# California Regional Water Quality Control Board
## North Coast Region
### Bob Anderson, Chairman


**Linda S. Adams**
*Secretary for Environmental Protection*

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**Arnold Schwarzenegger**
*Governor*

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

**WASTE DISCHARGE REQUIREMENTS**
**FOR THE**
**HUMBOLDT CREAMERY, FERNBRIDGE FACILITY**

The following Discharger is subject to waste discharge requirements as set forth in this Order:

**Table 1. Discharger Information**

| | |
|---|---|
| **Discharger** | **Humboldt Creamery** |
| **Name of Facility** | **Humboldt Creamery, Fernbridge** |
| **Facility Address** | **572 Highway 1** |
| | **Fortuna, California 95540-9711** |
| | **Humboldt County** |
| The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a **minor** discharge. | |

The discharge by the **Humboldt Creamery** from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

**Table 2. Discharge Location**

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| 001 | Industrial Process Wastewater | 40º'36" 52 N | 124º 12' 09" W | Groundwater |
| 002 | Condensate and Non-Contact Cooling Water | 40º'36" 56 N | 124º 12' 09" W | Eel River |
| 003 | Domestic Wastewater | 40º'36" 54N | 124º 12' 09" W | Groundwater |
| 004 | Condensate and Non-Contact Cooling Water | 40º'36" 53 N | 124º 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.

Deleted: September 11, 2008

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Catherine Kuhlman, Executive Officer

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**List of Attachments**

## I. Facility Information

The following Discharger is subject to waste discharge requirements as set forth in this Order:

**Table 4. Facility Information**

| | |
|---|---|
| **Discharger** | **Humboldt Creamery** |
| **Name of Facility** | **Humboldt Creamery, Fernbridge** |
| **Facility Address** | **572 Highway 1**<br>**Fernbridge, California 95540**<br>**Humboldt County** |
| **Facility Contact, Title, and Phone** | **Mike Callihan, Operations Manager, (707) 725-6182** |
| **Mailing Address** | **572 Highway 1, Fortuna, California 95540-9711** |
| **Type of Facility** | **Dairy Products Processing, Industrial** |
| **Treatment Facility Design Flow (SN001)** | **Avg 249,000 gallons per day (gpd), Max 450,000 gpd** |
| **Facility Design Flow (SN002)** | **63,000 gpd** |
| **Domestic Sewage Facility Design Flow (SN003)** | **2500 gallons per day (gpd)** |

## II. Findings

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds:

**A. Background.** Humboldt Creamery (hereinafter Permittee) is currently discharging pursuant to Order No. R1-2002-0041 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0005584. The Permittee submitted a Report of Waste Discharge, dated October 10, 2006**,** and applied for a NPDES permit renewal to discharge treated and untreated wastewater from the Humboldt Creamery**,** hereinafter Facility. The application was deemed complete on June 3, 2008.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Permittee herein.

**B. Facility Description.** The Permittee owns and operates a dairy products processing facility. Products produced at the facility include dry condensed and evaporated products, ice cream and frozen deserts, and fluid milk. Process wastewater generated at the facility consists of milk tanker truck washout, acid and caustic rinse water, boiler blow down, and waste products from the wash down processes including but not limited to cleaning of dairy processing equipment. Between May 16$^{th}$ and September 30$^{th}$ each year, process wastewater also includes dry condensed milk condensate and non-contact cooling water. The treatment system consists of an aeration pond and a

settling pond. Treated process wastewater is discharged from Discharge Point 001 via irrigation to approximately 150 acres of grazed pasture land adjacent to the Eel River.

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, 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.

The Permittee treats and discharges domestic wastewater through an onsite septic and leachfield system. The system includes three 1,800 gallon septic tanks installed in series. The first two tanks are designed to collect solids and greases. The third tank is designed to function as a dosing tank for the distribution of primary treated effluent to the pressurized leachfield system. The dosing tank contains four 1 horsepower pumps, which pump effluent to two alternating leachfields of 1,800 linear feet each. Five float switches in the dosing tank automatically activate the pumps as well as audible and visual alarms during times of system malfunction. Section VI.C.6.b. of this Order requires the Discharger to comply with statewide storm water regulations.

Attachment B provides a map of the area around the facility. Attachment C provides a flow schematics of the Facility.

**C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

**D. Background and Rationale for Requirements**. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G are also incorporated into this Order.

**E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

For the portion of the permit that addresses WDRs for discharges to land, the Regional Water Board has prepared a notice of determination that the project is categorically exempt from CEQA pursuant to section 15301 of title 14 of the California Code of Regulations. Because the Regional Water Board is issuing the WDRs for discharges from an existing facility for which no expansion is being permitted, this project meets the requirements of the categorical exemption, including the requirements set forth in section 15300.2 that the project not have any significant effects or result in cumulative impacts.

**F. Technology-based Effluent Limitations**. Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations[1], require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Effluent Limitations Guidelines and Standards for the Dairy Products Processing Point Source Category in Part 405. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

**G. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

**H. Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the North Coast Region (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Eel River are as follows:

**Table 5. Basin Plan Beneficial Uses**

| Discharge Point | Receiving Water Name | Beneficial Use(s) |
|---|---|---|
| SN001, SN003, and SN004 | Groundwater | Existing:<br>MUN – Municipal and Domestic Supply<br>IND – Industrial Water Supply<br>PRO – Industrial Process Supply<br>AGR – Agricultural Supply<br>FRSH – Freshwater replenishment to Surface Waters |
| SN002 | Eel River | Existing:<br>MUN – Municipal and Domestic Supply<br>AGR – Agricultural Supply<br>IND – Industrial Service Supply<br>GWR – Groundwater Recharge<br>FRSH – Freshwater Replenishment<br>NAV – Navigation<br>REC1 – Water Contact Recreation<br>REC2 – Non-Contact Water Recreation<br>COMM – Commercial and Sport Fishing<br>COLD – Cold Freshwater Habitat<br>WILD – Wildlife Habitat<br>RARE – Preservation of Rare, Threatened, or Endangered Species<br>MIGR – Migration of Aquatic Organisms<br>SPWN – Spawning, Reproduction, and/or Early Development<br>SHELL – Shellfish Harvesting<br>EST – Estuarine Habitat<br>CUL – Native American Culture<br>Potential:<br>PRO – Industrial Process Supply<br>POW – Hydropower Generation<br>MAR – Marine Habitat<br>AQUA – Aquaculture |

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Requirements of this Order implement the Basin Plan.

I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

**J. State Implementation Policy**. On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

**K. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Permittee's request and demonstration that it is infeasible for an existing Permittee to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules and interim effluent limitations and/or discharge specifications

**L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

**M. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on biological oxygen demand (BOD), total suspended solids (TSS), and pH. Restrictions on BOD, TSS and pH are discussed in Section VI.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than

the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

**N. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

**O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.

**P. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of

the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

**Q. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

**R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

**S. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections III.K, III.L, III.M, III.N, IV.B, IV.C, V.B, and VI.C. of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

**T. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

**U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

## III. Discharge Prohibitions

**A.** The discharge of any waste not specifically regulated by this permit, not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.

**B.** Creation of pollution, contamination, or nuisance, as defined by section 13050 of the California Water code is prohibited.

**C.** The discharge or reclamation use of untreated or partially treated waste (receiving a lower level of treatment than described in section II. A of the Fact Sheet) from anywhere within the collection, treatment, or disposal systems is prohibited, except as provided for in Prohibition III. E and in Attachment D, Standard Provision G (Bypass).

**D.** The discharge of waste to land that is not owned by or under agreement to use by the Discharger is prohibited, except for use for fire suppression as provided in title 22, sections 60307 (a) and (b) of the California Code of Regulations.

**E.** Discharge to the Eel River or its tributaries of domestic wastewater and/or process water other than noncontact cooling water or condensate from evaporated milk processing is prohibited.

**F.** The discharge of noncontact cooling water and condensate from evaporated milk processing to the Eel River and its tributaries is prohibited during the period from May 15 through September 30 of each year.

**G.** The discharge of waste at any point not described in Finding II. B or authorized by a permit issued by the State Water Board or another Regional Water Board is prohibited.

**H.** During the period of October 1 through May 14, discharges of wastewater shall not exceed one percent of the flow of the receiving water as measured in the Eel River at the Scotia gauging station (USGS Station 11477000). The total volume discharged to the Eel River in a calendar month shall not exceed, in any circumstances, one percent of the total volume of the Eel River passing the Scotia gauging station in the same calendar month.

**I.** Discharges of non-contact cooling water cannot contain pollutants other than heat.

**J.** Discharge from SN002 that results in a measurable change in receiving water temperatures is prohibited.

**K.** The discharge of domestic wastewater shall be kept underground at all times.

**L.** The mean daily flow of domestic wastewater shall not exceed 2,500 gallons per day averaged over a calendar month.

**M.** Irrigation of industrial process water in the leachfield area is prohibited.

**N.** Leachfield replacement area equivalent to 100 percent of the existing leachfield area shall be available for future leachfield repair. Incompatible uses of the existing disposal area and/or the replacement area are prohibited.

## IV. Effluent Limitations and Discharge Specifications

### A. Effluent Limitations – Discharge Point SN 002

#### 1. Final Effluent Limitations – Discharge Point SN 002

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point SN 002, with compliance measured at Monitoring Location EFF-002 as described in the attached MRP:

**Table 6. Surface Water Discharge Effluent Limitations**

| Parameter | Units | Effluent Limitations | |
|---|---|---|---|
| | | Maximum Daily | Average Daily |
| Biochemical Oxygen Demand[1] | lbs/100 lbs BOD5 input[2] | 0.218 | 0.109 |
| Total Suspended Solids (TSS) | lbs/100 lbs BOD5 input | 0.328 | 0.164 |
| pH[3] | Standard Units | 6.5 to 8.5 | |

**a. Flow**. The mean daily flow of waste through SN002 shall not exceed 63,000 gpd, measured over a calendar month.

**b. Acute Toxicity**. There shall be no acute toxicity in treated wastewater discharged to the Eel River and its tributaries. The Discharger will be considered compliant with this limitation when the survival of aquatic organisms in a 96-hour bioassay of undiluted effluent complies with the following.

**i.** Minimum for any one bioassay: 70 percent survival

**ii.** Median for any three or more consecutive bioassays: at least 90 percent survival.

Compliance with the acute toxicity effluent limitation shall be determined in accordance with section V of the Monitoring and Reporting Program (Attachment E) of this Order.

#### 2. Interim Effluent Limitations

This Section does not apply to the Facility.

[1] Biochemical Oxygen Demand 5-Day @ 20°C ($BOD_5$)
[2] The term $BOD_5$ input shall mean biological oxygen demand of the materials entered into the process. It can be calculated by multiplying the fats, proteins and carbohydrates by factors of 0.890, 1.031 and 0.691 respectively. Organic acids (ie. lactic acids) should be included as carbohydrates. Composition of input materials may be based on either direct analyses or generally accepted published numbers.
[3] At no time shall the pH be less than 6.5 nor greater than 8.5

### 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 Pint SN004, with compliance measured at Monitoring Location LND-001 as described in the attached MRP:

**Table 7. Land Discharge Effluent Limitations**

| 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 |

#### 2. Interim Effluent Limitations Discharge Point SN 001[4]

Section VI.C.2.d of this Order allows a compliance schedule to achieve final effluent limitations for sodium and total dissolved solids. Final effluent limitations identified in Table 7 above must be achieved no later than December 1, 2010. During the interim period changes to waste discharges at SN 001 beyond that described in Finding II.B of this Order are prohibited.

### C. Reclamation Specifications

This Section does not apply to the Facility.

## V. Receiving Water Limitations

### A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. Compliance with receiving water limitations shall be measured at monitoring locations described in the MRP (Attachment E). Discharges from the Facility shall not cause the following:

1. The discharge shall not cause the dissolved oxygen concentration of the receiving waters to be depressed below 7.0 mg/L. Additionally, the discharge shall not cause the dissolved oxygen content of the receiving water to fall below 10.0 mg/L more than 50 percent of the time, or below 7.5 mg/L more than 10 percent of the time. In the event that the receiving waters are determined to have dissolved oxygen

[4] Available data indicates the discharges from SN 004 are not likely to exceed final effluent limitations. Therefore, interim limitations apply only to SN 001.

concentration of less than 7.0 mg/L, the discharge shall not depress the dissolved oxygen concentration below the existing level.

2. The discharge shall not cause the specific conductance (micromhos[5]) concentration of the receiving waters to increase above 225 micromhos 50 percent of the time, or above 375 micromhos more than 10 percent of the time.

3. The discharge shall not cause the total dissolved solids concentration of the receiving waters to increase above 140 mg/l more than 50 percent of the time, or above 275 mg/l more than 10 percent of the time.

4. The discharge shall not cause the pH of the receiving waters to be depressed below 6.5 nor raised above 8.5. Within this range, the discharge shall not cause the pH of the receiving waters to be changed at any time more than 0.5 units from normal ambient pH levels. If the pH of the receiving water is less than 6.5, the discharge shall not cause a further depression of the pH of the receiving water. If the pH of the receiving water is greater than 8.5, the discharge shall not cause a further increase in the pH of the receiving water.

