



# California Regional Water Quality Control Board

## Los Angeles Region

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Alan C. Lloyd, Ph.D.  
Agency Secretary

Arnold Schwarzenegger  
Governor

### ORDER NO. R4-2005-0070 NPDES NO. CA0057371

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

<b>Discharger</b>	California Dairies, Incorporated
<b>Name of Facility</b>	Artesia Facility
<b>Facility Address</b>	11709 East Artesia Boulevard
	Artesia, CA 90101
	Los Angeles County

The Discharger is authorized to discharge from the following discharge points as set forth below:

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated Condensate Water	33 ° 52' 23" N	118 ° 04' 56" W	Coyote Creek

This Order was adopted by the Regional Water Board on:	<b>November 3, 2005</b>
This Order shall become effective on:	<b>December 5, 2005</b>
This Order shall expire on:	<b>October 10, 2010</b>
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Board have classified this discharge as a minor discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, <b>not later than 180 days in advance of the Order expiration date</b> as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that Order No. 99-136 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Jonathan S. Bishop, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on November 3, 2005.

Jonathan S. Bishop, Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
 REGION 4, LOS ANGELES REGION**

ORDER NO. R4-2005-0070  
 NPDES NO. CA0057371

**TABLE OF CONTENTS**

I.	Facility Information .....	3
II.	Findings .....	4
III.	Discharge Prohibitions .....	7
IV.	Effluent Limitations and Discharge Specifications .....	9
	A. Effluent Limitations – Discharge Point 001 .....	9
	B. Land Discharge Specifications .....	11
	C. Reclamation Specifications .....	11
V.	Receiving Water Limitations .....	12
	A. Surface Water Limitations .....	12
	B. Groundwater Limitations .....	13
VI.	Provisions .....	13
	A. Standard Provisions .....	13
	B. Monitoring and Reporting Program Requirements .....	15
	C. Special Provisions .....	15
	1. Reopener Provisions .....	15
	2. Special Studies, Technical Reports and Additional Monitoring Requirements .....	16
	3. Best Management Practices and Pollution Prevention .....	17
	4. Compliance Schedules .....	17
	5. Construction, Operation and Maintenance Specifications .....	18
	6. Special Provisions for Municipal Facilities (POTWs Only) .....	18
	7. Other Special Provisions .....	18
VII.	Compliance Determination .....	19
	A. Compliance with single constituent effluent limitation .....	19
	B. Compliance with effluent limitations expressed as a sum of several constituents .....	19
	C. Mass-based Effluent Limitations .....	19
	D. Average Monthly Effluent Limitation (AMEL) .....	19
	E. Maximum Daily Effluent Limitation (MDEL) .....	20
	F. Instantaneous Minimum Effluent Limitation .....	20
	G. Instantaneous Maximum Effluent Limitation .....	20
	Attachment A – Definitions .....	A-1
	Attachment B – Topographic Map .....	B-1
	Attachment C – Flow Schematic .....	C-1
	Attachment D – Federal Standard Provisions .....	D-1
	Attachment E – Monitoring and Reporting Program (MRP) .....	E-1
	Attachment F – Fact Sheet .....	F-1
	Attachment G – Minimum Levels .....	G-1
	Attachment H – Priority Pollutants .....	H-1
	Attachment I – RPA Summary .....	I-1

## I. FACILITY INFORMATION

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

<b>Discharger</b>	California Dairies, Incorporated
<b>Name of Facility</b>	Artesia Facility
<b>Facility Address</b>	11709 East Artesia Boulevard
	Artesia, CA 90701
	Los Angeles County
<b>Facility Contact, Title, and Phone</b>	Rico Hinojosa, Plant Manager, 562-865-1291
<b>Mailing Address</b>	Same as the Facility Address
<b>Type of Facility</b>	Milk transfer and processing plant
<b>Facility Design Flow</b>	0.22 million gallons per day (MGD)

## II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board), finds:

- A. **Background.** California Dairies, Incorporated (hereinafter CDI or Discharger) is currently discharging under Order No. 99-136 and a National Pollutant Discharge Elimination System (NPDES) Permit No. CA0057371. The Discharger submitted a Report of Waste Discharge, dated February 4, 2005, and applied for a NPDES permit renewal to discharge up to 220,000 gallons per day of treated condensate water from milk evaporators from Artesia Facility, hereinafter Facility. The application was deemed complete on September 13, 2005.
- B. **Facility Description.** The Discharger operates a milk transfer and processing plant. The Facility is located at 11709 East Artesia Boulevard, Artesia, California. Attachment B depicts a topographic map of the area around the Facility. The Facility produces condensed and evaporated milk products. Raw milk and cream are processed into condensed milk, powdered milk, whole milk condensed, butter, cheese, and ice cream mixes through a evaporative system. The production process involves evaporating the liquid part of skim milk to obtain concentrated milk solids. The steam condensate that is produced in the process of evaporating the liquid fraction of the milk is known as “cow water,” an industry term synonymous with reclaimed evaporator water. A portion of the “cow water” is an integral part of the CDI waste minimization and resource recovery program, as it is used for equipment washdown, surface cleaning, cooling tower makeup, and boiler makeup. The remaining volume of wastewater that cannot be reused is discharged to the storm drain through Discharge Point 001 (see Table on cover page) thence to the Coyote Creek, a water of the United States within San Gabriel River Watershed. CDI discharges up to 220,000 gallons per day of wastewater during the maximum production at the Facility. Attachment C depicts the Evaporator Condensate Process Schematic at Facility Production Limit.
- In addition, a portion of the wastewater is also discharged to the sanitary sewer under an industrial waste discharge permit issued by the County Sanitation Districts of Los Angeles County (CSDLAC). Under the terms of CDI’s existing industrial waste discharge permit, the five-minute peak discharge of wastewater from the Facility to the county sewer must not exceed 320 gallons per minute. The peak discharge limitation is due to the infrastructure limitations within the CSDLAC sewerage system.
- C. **Legal Authorities.** This Order is issued pursuant to section 402 of the Federal CWA and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the CWC. 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 of the CWC for discharges that are not subject to regulation under CWA section 402.
- 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 through special studies. Attachments A through I, which contain background information and rationale for Order requirements, are hereby incorporated into this Order and, thus, constitute part of the Findings for this Order.
- E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with section 13389 of the CWC.

**F. Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR § 122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Best Professional Judgment (BPJ) in accordance with 40 CFR § 125.3. A detailed discussion of the technology-based effluent limitation development is included in the Fact Sheet (Attachment F).

**G. Water Quality-based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR § 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter.

USEPA approved the State’s 2002 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in Los Angeles County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) list and have been scheduled for TMDL development. According to the State’s 2002 303(d) list, the Coyote Creek is impaired for abnormal fish histology, algae, dissolved copper, high coliform counts, dissolved lead, total selenium, and dissolved zinc. To date, no TMDL has been approved by USEPA for this segment of water. Therefore, no conditions in the Order are based on TMDLs.

**H. Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994, which was amended on January 27, 1997, by Regional Board Resolution No. 97-02 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, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to Coyote Creek are as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Coyote Creek	<u>Existing:</u> Preservation of rare, threatened or endangered species (RARE). <u>Intermittent:</u> Non-contact (REC-2) water recreation. <u>Potential:</u> Municipal and domestic water supply (MUN), industrial service supply (IND), industrial process supply (PROC), water contact recreation (REC-1), warm freshwater habitat (WARM), and wildlife habitat (WILD).

The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.

The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board with the adoption of Resolution No. 2002-011, *Amendment to the*

*Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life.* The ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with USEPA's 1999 ammonia criteria update.