5. The discharge shall not cause turbidity of receiving waters to be increased more than 20 percent above naturally occurring background levels.

6. The discharge shall not cause receiving waters to contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

7. The discharge shall not cause receiving waters to contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.

8. The discharge shall not cause coloration of receiving waters that causes nuisance or adversely affects beneficial uses.

9. The discharge shall not cause bottom deposits in receiving waters to the extent that such deposits cause nuisance or adversely affect beneficial uses.

10. The discharge shall not cause or contribute concentrations of biostimulants to the receiving water that promote objectionable aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

11. The discharge shall not cause receiving waters to contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in humans, plants, animals, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods, as specified by the Regional Water Board.

[5] Measured at 77º F.

**12.** The discharge shall not cause receiving water temperature to increase above natural receiving water temperature at any time.

**13.** The discharge shall not cause an individual pesticide or combination of pesticides to be present in concentrations that adversely affect beneficial uses. The discharge must not cause bioaccumulation of pesticide, fungicide, wood treatment chemical, or other toxic pollutant concentrations in bottom sediments or aquatic life to levels which are harmful to human health.

**14.** The discharge shall not cause the receiving waters to contain concentrations of pesticides in excess of the limiting concentrations set forth in Table 3-2 of the Basin Plan. The discharge shall not cause the receiving waters to contain concentrations of pesticides in excess of the limiting concentrations established as Maximum Contaminant Levels by the Department of Health Services in title 22, Cal. Code of Regs, section 64444.

**15.** The discharge shall not cause receiving waters to contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise affect beneficial uses.

**16.** The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board, as required by the federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Clean Water Act, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

**17.** The discharge shall not cause concentrations of chemical constituents to occur in excess of limits specified in Table 3-2 of the Basin Plan or in excess of more stringent Maximum Contaminant Levels (MCLs) established for these pollutants in title 22, Cal. Code of Regs. Division 4, Chapter 15, Articles 4 and 5.5.

**B. Groundwater Limitations**

Compliance with receiving water limitations for groundwater shall be measured at monitoring well locations described in the MRP (Attachment E). Discharges from the Facility shall not cause exceedance of applicable water quality objectives or create adverse impacts to beneficial uses of groundwater.

## VI. Provisions

### A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions.

   **a.** Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

   **b.** In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, interim or final effluent limitation, reclamation specification, or receiving water limitation of this Order that may result in a significant threat to human health or the environment, such as inundation of treatment components, breach of pond containment, surfacing effluent in the leachfields, etc, that results in a discharge to a drainage channel or a surface water, the Discharger shall as soon as possible, but no later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of the environmental health with jurisdiction over affected water bodies, and the Regional Water Board.

   As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the Regional Water Board a written certification that the State Office of Emergency Services and the local health officer or directors of the environmental health with jurisdiction over affected water bodies have been notified of the discharge. Written documentation of the circumstances of the spill event shall be submitted to the Regional Water Board within five days, unless the Regional Water Board waives confirmation. The written documentation shall state the nature, time, duration, and cause of noncompliance and shall describe the measures taken or being taken to remedy the noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other types of noncompliance requires written notification as above at the time of the routine monitoring report.

   **c.** Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a

watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Water Code section 1211.)

**B. Monitoring and Reporting Program (MRP) Requirements**

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

**C. Special Provisions**

**1. Reopener Provisions**

**a. Standard Revisions.** If applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board may reopen this Order and make modifications in accordance with such revised standards.

**b. Reasonable Potential.** This Order may be reopened for modification to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above an applicable water quality objective.

**c. Whole Effluent Toxicity.** As a result of a Toxicity Reduction Evaluation (TRE), this Order may be reopened to include a chronic toxicity limitation and/or a limitation for a specific toxic pollutant identified by a TRE. In addition, if a numeric water quality objective for chronic toxicity is adopted by the State Water Board, this Order may be reopened to include an effluent limitation for chronic toxicity based on that objective.

**d. 303 (d) Listed Pollutants**. If a TMDL is adopted and is applicable to receiving waters for this discharge, this Order may be reopened to incorporate requirements of the TMDL. If the Regional Water Board determines that a voluntary offset program is feasible for and desired by the Discharger, then this Order may be reopened to reevaluate the effluent limitations for the pollutant or pollutants addressed by the TMDL and, if appropriate, to incorporate provisions recognizing the Discharger's participation in an offset program.

**e. Special Studies.** If a wastewater reclamation / recycled water evaluation, water effect ratio, mixing zone or other water quality study provides new information and a basis for determining that a permit condition or conditions should be modified, the Regional Water Board may reopen this Order and make modifications in accordance with title 40, section 122.62.

**2. Special Studies, Technical Reports and Additional Monitoring Requirements**

**a. Toxicity Reduction Requirements**

**i.** Whole Effluent Toxicity. In addition to an effluent limitation for whole effluent acute toxicity, the Monitoring and Reporting Program (MRP) of this Order requires routine monitoring for whole effluent chronic toxicity to determine compliance with the Basin Plan's narrative water quality objective for toxicity. As established by the MRP, if either the effluent limitation for acute toxicity or a monitoring trigger of 1.0 TUc (where 1 TUc = 100/NOEC) for chronic toxicity is exceeded, the Discharger shall conduct accelerated toxicity monitoring, as specified in section V of the MRP. Results of accelerated toxicity monitoring will indicate a need to conduct a Toxicity Reduction Evaluation (TRE), if toxicity persists; or it will indicate that a return to routine toxicity monitoring is justified because persistent toxicity has not been identified by accelerated monitoring. A TRE shall be conducted in accordance with the TRE Workplan prepared by the Discharger pursuant to section VI. C. 2. a. (2) of this Order, below.

**ii.** Toxicity Reduction Evaluations (TRE) Workplan. The Discharger shall prepare and submit to the Regional Water Board Executive Officer a TRE Workplan within 180 days of the effective date of this Order. This plan shall be reviewed and updated as necessary in order to remain current and applicable to the discharge and discharge facilities. The workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include at least the following items:

**(a)** A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

**(b)** A description of the Facility's methods of maximizing in house treatment efficiency and good housekeeping practices.

**(c)** If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in house expert or an outside contractor).

**iii.** Toxicity Reduction Evaluation (TRE). The TRE shall be conducted in accordance with the following:

**(a)** The TRE shall be initiated within 30 days of the date of completion of the accelerated monitoring test, required by section V of the MRP, observed to exceed either the acute or chronic toxicity parameter.

**(b)** The TRE shall be conducted in accordance with the Discharger's workplan.

**(c)** The TRE shall be in accordance with current technical guidance and reference material including, at a minimum, the USEPA manual EPA/833B 99/002.

**(d)** The TRE may end at any stage if, through monitoring results, it is determined that there is no longer consistent toxicity.

**(e)** The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. As guidance, the Discharger shall use the USEPA acute and chronic manuals, EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).

**(f)** As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the source(s) and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with chronic toxicity parameters.

**(g)** Many recommended TRE elements accompany required efforts of source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. To prevent duplication of efforts, evidence of complying with requirements of recommendations of such programs may be acceptable to comply with requirements of the TRE.

**(h)** The Regional Water Board recognizes that chronic toxicity may be episodic and identification of a reduction of sources of chronic toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

**b. Land Disposal Evaluation**

The Discharger shall prepare and submit for Regional Water Board staff approval a workplan to evaluate its Land Disposal System. The Program shall be of sufficient scope to demonstrate that the discharge of treated wastewater to the Discharger's land irrigation system is in compliance with this Order and shall include, but not be limited to the following:

**i.** By **February 1, 2009**, a workplan for a disposal study to determine the appropriate salt, nutrient, and irrigation management practices. 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 three and a half years following the effective date of this Order. The workplan proposal should be designed to investigate:

**(a)** Site specific lithology and soil transmissivity;

**(b)** Depth to groundwater across seasonal variations;

**(c)** Quality of wastewater for comparison to Department of Health Services Maximum Contaminant Levels[6],

**(d)** Vegetative or crop nutrient demand/tolerances;

**(e)** Acreage required to prevent irrigation beyond the amount protective of the beneficial uses, accounting for evapotranspirative demand, distribution uniformity of irrigation, and leaching in soils.

**ii.** By **February 1, 2011**, submit a report describing the findings and conclusions of the land disposal study that models the fate and transport of wastewater constituents including, but not limited to, nutrients, metals, and salts. The report should include all pertinent information including field data and lab reports, etc. used to derive conclusions in the report.

**iii.** If the reclamation study demonstrates that wastewater disposal does not conform to the requirements of this Order, by **August 1, 2011**, the Discharger shall:

**(a)** Submit a written proposal including milestones and a time schedule for completion, to either study alternatives to comply with requirements of this Order; or

**(b)** Submit a revised report of waste discharge and apply for a permit to conduct alternative disposal practices.

**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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[6] California Code of Regulations, title 22, section 64444.

**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.

**ii.** By **June 1, 2011**, submit a report describing the findings and conclusions of the 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.

**3. Best Management Practices and Pollution Prevention**

**a. Pollutant Minimization Program**

The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as DNQ (does not quantify) when the effluent limitation is less than the MDL (minimum detection limit), sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

**i.** A sample result is reported as DNQ and the effluent limitation is less than the RL (reporting limit); or

**ii.** A sample result is reported as ND (non-detect) and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

**i.** An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

**ii.** Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;

**iii.** Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent

at or below the effluent limitation;

**iv.** Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and

**v.** An annual status report that shall be sent to the Regional Water Board including:

**(a)** All PMP monitoring results for the previous year;

**(b)** A list of potential sources of the reportable priority pollutant(s);

**(c)** A summary of all actions undertaken pursuant to the control strategy; and

**(d)** A description of actions to be taken in the following year.

**4. Construction, Operation and Maintenance Specifications**

**a.** The Discharger shall 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 this Order. Proper operation and maintenance includes adequate laboratory quality control and appropriate quality assurance procedures. This provision requires the operation or backup or auxiliary facilities or similar systems that are installed by the Discharger only when necessary to achieve compliance with the conditions of this Order. (title 40, section 122.41 (e))

**b.** The Discharger shall maintain an updated Operation and Maintenance (O&M) Manual for the Facility. The Discharger shall update the O&M Manual, as necessary, to conform with changes in operation and maintenance of the Facility. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following:

**i.** Description of the treatment plant table of organization showing the number of employees, duties and qualifications and plant attendance schedules (daily, weekends and holidays, part-time, etc). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.

**ii.** Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.

**iii.** Description of laboratory and quality assurance procedures.

**iv.** Process and equipment inspection and maintenance schedules.

**v.** Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.

**vi.** Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

**5. Special Provisions for Municipal Facilities (POTWs Only)**

This Section does not apply to the Facility.

**6. Other Special Provisions**

**a. Adequate Capacity**

If the Discharger's wastewater treatment plant and/or disposal area(s) will reach capacity within four years, the Discharger shall notify the Regional Water Board in writing. Factors to be evaluated in assessing reserve capacity shall include, at a minimum, (1) comparison of the wet weather design flow with the highest daily flow, and (2) comparison of the average dry weather design flow with the lowest 30-day flow. The Discharger shall demonstrate that adequate steps are being taken to address the capacity problem. The Discharger shall submit a technical report to the Regional Water Board showing how flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Water Board, or within 120 days after receipt of Regional Water Board notification, that the Facility will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Water Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Water Board itself.

**b. Storm Water**

For the control of storm water discharged from the site, if applicable, the Discharger shall seek authorization to discharge under and meet the requirements of the State Water Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities (or subsequent renewed versions of the General Permit).

If applicable, the Discharger may submit a No Exposure Certification (NEC) certifying that there is no exposure of the facility's industrial activities, equipment, and materials to storm water in accordance with the requirements in Section B.12.a.i. of the General Permit. The NEC and supporting documentation must be submitted to the Regional Water Board prior to the wet season (October 1).

**7. Compliance Schedules**
This Section does not apply to the Facility.

## VII. Compliance Determination

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

### A. General.

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

### B. Multiple Sample Data.

When determining compliance with an average monthly effluent limitation (AMEL), average weekly effluent limitation (AWEL), or maximum daily effluent limitation (MDEL) for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

**C. Average Monthly Effluent Limitation (AMEL).**

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**D. Average Weekly Effluent Limitation (AWEL).**

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**E. Maximum Daily Effluent Limitation (MDEL).**

If a daily discharge exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

**F. Instantaneous Minimum Effluent Limitation.**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

**G. Instantaneous Maximum Effluent Limitation.**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

## ATTACHMENT A – DEFINITIONS

**Arithmetic Mean (μ),** also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: $\Sigma x$ is the sum of the measured ambient water concentrations, and n is the number of samples.

**Average Monthly Effluent Limitation (AMEL):** the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Bioaccumulative** pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

**Carcinogenic** pollutants are substances that are known to cause cancer in living organisms.

**Coefficient of Variation (CV)** is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

**Detected, but Not Quantified (DNQ)** are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

**Dilution Credit** is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

**Effluent Concentration Allowance (ECA)** is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Enclosed Bays** means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

**Estimated Chemical Concentration** is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Estuaries** means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

**Inland Surface Waters** are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

**Maximum Daily Effluent Limitation (MDEL)** means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

**Median** is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ($n$) is odd, then the median = $X_{(n+1)/2}$. If $n$ is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

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

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

**Mixing Zone** is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

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

**Ocean Waters** are the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

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

**Pollutant Minimization Program (PMP)** means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

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

**Reporting Level (RL)** is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

**Satellite Collection System** is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

**Source of Drinking Water** is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

**Standard Deviation (σ)** is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

$\mu$ is the arithmetic mean of the observed values; and

n is the number of samples.

**Toxicity Reduction Evaluation (TRE)** is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

## ATTACHMENT B – AREA MAP

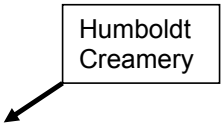


**Figure 1 - Area Map**

## ATTACHMENT C – FACILITY SCHEMATICS

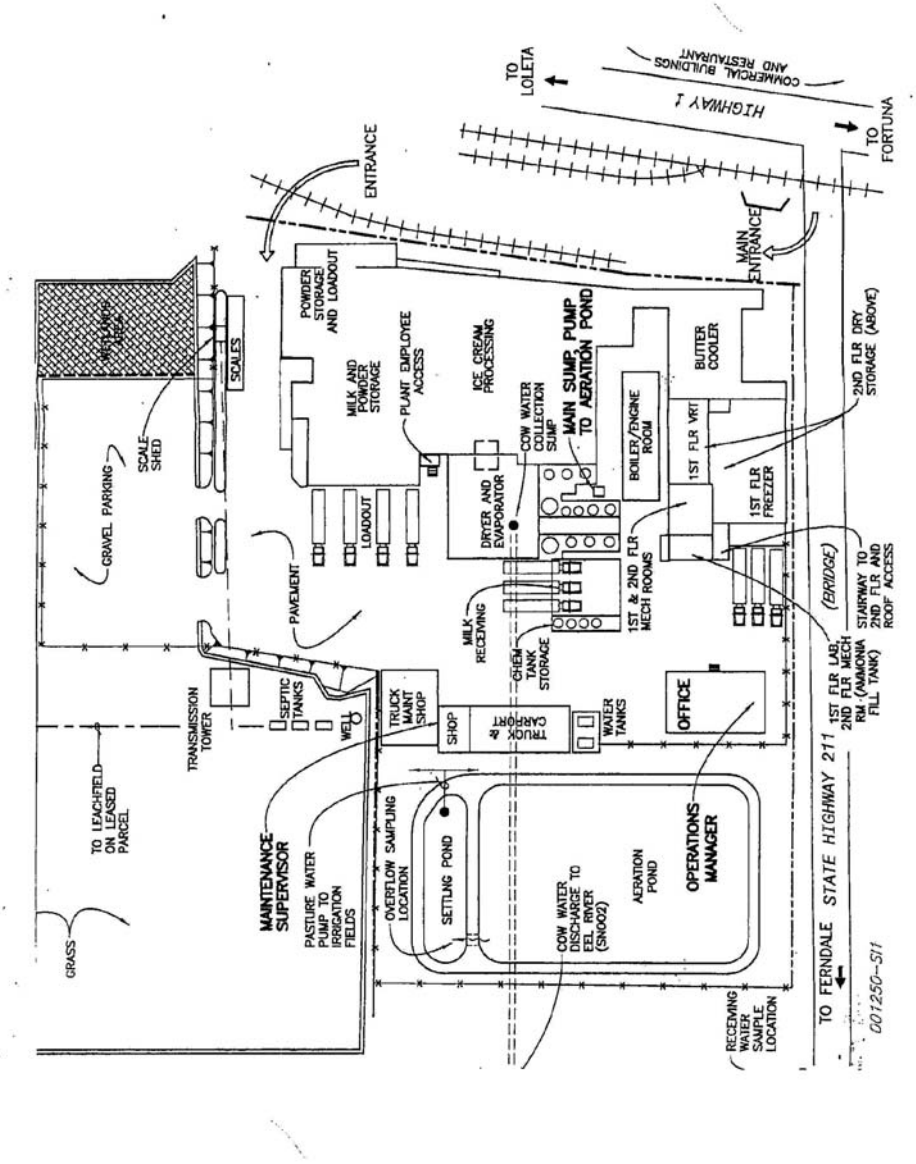


**Figure 2 - Facility Diagram**

Deleted: <sp>

**Figure 3 - Process DiagramSN002**

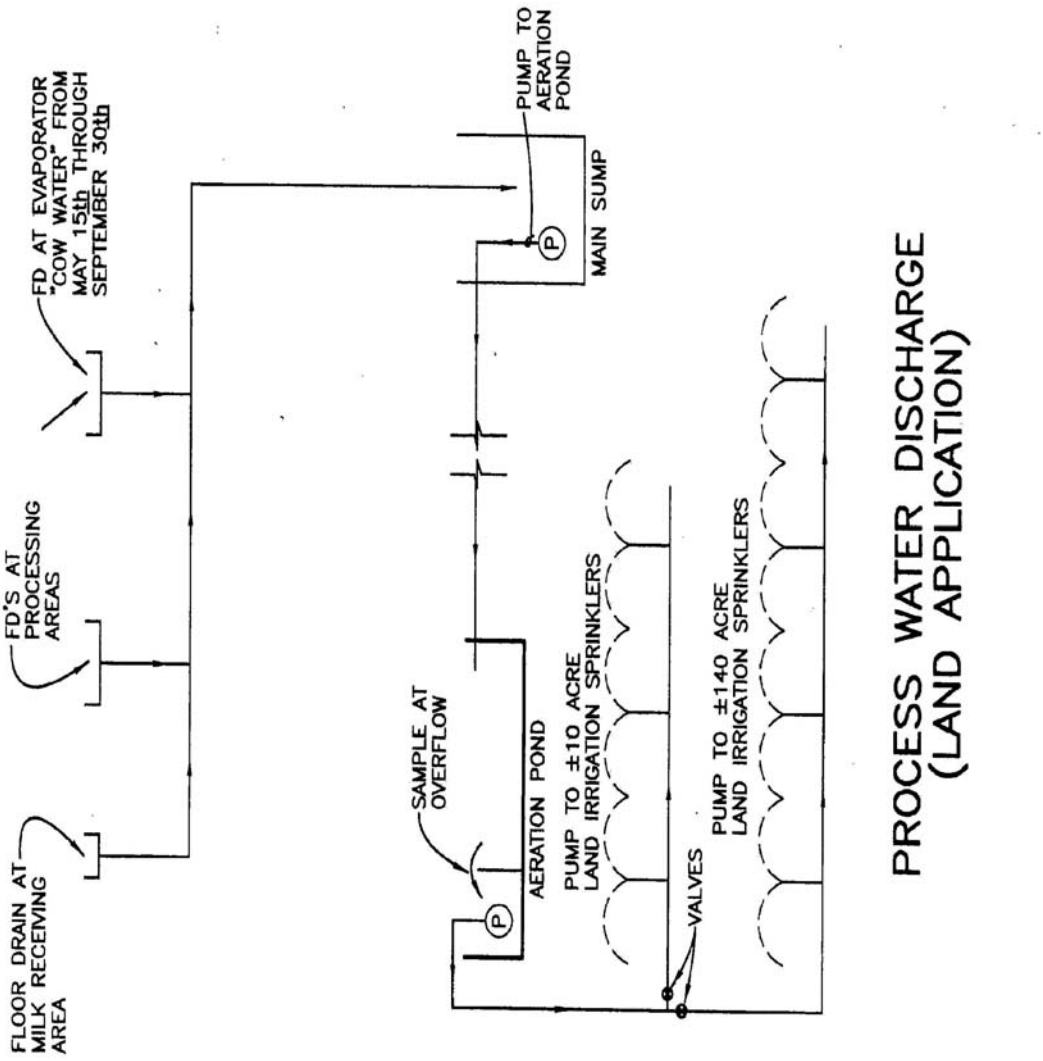


**Figure 4 - Process Diagram SN001**

**Figure 5 - Land Disposal Area Map**

# ATTACHMENT D –STANDARD PROVISIONS

## I. STANDARD PROVISIONS – PERMIT COMPLIANCE

### A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

### B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

### C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

### D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

## E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

## F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

## G. Bypass

1. Definitions

   a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)

   b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does

not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

   c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

   a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)

   b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

### H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).).

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

   a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

   b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

   c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

   d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

## II. STANDARD PROVISIONS – PERMIT ACTION

### A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or

termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

**B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

**C. Transfers**

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

## III. STANDARD PROVISIONS – MONITORING

**A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

**B.** Monitoring results must be conducted according to test procedures under Part 136 of the Code of Federal Regulations or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 of the Code of Federal Regulations unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

## IV. STANDARD PROVISIONS – RECORDS

**A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503 of the Code of Federal Regulations), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

**B. Records of monitoring information shall include:**

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

**C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):**

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

## V. STANDARD PROVISIONS – REPORTING

**A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

**B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)

2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

    a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));

    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

    c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the Facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

**C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

**D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

**E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 2 hours from the time

the Discharger becomes aware of the circumstances. Compliance with the 2 hour reporting requirement meets the minimum reporting requirement set forth in section 122.41(l)(6)(i) of title of the code of federal regulations. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):

   a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

   b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 2 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

**F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted Facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted Facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R.§ 122.41(l)(1)(iii).)

### G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted Facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

### H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

### I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

## VI. STANDARD PROVISIONS – ENFORCEMENT

**A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13265, 13268, 13350, 13385, 13386, and 13387.

## VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

### A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):

    a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

    b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. § 122.42(a)(2)):

   a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

   b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

   c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

   d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM

### Table of Contents



### List of Tables

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations section 122.48 of title 40 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### I. GENERAL MONITORING PROVISIONS

**A.** Wastewater Monitoring Provision. Composite samples may be taken by a proportional sampling device approved by the Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed one hour.

**B.** If the Discharger monitors any pollutant more frequently than required by this Order, using test procedures approved by title 40, section 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the monthly and annual discharger monitoring reports.

**C.** Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

### II. MONITORING LOCATIONS

The Discharger shall establish the following representative monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order.

**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 |

| Discharge Point | Monitoring Location | Monitoring Location Description |
|---|---|---|
| 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[8] | 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 |
| Internal Process Function | INT-North[9] | Septic system effluent within the north leachfield |
| Internal Process Function | INT-South[2] | Septic system effluent within the south leachfield |
| Receiving Water | GWR-North[10] | Groundwater beneath the north leachfield |
| Receiving Water | GWR-South | Groundwater beneath the south leachfield |

## III. INFLUENT MONITORING REQUIREMENTS

### A. Monitoring Location INF-002

1. The Discharger shall monitor materials entered into the evaporated milk process at INF-002 as follows:

[8] 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.
[9] 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.
[10] 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.

**Table E-2. Influent Monitoring Location INF-002**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| $BOD_5$ Input[11] | lbs/day | Calculation | Daily | title 40, section 405.101 |

## IV. EFFLUENT MONITORING REQUIREMENTS

### A. Monitoring Location EFF-002

1. When discharging to the Eel River, the Discharger shall monitor Effluent from non-contact cooling water and evaporative condensate processes at EFF-002 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

**Table E-3. Effluent Monitoring Location EFF-002[12][13]**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Flow[14] | mgd | Continuous | Daily | Meter |
| Biochemical Oxygen Demand[15] | mg/L | 24-hr Composite | Weekly | Standard Method 5210B |
| Total Suspended Solids | mg/L | 24-hr Composite | Weekly | Standard Method 2540D |
| pH | s.u. | Grab | Weekly | title 40, section 136 |
| Acute Toxicity | TUa | 24-hr Composite | 2X / year[16] | MRP section V |
| Chronic Toxicity | TUc | 24-hr Composite | Annually | MRP section V |
| CTR Pollutants | µg/L | Grab | 1X / Permit Term | Standard Methods[3] |

2. For the purposes of compliance evaluation, in addition to laboratory results in mg/l, results from biochemical oxygen demand and total suspended solids shall be presented as lbs/100 lbs $BOD_5$ input/day.

[11] The term $BOD_5$ input shall mean biological oxygen demand of the materials entered into the process. It can be calculated by multiplying the fats, proteins and carbohydrates by factors of 0.890, 1.031 and 0.691 respectively. Organic acids (ie. lactic acids) should be included as carbohydrates. Composition of input materials may be based on either direct analyses or generally accepted published numbers

[12] When *not discharging to the Eel River, sampling will not be required at EFF-002, SWR-001, SWR-002 during that specific reporting period. In order to ensure adequate characterization of the discharge, all sample analyses required in a given period (ie weekly and annual frequency) shall be collected if discharge occurs during that period.*

[13] Sampling requirements for acute toxicity, chronic toxicity, and CTR pollutants will take effect 6 months after the permit effective date.

[14] On a monthly basis, the Discharger shall report average and maximum daily flows

[15] Biochemical Oxygen Demand 5-Day @ 20°C ($BOD_5$)

[16] Monitoring shall occur during the first month of surface water discharge and during the second consecutive month thereafter (ie. If monitoring occurs in November, consecutive monitoring shall be performed in January)

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Acute Toxicity Testing

The Discharger shall conduct whole effluent acute toxicity testing to determine compliance with the effluent limitations established in section IV. A. 1. b of the Order. The Discharger shall meet the following acute toxicity testing requirements:

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1. **Test Frequency**. The Discharger shall conduct toxicity testing twice per year on effluent suitable for discharge to the Eel River.