Requirements of this Order specifically implement the applicable Water Quality Control Plans.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
- J. **State Implementation Policy.** On March 2, 2000, 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 Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The SIP became effective on May 18, 2000. The alternate test procedures provision was effective on May 22, 2000. The SIP includes procedures for determining the need for and calculating WQBELs and requires dischargers to submit data sufficient to do so. The State Water Board adopted amendments to the SIP on February 24, 2005, was approved by the Office of Administrative Law (OAL) on May 31, 2005, and the USEPA approved it on July 13, 2005. The CTR's Compliance Schedule provisions sunseted on May 17, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed five years from permit issuance or May 17, 2010, whichever is sooner.
- K. **Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger 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 17, 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 include compliance schedules and interim effluent limitations. A detailed discussion of the basis for the compliance schedule and interim effluent limitations and discharge specifications is included in the Fact Sheet (Attachment F).
- L. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that 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, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F) the permitted

discharge is consistent with the antidegradation provision of 40 CFR § 131.12 and State Water Board Resolution No. 68-16.

- M. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR § 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 existing 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 existing Order.
- N. **Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards 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.
- O. **Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR §§ 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. 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 (Attachment F).
- P. **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 CFR 131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved 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.
- Q. **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 (Attachment F) of this Order.
- R. **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 (Attachment F) of this Order.

### III. DISCHARGE PROHIBITIONS

- A. Wastes discharged shall be limited to a maximum of 220,000 gpd of condensate wastewater from the milk evaporators as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.
- B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, Coyote Creek, or other waters of the State, are prohibited.

- C. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, Coyote Creek, or other waters of the State, are prohibited.
- D. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by Section 13050 of the CWC.
- E. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- F. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- G. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- H. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

**IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

**A. Effluent Limitations – Discharge Point 001**

**1. Final Effluent Limitations – Discharge Point 001**

- a. The discharge of condensate wastewater from milk evaporators shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001 as described in the attached Monitoring and Reporting Program (Attachment E):

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	20	30	--	--
	Lbs/day <sup>1</sup>	37	55	--	--
Oil and Grease	mg/L	10	15	--	--
	lbs/day <sup>1</sup>	18	28	--	--
Total Suspended Solids, (TSS)	mg/L	50	75	--	--
	lbs/day <sup>1</sup>	92	138	--	--
PH	Standard units	--	--	6.5	8.5
Cadmium, Total Recoverable	µg/L	2.02	4.0	--	--
	lbs/day <sup>1</sup>	0.0037	0.0074	--	--
Copper, Total Recoverable	µg/L	6.98	14	--	--
	lbs/day <sup>1</sup>	0.013	0.026	--	--
Lead, Total Recoverable	µg/L	2.61	5.2	--	--
	lbs/day <sup>1</sup>	0.0048	0.010	--	--
Mercury, Total Recoverable	µg/L	0.051	0.10	--	--
	lbs/day <sup>1</sup>	0.001	0.00019	--	--
Selenium, Total Recoverable	µg/L	4.1	8.2	--	--
	lbs/day <sup>1</sup>	0.008	0.015	--	--
Silver, Total Recoverable	µg/L	2.023	4.1	--	--
	lbs/day <sup>1</sup>	0.0037	0.0074	--	--
Thallium, Total Recoverable	µg/L	6.3	12.6	--	--
	lbs/day <sup>1</sup>	0.012	0.023	--	--
Zinc, Total Recoverable	µg/L	59.72	120	--	--
	lbs/day <sup>1</sup>	0.11	0.22	--	--

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Chlorine, Total Residual	mg/L	--	0.10	--	--
	lbs/day <sup>1</sup>	--	0.18	--	--
Nitrite Nitrogen (as N)	mg/L	--	1.0	--	--
	lbs/day <sup>1</sup>	--	1.8	--	--
Nitrite Plus Nitrate (as N)	mg/L	--	8.0	--	--
	lbs/day <sup>1</sup>	--	15	--	--
Settleable Solids	ml/L	0.1	0.30	--	--
Temperature	°F	--	--	--	86
Turbidity	NTU	50	75	--	--

<sup>1</sup> The mass-based effluent limitations for pollutants are based on a maximum discharge flow rate of 220,000 gpd (0.220 mgd) using the formula:

$$m = 8.34 C_i Q$$

where: m = mass discharge for a pollutant, lb/day  
 C<sub>i</sub> = limitation concentration for a pollutant, mg/L  
 Q = actual discharge flow rate, mgd

The mass emission for the discharge shall be calculated and reported using the limitation concentration and the actual flow rate measured at the time of discharge, using the above formula.