2. **Sample Type**. For 96-hour static renewal or 96-hour static non-renewal testing, the samples shall be 24-hour composite samples and shall be representative of the volume and quality of the discharge. Effluent samples shall be collected at Monitoring Location EFF-002.

3. **Test Species**. Test species for acute testing shall be an invertebrate, the water flea, *Ceriodaphnia dubia*, and a vertebrate, the rainbow trout, *Oncorhynchus mykiss*, for at least the first two suites of tests conducted within 12 months after the effective date of the Order. After this screening period, monitoring shall be conducted using the most sensitive species. At least one time every five years, the Discharger shall re-screen with the two species described above and continue routine monitoring with the most sensitive species.

4. **Test Methods**. The presence of acute toxicity shall be estimated as specified in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (USEPA Report No. EPA-821-R-02-012, 5th edition or subsequent editions), or other methods approved by the Executive Officer.

   Test procedures related to pH control, sample filtration, aeration, temperature control and sample dechlorination shall be performed in accordance with the USEPA method and fully explained and justified in each acute toxicity report submitted to the Regional Water Board. Control of the pH in acute toxicity tests is allowed, provided the test pH is maintained at the measured effluent pH, and the control of pH is done in a manner that has the least influence on the test water chemistry and on the toxicity of other pH sensitive materials such as some heavy metals, sulfide and cyanide.

5. **Test Dilutions.** The acute toxicity test shall be conducted using 100 percent effluent collected at Monitoring Location EFF-002, when discharging to the Eel River.

6. **Test Failure.** If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger shall re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.

7. **Accelerated Monitoring.** If the result of any acute toxicity test fails to meet the single test minimum limitation established in section IV. A. 1. d of the Order (70 percent survival), and the testing meets all test acceptability criteria, the Discharger shall take two more samples, one within 14 days, and one within 21 days of receiving the initial sample result. If any of the additional samples do not comply with the three sample median minimum limitation (90 percent survival), the Discharger shall initiate a Toxicity Reduction Evaluation (TRE) in accordance with section VI. C. 2. a of the Order. If the two additional samples are in compliance with the acute toxicity requirement, and the testing meets all test acceptability criteria, then a TRE will not be required. If the discharge has ceased before the additional samples could be collected, the Discharger shall contact the Executive Officer within 21 days with a plan to demonstrate compliance with the acute toxicity effluent limitation.

8. **Notification.** The Discharger shall notify the Regional Water Board in writing 14 days after the receipt of test results exceeding an effluent limitation or trigger. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by this Order, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

9. **Reporting**. Test results for acute toxicity tests shall be reported according to the acute toxicity manual Chapter 12 (Report Preparation) or in an equivalent format that clearly demonstrates that the Discharger is in compliance with effluent limitations and other permit requirements.

10. **Ammonia Toxicity**. The acute toxicity test shall be conducted without modifications to eliminate ammonia toxicity.

**B. Chronic Toxicity Testing**

The Discharger shall conduct chronic toxicity testing to demonstrate compliance with the Basin Plan's narrative water quality objective for toxicity. The Discharger shall meet the following chronic toxicity testing requirements:

1. **Test Frequency.** The Discharger shall conduct chronic toxicity testing annually, on effluent suitable for discharge to the Eel River.

2. **Sample Type**. For 96-hour static renewal or 96-hour static non-renewal testing, the samples shall be 24-hour composite samples and shall be representative of the

volume and quality of the discharge. The effluent sample shall be collected at Monitoring Location EFF-001**.**

3. **Test Species.** Test species for chronic testing shall be a vertebrate, the fathead minnow, *Pimephales promelas* (larval survival and growth test), an invertebrate, the water flea, *Ceriodaphnia dubia* (survival and reproduction test), and a plant, the green alga, *Selanastrum capricornutum* (growth test).

4. **Test Methods**. The presence of chronic toxicity shall be estimated as specified in USEPA's Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms (USEPA Report No. EPA-821-R-02-013, 4th or subsequent editions).

   Test procedures related to pH control, sample filtration, aeration, temperature control and sample dechlorination shall be performed in accordance with the USEPA method and fully explained and justified in each chronic toxicity report submitted to the Regional Water Board. Control of the pH in chronic toxicity tests is allowed, provided the test pH is maintained at the measured pH of the downstream receiving water, and the control of pH is done in a manner that has the least influence on the test water chemistry and on the toxicity of other pH sensitive materials such as some heavy metals, sulfide and cyanide.

5. **Test Dilutions.** The chronic toxicity test shall be conducted using a series of at least five dilutions and a control. The series shall consist of the following dilution series: 12.5, 25, 50, 75, and 100 percent effluent. Control and dilution water should be receiving water at an appropriate location upstream of the discharge point. Laboratory water may be substituted for receiving water, as described in the manual, upon approval by the Regional Water Board Executive Officer. Specifically, for the *Selenastrum capricornutum* test, synthetic laboratory water with a hardness similar to the receiving water shall be used as the control and dilution water. If the dilution water used is different from the culture water, a second control using culture water shall be used.

6. **Reference Toxicant.** If organisms are not cultured in-house, concurrent testing with a reference toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests also shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).

7. **Test Failure**. If either the reference toxicant test or the chronic toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger shall re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.

8. **Notification.** The Discharger shall notify the Regional Water Board in writing 14 days after the receipt of test results exceeding an effluent limitation or trigger.

9. **Accelerated Monitoring Requirements.** If the result of any chronic toxicity test exceeds a chronic toxicity trigger of 1.0 TUc, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring. Accelerated monitoring shall consist of four additional effluent samples, one test conducted approximately every week, over a four–week period. Testing shall commence within 14 days of receipt of the sample results of the exceedance of the chronic toxicity trigger. If the discharge will cease before the additional samples can be collected, the Discharger shall contact the Executive Officer within 21 days with a plan to demonstrate compliance with the chronic toxicity effluent limitation. The following protocol shall be used for accelerated monitoring and TRE implementation.

   **a.** If the results of four consecutive accelerated monitoring tests do not exceed the effluent limitation, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring. If there is adequate evidence of a pattern of effluent toxicity, however, the Regional Water Board Executive Officer may require that the Discharger initiate a TRE.

   **b.** If the source(s) of the toxicity is easily identified (i.e. temporary plant upset), the Discharger shall make necessary corrections to the facility and shall continue accelerated monitoring until four consecutive accelerated tests do not exceed the effluent limitation. Upon confirmation that the effluent toxicity has been removed, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring.

   **c.** If the result of any accelerated toxicity test exceeds an effluent limitation or trigger, the Discharger shall cease accelerated monitoring and initiate a TRE to investigate the cause(s) of, and identify corrective actions to reduce or eliminate effluent toxicity. Within thirty (30) days of notification by the laboratory of the test results exceeding the effluent limitation during accelerated monitoring, the Discharger shall submit a TRE Action Plan to the Regional Water Board including, at minimum:

      **i.** Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;

      **ii.** Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and

      **iii.** A schedule for these actions.

10. **Ammonia Toxicity**. The chronic toxicity test shall be conducted without modifications to eliminate ammonia toxicity.

**C. Chronic Toxicity Reporting**

1. **Routine Reporting**. Test results for chronic tests shall be reported according to the acute and chronic manuals and the Monitoring and Reporting Program and shall be attached to the corresponding monthly self-monitoring report. Test results shall include, at a minimum, for each test:

   **a.** sample date(s)
   **b.** test initiation date
   **c.** test species
   **d.** end point values for each dilution (e.g., number of young, growth rate, percent survival)
   **e.** NOEC value(s) in percent effluent
   **f.** IC15, IC25, IC40, and IC50 values (or EC15, EC25…etc.) in percent effluent
   **g.** TUc values (100/NOEC)
   **h.** Mean percent mortality (±s.d.) after 96 hours in 100 percent effluent (if applicable)
   **i.** NOEC and LOEC values for reference toxicant test(s)
   **j.** IC50 or EC50 value(s) for reference toxicant test(s)
   **k.** Available water quality measurements for each test (e.g., pH, DO, temperature, conductivity, hardness, salinity, ammonia)
   **l.** Statistical methods used to calculate endpoints.
   **m.** The statistical output page, which includes the calculation of percent minimum significant difference (PMSD)

2. **Quality Assurance Reporting**. Because the permit requires sublethal hypothesis testing endpoints from Methods 1000.0, 1002.0, and 1003.0 in the test methods manual titled *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA-821-R-02-013, 2002), within test variability must be reviewed for acceptability, and variability criteria (upper and lower PMSD bounds) must be applied, as directed under section 10.2.8 – *Test Variability* of the test methods manual. Under section 10.2.8, the calculated PMSD for both reference toxicant test and effluent toxicity test results must be compared with the upper and lower PMSD bounds variability criteria specified in Table 6 – *Variability Criteria (Upper and Lower PMSD Bounds) for Sublethal Hypothesis Testing Endpoints Submitted Under NPDES Permits*, following the review criteria in paragraphs 10.2.8.2.1 through 10.2.8.2.5 of the test methods manual. Based on this review, only accepted effluent toxicity test results shall be reported.

3. **Compliance Summary.** Monthly self-monitoring reports submitted by the Discharger shall contain an updated chronology of chronic toxicity test results

expressed in TUc, and organized by test species, type of test (survival, growth or reproduction), and monitoring frequency (routine, accelerated, or TRE). The final report shall clearly demonstrate that the Discharger is in compliance with effluent limitations and other permit requirements.

## 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[17] | 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[18] |
| Aluminum | µg/L | 24-hr Composite | Monthly | ICPMS |
| Manganese | µg/L | 24-hr Composite | Monthly | ICPMS |
| Visual Observations | --- | --- | Daily | Visual |

3. For the purposes of compliance evaluation, in addition to laboratory results in mg/l, biochemical oxygen demand shall be presented as lbs/acre/day.

4. The Discharger shall report the riser used for land disposal distribution each day.

## VII. RECLAMATION MONITORING REQUIREMENTS

This Section does not apply to the Facility.

[17] Biochemical Oxygen Demand 5-Day @ 20°C ($BOD_5$)
[18] Inductively Coupled Plasma/Mass Spectrometry

## VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

### A. Monitoring Location SWR-001

1. The Discharger shall monitor upstream conditions in the Eel River receiving waters at Monitoring Location SWR-001 during the periods of surface water discharge, as follows.

**Table E-5. Receiving Water Monitoring Requirements – SWR-001[11, 12]**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Method |
|---|---|---|---|---|
| Flow | cfs or mgd | Data | Daily | Gauge[19] |
| Temperature | ° F | Grab | Monthly | Standard Methods |
| Dissolved Oxygen | mg/L | Grab | Monthly | title 40, section 136 |
| Specific Conductance | micromhos/cm[20] | Grab | Monthly | title 40, section 136 |
| Total Dissolved Solids | mg/L | Grab | Monthly | Standard Method 2540C |
| pH | s.u. | Grab | Monthly | Standard Methods |
| Turbidity | NTU | Grab | Monthly | Standard Method 2130B |
| Visual Observations[21] | --- | --- | Monthly | Visual |
| CTR Pollutants[22] | µg/L | Grab | 1X / Permit Term | Standard Methods |

### B. Monitoring Location SWR-002

1. The Discharger shall monitor downstream conditions in the Eel River receiving waters at Monitoring Location SWR-002 during the periods of surface water discharge, as follows.

[19] Flow of the receiving water as measured in the Eel River at the Scotia gauging station (USGS Station 11477000).
[20] Measured in micromhos/cm at 25 ºC
[21] Visual observations shall include, but not be limited to observation of floating materials, including solids, liquids, foams, and scum, visible oils or films and color.
[22] Those pollutants identified by the California Toxics Rule at title 40, section 131.38. Monitoring shall occur simultaneously with effluent monitoring for CTR pollutants required by Section IV. A. 1 of the MRP. Analytical methods must achieve the lowest minimum level (ML) specified in Appendix 4 of the SIP; and in accordance with Section 2.4.1 of the SIP, the Discharger shall report the Reporting Level (RL) and the Method Detection Limit (MDL) with each sample result.

**Table E-6. Receiving Water Monitoring Requirements – SWR-002[11]**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Method |
|---|---|---|---|---|
| Dissolved Oxygen | mg/L | Grab | Monthly | title 40, section 136 |
| Specific Conductance | micromhos/cm[23] | Grab | Monthly | title 40, section 136 |
| Total Dissolved Solids | mg/L | Grab | Monthly | Standard Method 2540C |
| pH | s.u. | Grab | Monthly | Standard Methods |
| Turbidity | NTU | Grab | Monthly | Standard Method 2130B |
| Temperature | ° F | Grab | Monthly | Standard Methods |
| Visual Observations[24] | --- | --- | Monthly | Visual |

**C. Monitoring Locations GWR-001 through GWR-005**

1. The Discharger shall monitor downstream conditions in the receiving groundwater at Monitoring Locations GRW-001 through GRW-005, as follows.

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

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Ammonia Nitrogen | mg/L | Grab | Quarterly | title 40, section 136 |
| Nitrite Nitrogen | mg/L | Grab | Quarterly | title 40, section 136 |
| Nitrate Nitrogen | mg/L | Grab | Quarterly | title 40, section 136 |
| Total Dissolved Solids | mg/L | Grab | Quarterly | Standard Method 2540C |
| Sodium | µg/L | Grab | Quarterly | ICPMS |
| Aluminum | µg/L | Grab | Quarterly | ICPMS |
| Manganese | µg/L | Grab | Quarterly | ICPMS |
| Iron | µg/L | Grab | Quarterly | ICPMS |
| Depth to Groundwater | 0.01 feet | Grab | Quarterly | Measurement |

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## IX. OTHER MONITORING REQUIREMENTS

**A. Monitoring Locations INT-North, INT-South, GWR-North, GWR-South**

1. The Discharger shall monitor groundwater conditions at Monitoring Locations INT-North, INT-South, GWR-North, and GWR-South, as follows.

[23] Measured in micromhos/cm at 25 ºC
[24] Visual observations shall include, but not be limited to observation of floating materials, including solids, liquids, foams, and scum, visible oils or films and color.

**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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## X. REPORTING REQUIREMENTS

### A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

2. Schedules of Compliance. If applicable, the Discharger shall submit all reports and documentation required by compliance schedules that are established by this Order. Such reports and documentation shall be submitted to the Regional Water Board on or before each compliance date established by the Order. If noncompliance is reported, the Discharger shall describe the reasons for noncompliance and a specific date when compliance will be achieved. The Discharger shall notify the Regional Water Board when it returns to compliance with applicable compliance dates established by schedules of compliance.

### B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly and annual summary SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-9. Monitoring Periods and Reporting Schedule**

| Sampling Frequency | Monitoring Period Begins On… | Monitoring Period | SMR Due Date |
|---|---|---|---|
| Continuous | December 1, 2008 | All | 1st day of second calendar month following sampling |
| Daily | December 1, 2008 | Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of sampling. | 1st day of second calendar month following sampling |
| Weekly | December 1, 2008 | Sunday through Saturday | 1st day of second calendar month following sampling |
| Monthly | December 1, 2008 | 1st day of calendar month through last day of same | 1st day of second calendar month following sampling |
| Quarterly | December 1, 2008 | Jan-Mar, Apr-Jun, Jul-Sep, Oct-Dec | 1st day of calendar month in the following quarter |
| Twice Annually | December 1, 2008 | October 1 through May 15 | 1st day of second calendar month following sampling |
| Annually | December 1, 2008 | October 1 through May 15 | 1st day of second calendar month following sampling |
| 1X / Order Term | December 1, 2008 | October 1 through May 15 | May 1, 2011 |

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4. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in title 40, section 136.

   The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols.

   **a.** Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   **b.** Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

   **c.** For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the

reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

**d.** Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

**e.** Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.

**5.** The Discharger shall submit SMRs in accordance with the following requirements:

**a.** The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The reported data shall include calculation of all effluent limitations that require averaging, taking of a median or other computation. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment. During periods of land discharge, the reports shall certify "land discharge".

**b.** The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:

**i.** Facility name
**ii.** WDID number
**iii.** Applicable period of monitoring and reporting
**iv.** Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation)
**v.** Corrective actions taken or planned; and
**vi.** The proposed time schedule for corrective actions.

**c.** SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

**North Coast Regional Water Quality Control Board**
**5550 Skylane Blvd, Suite A**
**Santa Rosa, CA 95403**

### C. Discharge Monitoring Reports (DMRs)

**1.** As described in section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

**2.** DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy of the DMR to the address listed below:

| **Standard Mail** | **FedEx/UPS/ Other Private Carriers** |
|---|---|
| State Water Resources Control Board<br>Division of Water Quality<br>c/o DMR Processing Center<br>PO Box 100<br>Sacramento, CA 95812-1000 | State Water Resources Control Board<br>Division of Water Quality<br>c/o DMR Processing Center<br>1001 I Street, 15th Floor<br>Sacramento, CA 95814 |

**3.** All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.

### D. Other Reports

1. The Discharger shall report the results of special studies required by Special Provisions VI. C. 2. a, VI. C. 2. b, and VI. C. 2. c of this Order.

2. Annual Report. The Discharger shall submit an Annual Report to the Regional Water Board for each calendar year. The report shall be submitted by March 1st of the following year[25]. The report shall, at a minimum, include the following.

   a. Both tabular and, where appropriate, graphical summaries of the monitoring data and disposal records from the previous year. If the Discharger monitors any pollutant more frequently than required by this Order, using test procedures approved under title 40, section 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and report of the data submitted SMR.

[25] The first annual monitoring report, including December 2008 and January through December 2009 shall be submitted by March 1, 2010.

b. A comprehensive discussion of the facility's compliance (or lack thereof) with all effluent limitations and other WDRs, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Order.

**ATTACHMENT F – FACT SHEET**

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## ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Discharger.

### I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

**Table 1. Facility Information**

| | |
|---|---|
| WDID | 1B80185OHUM |
| Discharger | Humboldt Creamery Association |
| Name of Facility | Humboldt Creamery, Fernbridge |
| Facility Address | 572 Highway 1<br>Fernbridge, California, 95540<br>Humboldt |
| Facility Contact, Title and Phone | Mike Callihan, Operations Manager<br>(707) 725-6182 |
| Authorized Person to Sign and Submit Reports | Mike Callihan, Operations Manager<br>(707) 725-6182 |
| Mailing Address | 572 Highway 1, Fortuna, California, 95540 |
| Billing Address | 572 Highway 1, Fortuna, California, 95540 |
| Type of Facility | Fluid Milk Processing; SIC 2026<br>Dry Condensed and Evaporated Products; SIC 2023<br>Ice Cream Production; SIC 2024 |
| Major or Minor Facility | Minor |
| Threat to Water Quality | 2 |
| Complexity | B |
| Pretreatment Program | N/A |
| Reclamation Requirements | N/A |
| Eel River Discharge Permitted Flow SN002 | Average 63,000 gallons per day (gpd);<br>Maximum 160,000 gpd |

| | |
|---|---|
| Land Disposal Permitted Flow SN001 and SN004 | Combined Average 249,000 gpd; Combined Maximum 450,000 gpd |
| Septic System Permitted Flow SN003 | 2,500 gpd |
| Watershed | Eel River Hydrogeologic Unit, Ferndale Hydrologic Subarea |
| Receiving Water | Eel River / Groundwater |
| Receiving Water Type | Inland Surface Water / Groundwater |

**A.** The Humboldt Creamery Association (hereinafter Discharger) is the owner and operator of the Humboldt Creamery (hereinafter Facility), a dairy processing plant. For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

**B.** The Facility discharges wastewater to the Eel River, a water of the United States, and is currently regulated by Order R1-2002-0041 which was adopted on June 22, 2002 and expired on June 22, 2007. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.

**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 and non-contact cooling water. The Discharger submitted a revised application for renewal of WDRs on October 21, 2008.

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## II. FACILITY DESCRIPTION

The Humboldt Creamery is a dairy products processing facility. Approximately one hundred twenty five (125) employees work at the facility to produce dry condensed and evaporated products, ice cream and frozen deserts, and fluid milk. Process wastewater generated at the facility consists of dry condensed milk condensate, non-contact cooling water, milk tanker truck washout, acid and caustic rinse water, boiler blow down, and waste products from the wash down process. Order No. R1-2008-0020 regulates

discharges of process wastewater as well as domestic wastewater generated at the facility.

**A. Description of Wastewater and Biosolids Treatment or Controls**

The process-waste treatment system treats an average of 230,000 gallons per day (gpd) and consists of an aeration pond and a settling pond. Maximum permitted flow for irrigated land disposal is 450,000 gpd.

The Permittee treats and discharges domestic wastewater through an onsite septic and leachfield system. The system includes three 1,800 gallon septic tanks installed in series. The first two tanks are designed to collect solids and greases. The third tank is designed to function as a dosing tank for the distribution of primary treated effluent to the pressurized leachfield system. The dosing tank contains four 1 horsepower pumps, which pump effluent to two alternating leachfields of 1,800 linear feet each. Five float switches in the dosing tank automatically activate the pumps as well as audible and visual alarms during times of system malfunction.

**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 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.

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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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**C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data**

The Previous Order required effluent monitoring at Monitoring Locations SN001 and SN002. Representative monitoring data from the term of the previous Order are as follows:

**Table 2. Historic Effluent Limitations and Effluent Monitoring Data**

| Parameter | Units | Effluent Criterion | | Monitoring Data Jan 2004 to Mar 2008 | |
|---|---|---|---|---|---|
| | | Average Monthly | Maximum Daily | Average Reported | Maximum Reported |
| Biological Oxygen Demand | mg/L | N/A | N/A | 580 | 2700 |
| Total Suspended Solids | mg/L | N/A | N/A | 240 | 2200 |
| Settleable Solids | ml/L | N/A | N/A | <0.1 | 1900 |
| pH | Standard Units | N/A | N/A | 7.3 | 8.1 |
| Dissolved Oxygen | mg/L | N/A | N/A | <1.0 | 1.9 |
| Flow SN001[26] | gallons/day | 249,000 | 450,000 | 261,996 | 870,118 |
| Flow SN002[1] | gallons/day | 63,000 | 160,000 | 77,682 | 198,615 |

### D. Compliance Summary

The Discharger has demonstrated overall compliance with conditions of Order No. R1-2002-0041. However, monitoring data shows that the Discharger has exceeded permit criterion for flow at both SN001 and SN002. Based on the available file information, it is unclear how the design flow criteria were developed. Section VI.C.2.c of the Order requires a special study to evaluate appropriate design criteria applicable to the Humboldt Creamery facility.

### E. Planned Changes

The Discharger has not notified the Regional Water Board of any proposed changes that would effect development of this Order.

## III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

### A. Legal Authorities

[26] This number represents design flow described in the provisions of Order No. R1-2002-0041. However, Order No. R1-2002-0041 did not contain limitations or prohibitions related to flow at this location.

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

## B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

For the portion of the permit that addresses WDRs for discharges to land, the Regional Water Board has prepared a notice of determination that the project is categorically exempt from CEQA pursuant to section 15301 of title 14 of the California Code of Regulations. Because the Regional Water Board is issuing the WDRs for discharges from an existing facility for which no expansion is being permitted, this project meets the requirements of the categorical exemption, including the requirements set forth in section 15300.2 that the project not have any significant effects or result in cumulative impacts.

## C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan for the North Coast Region* (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to surface waters within the Ferndale Hydrologic Subarea of the Eel River Hydrologic Unit are as follows.

**Table 3. Basin Plan Beneficial Uses**

| | Receiving Water Name Discharge Points | |
|---|---|---|
| **Beneficial Use (s)** | **Eel River**<br><br>**002** | **Groundwater**<br><br>**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 |

| | Receiving Water Name Discharge Points | |
|---|---|---|
| **Beneficial Use (s)** | **Eel River**<br><br>**002** | **Groundwater**<br><br>**001, 004** |
| 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 | |

In addition to the beneficial uses set out in the Basin Plan, there are several implementation plans that include actions intended to meet water quality objectives and protect beneficial uses of the North Coast Basin. For the Eel River and its tributaries, no point source waste discharges are allowed during the period of May 15 through September 30 and all other periods when the receiving stream's flow is less than 100 times greater than the waste flow.

The Basin Plan also contains a narrative water quality objective for toxicity that states:

> All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassay of appropriate duration or other appropriate methods as specified by the Regional Water Board.
>
> The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge, or when necessary for other control water that is consistent with the requirements for 'experimental water' as described in *Standard Methods for the Examination of Water and Wastewater* 18th Edition

(1992). At a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour bioassay.

In addition, effluent limits based upon acute bioassays of effluent will be prescribed. Where appropriate, additional numerical receiving water objectives for specific toxicants will be established as sufficient data becomes available, and source control of toxic substances will be required.

Requirements of this Order implement the Basin Plan.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21[27], 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

[27] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

5. **Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

7. **Impaired Water Bodies on CWA 303(d) List.** Section 303(d) of the federal CWA requires states to identify waterbodies that do not meet water quality standards and are not supporting their beneficial uses after implementation of technology-based effluent limitations on point sources. Each state must submit an updated list, the 303 (d) List of Impaired Waterbodies, to USEPA by April of each even numbered year. In addition to identifying the waterbodies that are not supporting beneficial uses, the 303 (d) list also identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment. The USEPA requires the Regional Water Board to develop total maximum daily loads (TMDLs) for each 303 (d) listed pollutant and water body contaminant. TMDLs establish the maximum quantity of a given pollutant that can be added to a water body from all sources without exceeding the applicable water quality standard for that pollutant and determine wasteload allocations (the portion of a TMDL allocated to existing and future point sources) for point sources and load allocations (the portion of a TMDL attributed to existing and future nonpoint sources) for nonpoint sources.