- b. There shall be no acute toxicity in the discharge. The acute toxicity of the effluent shall be such that:
  - 1) The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
  - 2) No single test produces less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in Section V of the Monitoring and Reporting Program No. 6166 (Attachment E).

**2. Interim Effluent Limitations**

- a. During the period beginning December 5, 2005, and ending on December 5, 2007, the discharge of condensate water from milk evaporators shall maintain compliance with the following limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001 as described in the attached MRP (Attachment E). These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this provision.

Parameter	Units	Interim Effluent Limitations <sup>1</sup>			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Cadmium, Total Recoverable	µg/L	4	--	--	--
Copper, Total Recoverable	µg/L	16	16	--	--
Lead, Total Recoverable	µg/L	20	20	--	--
Mercury, Total Recoverable	µg/L	0.33	0.33	--	--
Silver, Total Recoverable	µg/L	4	--	--	--
Thallium, Total Recoverable	µg/L	14	14	--	--
Zinc, Total Recoverable	µg/L	113	--	--	--

<sup>1</sup> The interim effluent limitations were based on the Facility's maximum effluent concentration (MEC).

**B. Land Discharge Specifications**

**[Not Applicable]**

**C. Reclamation Specifications**

**[Not Applicable]**

## **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. The discharge shall not cause the following in Coyote Creek:

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.5 units.
2. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
3. Surface water temperature to rise greater than 5 °F above the natural temperature of the receiving waters at any time or place. At no time the temperature be raised above 80 °F as a result of waste discharged.
4. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution 2002-011. Resolution No. 2002-011 revised the ammonia criteria in the 1994 Basin Plan, to be consistent with the 1999 USEPA update on ammonia criteria. Adopted on April 28, 2002, Resolution No. 2002-011 was approved by State Water Board, Office of Administrative Law (OAL) and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively, and is now in effect.
5. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
6. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
7. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
8. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
9. Accumulation of bottom deposits or aquatic growths.
10. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
11. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
12. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.

13. Alteration of turbidity, or apparent color beyond present natural background levels.
14. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
15. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
16. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
17. Create nuisance, or adversely effect beneficial uses of the receiving water.
18. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

## B. Groundwater Limitations

**[Not Applicable]**

## 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. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR § 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
  - b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.
  - c. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.

- d. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.
- e. These requirements do not exempt the operator of the waste disposal Facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal Facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
- f. Oil or oily material, chemicals, refuse, or other objectionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- g. A copy of these waste discharge specifications shall be maintained at the discharge Facility so as to be available at all times to operating personnel.
- h. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
  - 1) Violation of any term or condition contained in this Order;
  - 2) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
  - 3) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- i. If there is any storage of hazardous or toxic materials or hydrocarbons at this Facility and if the Facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- j. The Discharger shall notify the Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing Facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.
- k. The Discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
- l. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.
- m. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Regional Water Board of such change and shall

notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board.

- n. The CWC provides that any person who violates a waste discharge requirement or a provision of the CWC is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

Violation of any of the provisions of the NPDES program or of any of the provisions of this Order may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

- o. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.
- p. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.
- q. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
  - 1) Name and general composition of the chemical,
  - 2) Frequency of use,
  - 3) Quantities to be used,
  - 4) Proposed discharge concentrations, and
  - 5) USEPA registration number, if applicable.

## **B. Monitoring and Reporting Program Requirements**

The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment E of this Order. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Regional Water Board Standard Provisions, those provisions stated in the Monitoring and Reporting Program shall prevail.

## **C. Special Provisions**

### **1. Reopener Provisions**

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more

comprehensive monitoring program included as part of this Order and based on the results of the Reasonable Potential Analysis (RPA).

- c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new Minimum Levels (MLs).
- d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Coyote Creek.
- e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.