   In June 2007, the USEPA provided final approval of the 303 (d) list of impaired water bodies prepared by the State. The list identifies the Eel River Delta within the Lower Eel Hydrologic Area as impaired by sedimentation/siltation and temperature. On December 18, 2007, USEPA approved a TMDL addressing sediment and temperature in the Lower Eel River and its tributaries. Regarding temperature, the TMDL concludes that most sources of heat in the Lower Eel River watershed are from diffuse, nonpoint sources and result from such factors as removal of stream shade, longer travel time, changes in timing and volume of natural streamflow due to

water diversions and impoundments, and increased sediment loads that cause widening of streams. As the critical time period for temperature is in the summer, the TMDL was established for that critical time period, which is also the time period when point source discharges from area wastewater treatment facilities are prohibited. The TMDL concludes that, because of the summer discharge prohibition, area discharges from facilities, such as the Humboldt Creamery, do not contribute to temperature loadings to the Lower Eel River Watershed, and therefore, the TMDL establishes a "zero" wasteload allocation for all current and future wastewater treatment facilities that discharge to the Lower Eel River Watershed. The Regional Water Board interprets this wasteload allocation to mean that, as long as the Humboldt Creamery adheres to the summer discharge prohibition, it will be in compliance with the approved TMDL for temperature.

Regarding sediment, the TMDL establishes a maximum loading of 125 percent of the natural sediment loading for the watershed and further defines that loading rate as 2.5 tons of sediment per square mile of watershed per day on a long term basis. Although nonpoint sources were found to be primarily responsible for excessive sediment loadings to the Lower Eel River, the TMDL establishes wasteload allocations for area wastewater treatment facilities at levels corresponding to existing permit limitations for suspended and settleable solids. To satisfy the requirements of the TMDL, this Order therefore retains the monthly average limitations for settleable solids from Order No. R1-2000-92 of 0.1 mLs/L-hr, and reduces suspended solids from 95 mg/L to 30 mg/L.

### E. Other Plans, Polices and Regulations

1. **Stormwater**. The Order requires the Discharger to seek authorization to discharge under and meet the requirements of the State Water Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*, if applicable.

## IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

### A. Discharge Prohibitions

1. **Prohibition III.A.** The discharge of any waste not specifically regulated by this permit, not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.

   This prohibition is based on the Basin Plan, the previous Order (Order No. R1-2002-041), and State Water Board Order WQO 2002-0012 regarding the petition of WDRs Order No. 01-072 for the East Bay Municipal Utility District and Bay Area Clean Water Agencies. In State Water Board Order WQO 2002-0012, the State Water Board found that this prohibition is acceptable in Orders, but should be interpreted to apply only to constituents that are either not disclosed by the Discharger or are not reasonably anticipated to be present in the discharge, but have not been disclosed by the Discharger. It specifically does not apply to constituents in the discharge that do not have "reasonable potential" to exceed water quality objectives.

   The State Water Board has stated that the only pollutants not covered by this prohibition are those which were "disclosed …and...can be reasonably contemplated." (In re the Petition of East Bay Municipal Utilities District et al., (State Water Board 2002) Order No. WQ 2002-0012, p. 24) In that Order the State Water Board cited a case that held the Discharger is liable for discharge of pollutants not "within the reasonable contemplation of the permitting authority"..., (Piney Run Preservation Assn. v. County Commissioners of Carroll County, Maryland (4th Cir. 2001) 368 F .3d 255, 268.) Thus, State Water Board authority provides that, to be permissible, the constituent discharged (1) must have been disclosed by the Discharger and (2) can be reasonably contemplated by the Regional Water Board.

   Whether or not the Discharger reasonably contemplates the discharge of a constituent is not relevant. What matters is whether the Discharger disclosed the constituent to the Regional Water Board or whether the presence of the pollutant in the discharge can otherwise be reasonably contemplated by the Regional Water Board at the time of Order adoption.

2. **Prohibition III.B.** Creation of pollution, contamination, or nuisance, as defined by section 13050 of the California Water code is prohibited.

   This prohibition is based on section 13050 of the Water Code. It has been retained from Order No. R1-2002-0041.

3. **Prohibition III.C.** The discharge or reclamation use of untreated or partially treated waste (receiving a lower level of treatment than described in section II. A of the Fact Sheet) from anywhere within the collection, treatment, or disposal systems is

prohibited, except as provided for in Prohibition III. E and in Attachment D, Standard Provision G (Bypass).

This Prohibition is based on the Basin Plan, to protect beneficial uses of the receiving water from unpermitted discharges, and the intent of Water Code sections 13260 through 13264 relating to the discharge of waste to waters of the State without filing for and being issued an Order. This prohibition applies to spills not related to sanitary sewer overflows (SSOs) and other unauthorized discharges of wastewater within the collection, treatment, and disposal facilities. The discharge of untreated or partially treated wastewater from the collection, treatment, or disposal facility represents an unauthorized bypass pursuant to title 40, section 122.41(m) or an unauthorized discharge which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by this Order.

4. **Prohibition III.D.** The discharge of waste to land that is not owned by or under agreement to use by the Discharger is prohibited, except for use for fire suppression as provided in title 22, sections 60307 (a) and (b) of the Cal. Code of Regs.

   This prohibition is retained from Order No. R1-2002-0041. Land used for the application of wastewater must be owned by the Discharger or be under control of the Discharger by contract so that the Discharger maintains a means for ultimate disposal of treated wastewater.

5. **Prohibition III.E.** Discharge to the Eel River or its tributaries of domestic wastewater and/or process water other than noncontact cooling water or condensate from evaporated milk processing is prohibited.

   This prohibition is retained from Order No. R1-2002-0041. This Prohibition is based on the Basin Plan, to protect beneficial uses of the receiving water from unpermitted discharges, and the intent of Water Code sections 13260 through 13264 relating to the discharge of waste to waters of the State without filing for and being issued an Order.

6. **Prohibition III.F.** The discharge of noncontact cooling water and condensate from evaporated milk processing to the Eel River and its tributaries is prohibited during the period from May 15 through September 30 of each year.

   This prohibition is retained from Order No. R1-2002-0041. This prohibition is required by the Basin Plan. The Basin Plan prohibits discharges to the Eel River and its tributaries during the period May 15 through September 30 (Chapter 4, Waste Discharge prohibitions for the North Coastal Basin)

7. **Prohibition III.G.** The discharge of waste at any point not described in Finding II. B or authorized by a permit issued by the State Water Board or another Regional Water Board is prohibited.

This Prohibition is based on the Basin Plan, to protect beneficial uses of the receiving water from unpermitted discharges, and the intent of Water Code sections 13260 through 13264 relating to the discharge of waste to waters of the State without filing for and being issued an Order.

8. **Prohibition III.H.** During the period of October 1 through May 14, discharges of wastewater shall not exceed one percent of the flow of the receiving water as measured in the Eel River at the Scotia gauging station (USGS Station 11477000). The total volume discharged in a calendar month shall not exceed, in any circumstances, one percent of the total volume of the Eel River passing the Scotia gauging station in the same calendar month.

   This prohibition is retained from Order No. R1-2002-0041 and is a restatement of a Waste Discharge Prohibition established in Chapter 4 of the Basin Plan. The prohibition is intended to protect water quality and beneficial uses during critical low flow periods of the year.

9. **Prohibition III.I.** In cooling water discharges, the discharge of pollutants other than heat, is prohibited.

   This prohibition is retained from Order No. R1-2002-0041 and is intended to prohibit discharge of pollutants in non-contact cooling water not contemplated by the Regional Water Board at the time of Order adoption.

10. **Prohibition III.J.** Discharge from SN002 that results in a measureable change in receiving water temperatures is prohibited.

    This prohibition is retained from Order No. R1-2002-0041. This prohibition implements requirements of the Basin Plan. The Basin Plan establishes temperature objectives for surface waters. This prohibition implements Basin Plan requirements applicable to the Eel River.

11. **Prohibition III.K.** The discharge of domestic wastewater shall be kept underground at all times.

    This prohibition is retained from Order No. R1-2002-0041. This Prohibition is based on the Basin Plan, to protect beneficial uses of the receiving water from unpermitted discharges, and the intent of Water Code sections 13260 through 13264 relating to the discharge of waste to waters of the State without filing for and being issued an Order. Domestic wastewater is not disinfected and could pose a threat to public health if allowed to surface.

12. **Prohibition III.L.** The mean daily flow of domestic wastewater shall not exceed 2,500 gallons per day averaged over a calendar month.

This prohibition is retained from Order No. R1-2002-0041. This Prohibition is based on the septic system design criteria submitted with the report of waste discharge to conform to the Basin Plan criteria for onsite wastewater disposal systems.

13. **Prohibition III.M.** Irrigation of industrial process water in the leachfield area is prohibited.

    This prohibition is retained from Order No. R1-2002-0041. This Prohibition is based on the septic system design criteria submitted with the report of waste discharge to conform to the Basin Plan criteria for onsite wastewater disposal systems. Deposition of additional water in the leachfield area could result in system failures.

14. **Prohibition III.N.** Leachfield replacement area equivalent to 100 percent of the existing leachfield area shall be available for future leachfield repair. Incompatible uses of the existing disposal area and/or the replacement area are prohibited.

    This prohibition is retained from Order No. R1-2002-0041. This Prohibition is based on the septic system design criteria submitted with the report of waste discharge to conform to the Basin Plan criteria for onsite wastewater disposal systems.

## B. Technology-Based Effluent Limitations

### Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, requires that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Effluent Limitations Guidelines and Standards for the Dry Condensed and Evaporated Products Category in Part 405.11.

These effluent limitation guidelines were developed by the USEPA in response to the CWA requirement that technology-based effluent limitations be established based on several levels of controls:

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable

within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

- Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

- New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

**2. Applicable Technology-Based Effluent Limitations**

This Order adopts the following technology-based effluent limitations, applicable to Discharge Point SN002:

**Table 4. Summary of Technology-based Effluent Limitations – SN002**

| Parameter | Units | Effluent Limitations | |
|---|---|---|---|
| | | Maximum Daily | Average Daily |
| Biochemical Oxygen Demand[28] | lbs/100 lbs BOD5 input[29] | 0.218 | 0.109 |
| Total Suspended Solids (TSS) | lbs/100 lbs BOD5 input | 0.328 | .164 |
| pH | Standard Units | 6.0 to 9.0[30] | |

**C. Water Quality-Based Effluent Limitations (WQBELs)**

**1. Scope and Authority**

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements

[28] Biochemical Oxygen Demand 5-Day @ 20°C ($BOD_5$)
[29] The term $BOD_5$ input shall mean biological oxygen demand of the materials entered into the process. It can be calculated by multiplying the fats, proteins and carbohydrates by factors of 0.890, 1.031 and 0.691 respectively. Organic acids (ie. lactic acids) should be included as carbohydrates. Composition of input materials may be based on either direct analyses or generally accepted published numbers.
[30] Effluent Guidelines require a pH range of 6.0 to 9.0. However as described in IV.C.3.a.i. below, the water quality based effluent limitation has been established within the range of 6.5 to 8.5 in accordance with the Basin Plan to protect beneficial uses of the Eel River

where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirement, more stringent than secondary treatment requirements that are necessary to meet applicable water quality standards. The rationale for these requirements, which consist of pH for discharges into the Eel River, is discussed below in the Fact Sheet.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

**2. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

**a. Beneficial Uses.** Beneficial use designations for receiving waters for discharges from the facility are discussed in Finding II. H of the Order and section III. C. 1 of this Fact Sheet.

**b. Basin Plan Water Quality Objectives.** In addition to the specific water quality objectives indicated above, the Basin Plan contains narrative objectives for color, tastes and odors, floating material, suspended material, settleable material, oil and grease, biostimulatory substances, sediment, turbidity, pH, dissolved oxygen, bacteria, temperature, toxicity, pesticides, chemical constituents, and radioactivity that apply to inland surface waters, enclosed bays, and estuaries, including the Eel River.

**c. State Implementation Plan (SIP), CTR and NTR.** Water quality criteria and objectives applicable to the 126 priority pollutants for this receiving water are established by the California Toxics Rule (CTR), established by the USEPA at title 40, section 131.38; and the National Toxics Rule (NTR), established by the

USEPA at title 40, section 131.36. Criteria for most of the 126 priority pollutants are contained within the CTR and the NTR.

Aquatic life freshwater and saltwater criteria are further identified as criterion maximum concentrations (CMC) and criterion continuous concentrations (CCC). The CTR defines the CMC as the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects and the CCC as the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. The CMC is used to calculate an acute or one-hour average numeric effluent limitation and the CCC is used to calculate a chronic or 4-day average numeric effluent limitation. Aquatic life freshwater criteria were used for the reasonable potential analysis (RPA), and for the calculation of effluent limitations for pollutants that showed reasonable potential.

Human health criteria are further identified as "water and organisms" and "organisms only." "Water and organism" criteria are designed to address risks to human health from multiple exposure pathways. The criteria from the "water and organisms" column of the CTR were used for the RPA, because the receiving water, the Eel River, has the beneficial use designation as a municipal and domestic supply.

At title 22, Division 4, Chapter 15, Cal. Code of Regs, the Department of Health Services has established Maximum Contaminant Levels (MCLs) for certain pollutants for the protection of drinking water. Chapter 3 of the Basin Plan establishes these MCLs as water quality objectives applicable to receiving waters with the beneficial use designation of municipal and domestic supply

The SIP, which is described in Finding II. J of the Order and section III. C. 3 of the Fact Sheet, includes procedures for determining the need for, and the calculation of WQBELs and requires dischargers to submit data sufficient to do so. Attachment F-1 is a summary of RPA results for all priority toxic pollutants with water quality criteria/objectives that are applicable to the Eel River.

**3. Determining the Need for WQBELs**

**a.** Priority Pollutants

**i.** The RPA conducted for the Facility showed no reasonable potential for priority pollutants to exceed water quality criteria. Therefore no development of WQBELs is required for these constituents.

**b.** Non-Priority Pollutants

**i.** **pH**. The Order establishes an effluent limitation for pH of 6.5 to 8.5. This limitation is based on the water quality objective for all surface waters of the North Coast Region established by the Basin Plan (Chapter 3).

**4. WQBEL Calculations**

This Section does not apply to the Facility.

**Table 5. Summary of Water Quality-based Effluent Limitations**

| Parameter | Units | Effluent Limitations | |
|---|---|---|---|
| | | Maximum Daily | Average Daily |
| pH | Standard Units | 6.5 to 8.5 | |

**5. Whole Effluent Toxicity (WET)**

Effluent limitations for whole effluent, acute and chronic toxicity, protect the receiving water from the aggregate effect of a mixture of pollutants that may be present in effluent. There are two types of WET tests – acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic test is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. The Basin Plan establishes a narrative water quality objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to, or produce other detrimental responses in aquatic organisms. Detrimental responses may include, but are not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. The existing Order includes an effluent limitation for acute toxicity in accordance with the Basin Plan, which requires that the average survival of test organisms in undiluted effluent for any three consecutive 96-hour bioassay tests be at least 90 percent, with no single test having less than 70 percent survival.

In addition to the Basin Plan requirements, section 4 of the SIP states that chronic toxicity limitations are required in Orders for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. This Order does not establish an effluent limitation for chronic toxicity; however, chronic WET monitoring is required and limitations will be established if monitoring results demonstrate that discharges from the wastewater treatment facility are causing or contributing to chronic toxicity in the receiving water.

## D. Final Effluent Limitations

**1. Satisfaction of Anti-Backsliding Requirements**

All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order. New effluent limitations for biological oxygen demand (BOD) have been established for SN002 in this Order. The new BOD limitations are calculated based on production and expressed as an average daily limitation of 0.109 lbs/100 lbs $BOD_5$ input and a maximum daily limitation of 0.218 lbs/100 lbs $BOD_5$ input. New effluent limitations for total suspended solids (TSS) have been

established for SN002 in this Order. The new TSS limitations are calculated based on production and expressed as an average daily limitation of 0.164 lbs/100 lbs $BOD_5$ input and a maximum daily limitation of 0.328 lbs/100 lbs $BOD_5$ input. New effluent limitations for pH have been established for SN002 in this Order. The new pH limitations represent a numeric range and expressed a minimum daily limitation of 6.5 standard units and a maximum daily limitation of 8.5 standard units. The previous Order did not contain effluent limitations for SN002.

**2. Satisfaction of Antidegradation Policy**

This Order is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater.

**3. Stringency of Requirements for Individual Pollutants**

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on biological oxygen demand and total suspended solids. Restrictions on these pollutants are discussed in sections IV.B.2 and IV.D of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations for pH that are more stringent than the minimum, federal technology-based requirements but are necessary to meet water quality standards. These requirements are discussed in section IV.C.3 of the Fact Sheet.

Most beneficial uses and water quality objectives contained in the Basin Plan were approved under State law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order (specifically the addition of the beneficial use of Native American Culture (CUL) and the General Objective regarding antidegradation) were approved by USEPA on March 4, 2005, and are applicable water quality standards pursuant to section 131.21(c)(2). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

In addition, the Regional Water Board has considered the factors in Water Code section 13263, including the provisions of Water Code section 13241, in establishing these requirements.

**Table 6. Summary of Final Effluent Limitations – Discharge Point SN002**

| Parameter | Units | Effluent Limitations | |
|---|---|---|---|
| | | Maximum Daily | Average Daily |
| Biochemical Oxygen Demand[31] | lbs/100 lbs BOD5 input[32] | 0.218 | 0.109 |
| Total Suspended Solids (TSS) | lbs/100 lbs BOD5 input | 0.328 | .164 |
| pH | Standard Units | 6.5 to 8.5 | |

**E. Interim Effluent Limitations**

This Section does not apply to the Facility.

**F. Land Discharge Specifications**

**1. Scope and Authority**

Section 13263 of the Water Code requires the Regional Water Board to prescribe requirements for proposed discharges, existing discharges, or material change in an existing discharge based upon the conditions of the disposal area or receiving waters upon or into which the discharge is made or proposed. The prescribed requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241. In prescribing requirements, the Regional Water Board is not obligated to authorize the full waste assimilation capacities of the receiving water.

Water Code section 13241 requires the Regional Board to establish water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and prevention of nuisance, recognizing that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. The Basin Plan establishes water quality objectives specific to the North Coast Region for the protection of past, present, and probable future beneficial uses of water. Factors required for consideration during development of applicable water quality objectives, such as the characteristics of the hydrographic unit under consideration, economic considerations, and other factors required in accordance with section 13241 were considered during the Basin Planning and adoption process.

[31] Biochemical Oxygen Demand 5-Day @ 20°C ($BOD_5$)

[32] The term $BOD_5$ input shall mean biological oxygen demand of the materials entered into the process. It can be calculated by multiplying the fats, proteins and carbohydrates by factors of 0.890, 1.031 and 0.691 respectively. Organic acids (ie. lactic acids) should be included as carbohydrates. Composition of input materials may be based on either direct analyses or generally accepted published numbers.

**2. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

**a. Beneficial Uses**. Beneficial use designations for receiving waters for discharges from the facility are discussed in Finding II. H of the Order and section III. C. 1 of this Fact Sheet.

**b. Basin Plan Water Quality Objectives.** The Basin Plan contains narrative objectives for tastes and odors, bacteria, radioactivity, and chemical constituents (including those chemicals that adversely affect agricultural water supply) that apply to groundwater.

**3. Determining the Need for WQBELs**

**a. Biochemical Oxygen Demand (BOD)**. The Order establishes an effluent limitation for BOD of 60 lbs per acre per day. This limitation is based on literature values for BOD loading in land disposal systems for food processing systems. Consequences of BOD overloading may result in pollution or nuisance as defined by Water Code section 13050 including production of objectionable odors, increased risk of mosquito and fly breeding, plugging of the soil surface, and lowering of the oxidation/reduction potential in the underlying soil resulting in potential mobilization of naturally present contaminants in soil such as iron and manganese.

**b. Ammonia Nitrogen,** The Order establishes effluent limitations for ammonia nitrogen at 1.5 mg/l. This limitation is based on the secondary maximum contaminant level (MCL) for taste and odor in drinking water.

**c. Nitrite.** The Order establishes effluent limitations for nitrite1.0 mg/l. This limitation is based on the water quality objective for the protection of agricultural water supply.

**d. Nitrate.** The Order establishes effluent limitations for nitrate at 10 mg/l. This limitation is based on the State primary MCL for protection of health in drinking water.

**e. Total Dissolved Solids.** The Order establishes effluent limitations for total dissolved solids at 450 mg/l. Total dissolved solids is a direct measure of salinity. Overall salinity affects underlying groundwater quality as it relates to drinking water and agricultural supply beneficial uses. This limitation is based on the water quality objective for the protection of agricultural water supply.

**f. Sodium.** The Order establishes effluent limitations for sodium at 60,000 mg/l. This limitation is based on the secondary maximum contaminant level (MCL) for taste and odor in drinking water.

**g. Aluminum.** The Order establishes effluent limitations for aluminum at 1,000 ug/l. This limitation is based on the State primary MCL for protection of health in drinking water

**h. Manganese**. The Order establishes effluent limitations for manganese at 200 ug/l. This limitation is based on the water quality objective for the protection of agricultural supply.

**4. WQBEL Calculations**
This Section does not apply to the Facility.

**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 |

**G. Reclamation Specifications**
This Section does not apply to the Humboldt Creamery Facility.

## V. RATIONALE FOR RECEIVING WATER LIMITATIONS

### A. Surface Water

1. CWA section 303(a-c) requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The Regional Water Board adopted water quality criteria as water quality objectives in the Basin Plan. The Basin Plan states that "*[t]he numerical and narrative water quality objectives define the least stringent standards that the Regional [Water] Board will apply to regional waters in order to protect the beneficial uses."* The Basin Plan includes numeric and narrative water quality objectives for various beneficial uses and water bodies. This Order contains Receiving Surface Water Limitations based on the Basin Plan numerical and narrative water quality objectives for biostimulatory substances,

bacteria, chemical constituents, color, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, sediment, settleable material, suspended material, tastes and odors, temperature, toxicity, and turbidity.

**B. Groundwater**

1. The beneficial uses of the underlying ground water are municipal and domestic supply, industrial service supply, industrial process supply, agricultural supply, and freshwater replenishment to surface waters. Groundwater limitations are required to protect the beneficial uses of the underlying groundwater.

2. State Water Board Resolution No. 68-16, requires, in part, that whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality water will be maintained until it is demonstrated to the state that any changes will be consistent with maximum benefit to the people of the state, will not unreasonably affect beneficial uses of such water, and will not result in water quality less than prescribed in the policies.

## VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

### A. Influent Monitoring

Influent monitoring requirements for $BOD_5$ input are necessary to determine compliance with the Order's lbs/100 lbs input/day requirement for biological oxygen demand and total suspended solids.

### B. Effluent Monitoring

Effluent monitoring requirements are necessary to detemine compliance with prohibitions and/or effluent limitations established by the Order. Effluent monitoring requirements from the previous permit are retained for flow at moitoring locations EFF-002 and LND-001. Daily disposal area observations and documention of risers have also been retained from the previous permit. The following effluent monitoring requirements are newly established by the Monitoring and Reporting Program (Attachment E of this Order).

1. Weekly monitoring requirements at EFF-002 have been established for biological oxygen demand, total suspended solids, and pH to assess compliance with newly established effluent limitations.

2. Annual monitoring requirements have been established at EFF-002 for acute and chronic toxicity. This monitoring requirement enables the Regional Water Board to assess compliance with the Basin Plan's narrative water quality objective for toxicity that is applicable to all receiving waters of the Region. These requirements shall not begin until 6 months after the permit affective date.

3. The CTR pollutants are toxic pollutants for which water quality criteria have been established by the California Toxics Rule that are applicable to the receiving waters for this discharge. Routine monitoring requirements at EFF-002 have been established once during the anticipated term of the Order for the CTR pollutants to provide ongoing characterization of treated wastewater that is discharged from the facility and to assess the need for additional effluent limitations.

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.

## C. Whole Effluent Toxicity Testing Requirements

### 1. Acute Toxicity

**a. Rationale.** 96-hour bioassay testing is required to demonstrate compliance with the effluent limitation for acute toxicity (Effluent Limitation IV.A.1.d).

**b. Test Frequency.** The MRP establishes annual monitoring frequency instead of USEPA's recommendation for monthly WET testing for facilities listed as "major facilities" and quarterly testing for "minor facilities." (*Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs,* USEPA, 1996), because the discharge consists of limited inputs and limited volume.

**c. Sample Type.** This Order specifies a 96-hour static renewal or static non-renewal test as described in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (USEPA Report No. EPA-821-R-02-012, 5th edition or subsequent editions). Upon request, other methods may be approved by the Regional Water Board's Executive Officer.

**d. Test Species.** This Order requires the Discharger to conduct acute toxicity tests with the water flea, *Ceriodaphnia dubia*,and the rainbow trout, *Oncorhynchus*

*mykiss*, for at least two suites of tests. For the first two suites of acute toxicity tests, the Discharger will determine the most sensitive aquatic species and continue to monitor with the most sensitive species. At least once every five years, the Discharger will rescreen to reconfirm the most sensitive species for the acute toxicity test.

**e. Test Method.** The presence of acute toxicity shall be estimated as specified in effluent limitation IV.A.1.d and shall be consistent with *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (USEPA Report No. EPA-821-R-02-012, 5th edition or subsequent editions). Upon request, other methods may be approved by the Regional Water Board Executive Officer.

**f. Dilution Water.** Acute toxicity tests shall be conducted using undiluted effluent.

**g. Test Failure**. If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger shall re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.

**h. Accelerated Monitoring.** The provision requires accelerated acute toxicity testing when routine acute toxicity test results exceed the single sample effluent limitation (70 percent survival). The purpose of accelerated monitoring is to determine, in an expedient manner, whether there is a pattern of toxicity before requiring the implementation of a TRE. Under this provision, the Discharger is required to conduct testing on at least two additional samples, one within 14 days, and one within 21 days of receiving the initial sample result. If any of the additional samples do not comply with the three sample median minimum limitation (90 percent survival) using that sample result and the two previous sample results, the Discharger shall initiate a TRE. If any test of a sample is ruled invalid, the Discharger will re-sample within 7 days following notification of test invalidation.