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

- a. **Chronic Toxicity Trigger and Monitoring Requirements.** The Order contains a chronic toxicity trigger defined as an exceedance of 1.0 TU<sub>c</sub> in a critical life stage test for 100% effluent (The monthly median for chronic toxicity of 100% effluent shall not exceed, 1 TU<sub>c</sub> in a critical life stage test.). The Discharger shall monitor the effluent annually for chronic toxicity to determine the presence of chronic toxicity. If the chronic toxicity of the effluent exceeds 1.0 TU<sub>c</sub> (defined in Section V.A of the Monitoring and Reporting Program, Attachment E), the Discharger shall immediately implement accelerated chronic toxicity testing, as required in Section V of the Monitoring and Reporting Program, Attachment E).
- b. **Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.** The Discharger shall submit to the Regional Water Board an Initial Investigation Toxicity Reduction Evaluation (TRE) workplan (1-2 pages) within 90 days of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:
  - 1) A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;
  - 2) A description of the Facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the Facility;
  - 3) 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) (Section V of the Monitoring and Reporting Program No. 6166, Attachment E) provides references for the guidance manuals that should be used for performing TIEs).

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

#### a. **Pollutant Minimization Plan (PMP).**

The Discharger shall develop a PMP 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 effluent limitations specified in Final Effluent Limitations Section IV.A.1.a of this Order. The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Board:

- (a) Annual review and quarterly monitoring of the potential sources of priority pollutants;
- (b) Submittal of a control strategy designed to proceed toward the goal of maintaining effluent concentrations at or below the effluent limitation;
- (c) Implementation of appropriate cost-effective control measures consistent with the control strategy;
- (d) An annual status report that shall be sent to the Regional Water Board at the same time the annual summary report is submitted in accordance with Section X.D of the Monitoring and Reporting Program No. 6166 (Attachment E), and include:
  - (1) All PMP monitoring results for the previous year;
  - (2) A list of potential sources of priority pollutants;
  - (3) A summary of all actions undertaken pursuant to the control strategy;
  - (4) A description of actions to be taken in the following year.

### 4. **Compliance Schedules**

#### a. **Compliance Plan.**

- 1) The interim limitations stipulated in Section IV.A.2 shall be in effect for a period not to extend beyond December 5, 2007. Thereafter, the Discharger shall comply with the limitations specified in Section IV.A.1 of this Order.
- 2) The Discharger shall develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of cadmium, copper, lead, mercury, silver, thallium, and zinc in the effluent. This plan must evaluate options to achieve compliance with the permit limitations specified in Section IV.A.1.
- 3) The Discharger shall submit annual reports to describe the progress of studies and or actions undertaken to reduce cadmium, copper, lead, mercury, silver, thallium, and zinc in the effluent, and to achieve compliance with the limitations in this Order by the deadline specified in Section IV.A.2. The Regional Water Board shall receive the first annual progress report at the same time the annual summary report is due, as required in Section X.B.2 of Monitoring and Reporting Program (Attachment E).

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

- a. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order

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

**[Not Applicable]**

**7. Other Special Provisions**

**[Not Applicable]**

## VII. COMPLIANCE DETERMINATION

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

### A. Compliance with single constituent effluent limitation.

If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (see Reporting Requirement II.G. of the Monitoring and Reporting Program), then the Discharger is out of compliance.

### B. Compliance with effluent limitations expressed as a sum of several constituents.

If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero, provided that the applicable ML is used.

### C. Mass-based Effluent Limitations.

In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for "Not Detected" (ND) and the estimated concentration for "Detected, but Not Quantified" (DNQ) for the calculation of the monthly average concentration. To be consistent with Section VII.B of this Order, if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations should be considered as zero for the calculation of the monthly average concentration.

### D. Average Monthly Effluent Limitation (AMEL).

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and 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). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. 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. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

In determining compliance with the AMEL, the following provisions shall also apply to all constituents:

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for that month;
2. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

When all sample results are greater than or equal to the reported Minimum Level (see Reporting Requirement I.G. of the Monitoring and Reporting Program), the numerical average of the analytical results of these five samples will be used for compliance determination.

When one or more sample results are reported as “Not-Detected (ND)” or “Detected, but Not Quantified (DNQ)” (see Reporting Requirement I.G. of the Monitoring and Reporting Program), the median value of these four samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

3. In the event of noncompliance with an AMEL, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.
4. If only one sample was obtained for the month or more than a monthly period and the result exceeds the AMEL, then the Discharger is in violation of the AMEL.

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

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and 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, a violation will be flagged and 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, a violation will be flagged and 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, ACRONYMS, AND ABBREVIATIONS

### DEFINITIONS

**20°C BOD<sub>5</sub>**: 5-day Biochemical oxygen demand at 20°C.

**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.

**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.

**g/L**: grams per Liter.

**gpd**: gallons per day.

**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)**: the highest allowable daily discharge of a pollutant.

## ACRONYMS

AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand
BPT	Best practicable treatment control technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWC	California Water Code
Discharger	California Dairies, Incorporated
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ECA	Effluent Concentration Allowance
ELAP	California Department of Health Services Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Artesia Facility
gpd	gallons per day
IC	Inhibition Coefficient
IC <sub>15</sub>	Concentration at which the organism is 15% inhibited
IC <sub>25</sub>	Concentration at which the organism is 25% inhibited
IC <sub>40</sub>	Concentration at which the organism is 40% inhibited
IC <sub>50</sub>	Concentration at which the organism is 50% inhibited
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
LTA	Long-Term Average
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
POTW	Publicly Owned Treatment Works
PMP	Pollutant Minimization Plan
QA	Quality Assurance

QA/QC	Quality Assurance/Quality Control
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
SIP	State Implementation Policy ( <i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i> )
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	<i>Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California</i>
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solid
TU	Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WET	Whole effluent toxicity
WLA	Waste Load Allocations
WQBELs	Water Quality-Based Effluent Limitations

CALIFORNIA DAIRIES, INCORPORATED  
ARTESIA FACILITY  
ORDER NO. R4-2005-0070  
NPDES NO. CA0057371

**ATTACHMENT B – LOCATION MAP**

CALIFORNIA DAIRIES, INCORPORATED  
ARTESIA FACILITY  
ORDER NO. R4-2005-0070  
NPDES NO. CA0057371

## **ATTACHMENT C – FLOW SCHEMATIC**

## **ATTACHMENT D – FEDERAL 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 CWA and the CWC and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [40 CFR § 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 been modified to incorporate the requirement [40 CFR § 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 CFR § 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 CFR § 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 CFR § 122.41(e)].

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 CFR § 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 CFR § 122.5(c)].

## F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, 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 CFR § 122.41(i)] [CWC 13383(c)]:

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 CFR § 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 CFR § 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 CFR § 122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR § 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 CFR § 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 CFR § 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 and I.G.5 below [40 CFR § 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 CFR § 122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR § 122.41(m)(4)(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 CFR § 122.41(m)(4)(B)]; and

- c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR § 122.41(m)(4)(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 CFR § 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 CFR § 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 [40 CFR § 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 permittee. 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 CFR § 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 paragraph H.2 of this section 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 CFR § 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 CFR § 122.41(n)(3)]:
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR § 122.41(n)(3)(i)];
  - b. The permitted Facility was, at the time, being properly operated [40 CFR § 122.41(n)(3)(i)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [40 CFR § 122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR § 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 CFR § 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 CFR § 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 CFR § 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 CWC [40 CFR § 122.41(l)(3)] [40 CFR § 122.61].

## III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR § 122.41(j)(1)].
- B. Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [40 CFR § 122.41(j)(4)] [40 CFR § 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 40 CFR Part 503), 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 CFR § 122.41(j)(2)].
- B. Records of monitoring information shall include:
  - 1. The date, exact place, and time of sampling or measurements [40 CFR § 122.41(j)(3)(i)];
  - 2. The individual(s) who performed the sampling or measurements [40 CFR § 122.41(j)(3)(ii)];
  - 3. The date(s) analyses were performed [40 CFR § 122.41(j)(3)(iii)];
  - 4. The individual(s) who performed the analyses [40 CFR § 122.41(j)(3)(iv)];

5. The analytical techniques or methods used [40 CFR § 122.41(j)(3)(v)]; and
6. The results of such analyses [40 CFR § 122.41(j)(3)(vi)].