**i. Notification and Reporting.** The MRP includes notification requirements regarding test results that exceed the acute toxicity effluent limitation and require reporting of whole effluent toxicity test results in accordance with the acute toxicity manual Chapter 12 (Report Preparation) or in an equivalent format.

**2. Chronic Toxicity**

**a. Rationale.** Chronic whole effluent toxicity (WET) testing is required beginning 6 months after the permit effective date, once per year, during the discharge season, in order to demonstrate compliance with the Basin Plan's narrative toxicity objective.

**b. Test Frequency.** The USEPA has no fixed guidance on the establishment of monitoring frequency, but recommends monthly WET testing for facilities listed as "major facilities" and quarterly testing for "minor facilities" during the first year of WET testing in order to develop sufficient data to conduct a reasonable potential analysis. USEPA further recommends that a reduction in sampling frequency is appropriate if no individual toxicity test exceeds the WET limit or trigger. For small municipalities, not designated as "major facilities," the USEPA recommends at least one suite of tests to be conducted during the lifetime of the permit and prior to reissuance in order to assess reasonable potential. *(Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs*, USEPA, 1996). This Order specifies routine monitoring for chronic toxicity, once per year during the discharge season beginning 6 months after the permit effective date.

**c. Sample Location**. Representative effluent samples shall be collected at Monitoring Location EFF-002, when discharging to surface water.

**d. Sample Type.** The Discharger shall collect an 24 hour composite samples of effleunt discharged from Discharge Point SN002 for critical life stage toxicity testing as indicated in this Order.

**e. Test Species.** This Order requires the Discharger to conduct short-term tests with the water flea, *Ceriodaphnia dubia* (survival and reproduction test), the fathead minnow, *Pimephales promelas* (larval survival and growth test), and the green alga, *Selenastrum capricornutum* (growth test). Initially, the Discharger is required to determine the most sensitive test species and monitor the discharge for chronic toxicity using that species for no more than five years, whereupon, the Discharger will repeat the screening procedure to confirm the most sensitive species. If reasonable potential to exceed the narrative water quality objective is found to exist, the Permit may be reopened to include a chronic toxicity limitation, as appropriate. The Basin Plan does not allow a mixing zone for this discharge; therefore, reasonable potential will be based on results of chronic toxicity tests from samples collected at the end of the pipe.

**f. Test Method.** The presence of chronic toxicity shall be estimated as specified in and shall be consistent with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms,* Fourth Edition, EPA-821-R-02-013, October, 2002.

**g. Dilution Water.** Control and dilution water should be receiving water at a location immediately upstream and outside the influence of the outfall for all test methods except the short-term chronic *Selenastrum capricornutum* test. For the *S. capricornutum* test method, synthetic laboratory water with a hardness similar to the receiving water shall be used as a control and diluent. Laboratory water may

be substituted for receiving water, as described in the manual, upon approval by the Regional Water Board Executive Officer.

**h. Accelerated Monitoring.** Guidance regarding accelerated monitoring and TRE initiation is provided in the *Technical Support Document for Water Quality-Based Toxics Control*, EPA/505/2-90-001, March 1991 (TSD). The TSD at page 118 states, "EPA receommends if toxicity is repeatedly or periodically present at levels above effluent limits more than 20 percent of the time, a TRE should be required." If there is adequate evidence of a pattern of effluent toxicity (i.e., toxicity present exceeding the monitoring trigger 20 percent of the time), the Regional Water Board's Executive Officer will require the Discharger to initiate a TRE. The TRE will include follow-up monitoring requirements to assure toxicity has been mitigated. Due to possible seasonality of the toxicity, the accelerated monitoring should be performed in a timely manner, preferably taking no more than 2 to 3 months to complete.

**i. Monitoring Trigger.** A numeric chronic toxicity monitoring trigger of 1.0 TUc (where TUc = 100/NOEC) is established by the Order, because this Order does not allow any dilution for the chronic condition. Therefore, a TRE is triggered when the effluent exhibits a pattern of toxicity at 100 percent effluent.

## D. Receiving Water Monitoring

Receiving water monitoring requirements are necessary to detemine compliance with water quality criteria and protection of beneficial uses contained in the Order. The following effluent monitoring requirements are newly established by the Monitoring and Reporting Program (Attachment E of this Order).

### 1. Surface Water

**a.** Receiving water monitoring requirements from the previous permit are retained for temperature at monitoring locations SWR-001 and SWR-002, but have been reduced to monthly from bi-weekly in recognition of the consistency demonstrated during the previous permit cycle.

**b.** Monthly receiving water monitoring has been established at monitoring locations SWR-001 and SWR-002 for dissolved oxygen, specific conductance, total dissolved solids, pH, turbidity, and visual observations to assess compliance with receiving water limitations associated with discharges from SN002.

**c.** The CTR pollutants are toxic pollutants for which water quality criteria have been established by the California Toxics Rule that are applicable to the receiving waters for this discharge. Routine monitoring requirements at SWR-001 have been established once during the anticipated term of the Order for the CTR pollutants to provide ongoing

characterization of upstream receiving water conditions, which in combination with treated will be used to assess the need for additional effluent limitations.

**2. Groundwater**

**a.** Quarterly receiving water monitoring requirements for total dissolved solids, ammonia nitrogen, nitrite, nitrate, sodium, aluminum, and manganese at monitoring locations GWR-001 through GRW-005 have been established to assess compliance with receiving water limitations associated with discharges from land disposal operations.

**b.** Quarterly receiving water monitoring requirements for iron at monitoring locations GWR-001 through GRW-005 have been established to assess whether biological oxygen demand loading is resulting in changes to the oxidation/reduction potential in soils and causing release of naturally occurring metals from soil into receiving groundwater.

**c.** Quarterly receiving water monitoring requirements for depth to groundwater measurements at monitoring locations GWR-001 through GRW-005 have been established to flow direction in receiving water.

### E. Other Monitoring Requirements

**a.** Quarterly monitoring requirements for depth to water measurements at monitoring locations INT-North, INT-South, GWR-North, and GWR-South have been established to asses proper function of the onsite septic treatment and disposal system.

## VII. RATIONALE FOR PROVISIONS

### A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections

122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

**B. Regional Water Board Standard Provisions**

In addition to the Federal Standard Provisions (Attachment D), the Discharger must comply with the Regional Water Board Standard Provisions provided in Standard Provisions VI.A.2.

1. Order Provision VI.A.2.a identifies the State's enforcement authority under the Water Code, which is more stringent than the enforcement authority specified in the federal regulations (e.g., title 40, sections 122.41(j)(5) and (k)(2)).

2. Order Provision VI.A.2.b requires the Discharger to notify Regional Water Board staff, orally and in writing, in the event that the Discharger does not comply or will be unable to comply with any Order requirement. The Provision requires the Discharger to make direct contact with a Regional Water Board staff person.

3. Order Provision VI.A.2.c requires the Discharger to petition with, and receive approval from, the State Water Board Division of Water Rights prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse. This requirement is mandated by Water Code section 1211.

**C. Special Provisions**

**1. Reopener Provisions**

**a. Standards Revisions (Special Provisions VI.C.1.a).** Conditions that necessitate a major modification of a permit are described in title 40, section 122.62, which include the following:

**i.** When standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision. Therefore, if revisions of applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such revised standards.

**ii.** When new information, that was not available at the time of permit issuance, would have justified different permit conditions at the time of issuance.

**b. Reasonable Potential (Special Provisions VI.C.1.b).** This provision allows the Regional Water Board to modify, or revoke and reissue, this Order if present or

future investigations demonstrate that the Discharger governed by this Permit is causing or contributing to excursions above any applicable priority pollutant criterion or objective or adversely impacting water quality and/or the beneficial uses of receiving waters.

c. **Whole Effluent Toxicity (Special Provisions VI.C.1.c).** This Order requires the Discharger to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity through a TRE. This Order may be reopened to include a numeric chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE. Additionally, if a numeric chronic toxicity water quality objective is adopted by the State Water Board, this Order may be reopened to include a numeric chronic toxicity limitation based on that objective.

d. **303(d)-Listed Pollutants (Special Provisions VI.C.1.d).** This provision allows the Regional Water Board to reopen this Order to modify existing effluent limitations or add effluent limitations for pollutant(s) that are the subject of any future TMDL action.

e. **Special Studies (Special Provisions VI.C.1.e).** The Discharger may elect to study the feasibility of the use of water effect ratios and/or mixing zones to meet water quality objectives and effluent limitations for toxic pollutants. If these or other future water quality studies such as the required reclamation / recycled water evaluation provide new information and a basis for determining that a permit condition or conditions should be modified, the Regional Water Board may reopen this Order and make appropriate modifications to this Order.

2. **Special Studies and Additional Monitoring Requirements**

a. **Toxicity Reduction Evaluations (Special Provision VI.C.2.a).** The SIP requires the use of short-term chronic toxicity tests to determine compliance with the narrative toxicity objectives for aquatic life in the Basin Plan. Attachment E of this Order requires chronic toxicity monitoring for demonstration of compliance with the narrative toxicity objective.

In addition to WET monitoring, Special Provisions VI.C.2.a.(1) requires the Discharger to submit to the Regional Water Board an initial investigative TRE Work Plan for approval by the Executive Officer, to ensure the Discharger has a plan to immediately move forward with the initial tiers of a TRE, in the event effluent toxicity is encountered in the future. The TRE is initiated by evidence of a pattern of toxicity demonstrated through the additional effluent monitoring provided as a result of an accelerated monitoring program.

The Discharger is required to prepare a TRE Work Plan in accordance with USEPA guidance. Numerous guidance documents are available, as identified below:

**i.** *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/833B-99/002)*, August 1999.

**ii.** *Generalized Methodology for Conducting Industrial TREs, (EPA/600/2-88/070)*, April 1989.

**iii.** *Methods for Aquatic Toxicity Identification evaluations: Phase I Toxicity Characterization Procedures*. Second Edition, EPA 600/6-91/005F, February 1991.

**iv.** *Toxicity Identification evaluation: Characterization of Chronically Toxic Effluents, Phase I,* EPA 600/6-91/005F, May 1992.

**v.** *Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity,* Second Edition, EPA 600/R-92/080, September 1993.

**vi.** *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity,* Second Edition, EPA 600/R-92/081, September 1993.

**vii.** *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, EPA-821-R-02-012, October 2002.

**viii.** *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA-821-R-02-013, October 2002.

**ix.** *Technical Support Document for Water Quality-based Toxics Control,* EPA/505/2-90-001, March 1991.

**b. Land Disposal Evaluation (Special Provision VI.C.2.b.)** This Order allows year round land disposal of wastewater. These discharges are prohibited from creating a condition of pollution or nuisance or adversely impacting the beneficial uses of water. . In order to ensure compliance with applicable regulations, some facilities may need to implement modifications. It is appropriate to provide a reasonable time schedule for the proper evaluation of potential discharges, possible alternatives, and implementation for any necessary modifications.

c. **Effluent Disposal Evaluation (Special Provision VI.C.2.c.)** This Order limits wastewater disposal based on previously permitted effluent design flows. It is unclear from the file record how these design flows were developed and whether they are the most appropriate design flows for the current facility conditions. Any increase in permitted flows would require appropriate antidegradation analyses. In order to ensure compliance with applicable regulations, some facilities may need to implement modifications. It is appropriate to provide a reasonable time schedule for the proper evaluation of discharges, possible alternatives, and implementation for any necessary modifications.

**3. Best Management Practices and Pollution Prevention**

Provision VI.C.3, devlopment of a Pollution Minimization Plan is included in this Order as required by section 2.4.5 of the SIP. The Regional Water Board included standard provisions in all NPDES permits requiring development of a Pollutant Minimization Program if and when there is evidence that a toxic pollutant is present in effluent at a concentration greater than an applicable effluent limitation.

**4. Construction, Operation, and Maintenance Specifications**

Title 40, section 122.41(e) requires proper operation and maintenance of permitted wastewater systems and related facilities to achieve compliance with permit conditions. An up-to-date operation and maintenance manual, as required by Provision VI.C.4.b of the Order, is an integral part of a well-operated and maintained facility.

**5. Special Provisions for Municipal Facilities (POTWs Only)**
This Section does not apply to the Facility.

**6. Other Special Provisions**
This Section does not apply to the Facility.

**7. Compliance Schedules**
This Section does not apply to the Facility.

## VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Humboldt Creamery. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

### A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through posting on the Regional Water Board's Internet site at: http://www.waterboards.ca.gov/northcoast/public_notices/public_hearings/npdes_permits_and_wdrs.shtml and through publication in the Eureka Times-Standard on July 1, 2008.

### B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on July 31, 2008**.** At the request of the Discharger, the public comment period was extended through August 14, 2008.

### C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: September 11, 2008
Time: 08:30
Location: Regional Water Board Hearing Room
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/northcoast where you can access the current agenda for changes in dates and locations.

**D. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

**E. Information and Copying**

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (707) 576-2220.

**F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

**G. Additional Information**

Requests for additional information or questions regarding this order should be directed to Lisa Bernard at lbernard@waterboards.ca.gov or (707) 576-2677.