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

1. The name and address of any permit applicant or Discharger [40 CFR § 122.7(b)(1)]; and
2. Permit applications and attachments, permits and effluent data [40 CFR § 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 CFR § 122.41(h)] [CWC 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 paragraph (2.) and (3.) of this provision [40 CFR § 122.41(k)].
2. All permit applications shall be signed as follows:
  - a. For a corporation: 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 CFR § 122.22(a)(1)];
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 CFR § 122.22(a)(2)]; or
  - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal

geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR § 122.22(a)(3)].

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 paragraph (b) of this provision, 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 paragraph (2.) of this provision [40 CFR § 122.22(b)(1)];
  - b. The authorization specified 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 CFR § 122.22(b)(2)]; and
  - c. The written authorization is submitted to the Regional Water Board, State Water Board, or USEPA [40 CFR § 122.22(b)(3)].
4. If an authorization under paragraph (3.) of this provision 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 paragraph (3.) of this provision must be submitted to the Regional Water Board, State Water Board or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR § 122.22(c)].
5. Any person signing a document under paragraph (2.) or (3.) of this provision 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 CFR § 122.22(d)].

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in this Order [40 CFR § 122.41(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 CFR § 122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR 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 CFR § 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 CFR § 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 CFR § 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 24 hours from the time the Discharger becomes aware of the circumstances. 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 CFR § 122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR § 122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR § 122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [40 CFR § 122.41(l)(6)(ii)(B)].
  - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [40 CFR § 122.41(l)(6)(ii)(C)].
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 24 hours [40 CFR § 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 CFR § 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 40 CFR § 122.29(b) [40 CFR § 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 which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part

122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR § 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 CFR § 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 CFR § 122.41(l)(2)].

#### **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 CFR § 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 CFR § 122.41(l)(8)].

### **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15

years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR § 122.41(a)(2)] [CWC 13385 and 13387].

- B. Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR § 122.41(a)(3)].
- C. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR § 122.41(j)(5)].
- D. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR § 122.41(k)(2)].

## 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 CFR § 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 CFR § 122.42(a)(1)]:
  - a. 100 micrograms per liter ( $\mu\text{g/L}$ ) [40 CFR § 122.42(a)(1)(i)];
  - b. 200  $\mu\text{g/L}$  for acrolein and acrylonitrile; 500  $\mu\text{g/L}$  for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter ( $\text{mg/L}$ ) for antimony [40 CFR § 122.42(a)(1)(ii)];
  - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR § 122.42(a)(1)(iii)]; or
  - d. The level established by the Regional Water Board in accordance with 40 CFR § 122.44(f) [40 CFR § 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 CFR § 122.42(a)(2)]:
  - a. 500 micrograms per liter ( $\mu\text{g/L}$ ) [40 CFR § 122.42(a)(2)(i)];
  - b. 1 milligram per liter ( $\text{mg/L}$ ) for antimony [40 CFR § 122.42(a)(2)(ii)];
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR § 122.42(a)(2)(iii)]; or
  - d. The level established by the Regional Water Board in accordance with 40 CFR § 122.44(f) [40 CFR § 122.42(a)(2)(iv)].

**B. Publicly-Owned Treatment Works (POTWs)**

All POTWs shall provide adequate notice to the Regional Water Board of the following [40 CFR § 122.42(b)]:

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants [40 CFR § 122.42(b)(1)]; and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [40 CFR § 122.42(b)(2)].

Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [40 CFR § 122.42(b)(3)].

## Attachment E – Monitoring and Reporting Program – Table of Contents

Attachment E – Monitoring and Reporting Program (MRP) NO. 6166.....	E-2
I. General Monitoring Provisions .....	E-2
II. Monitoring Locations .....	E-5
III. Influent Monitoring Requirements.....	E-5
IV. Effluent Monitoring Requirements .....	E-5
A. Monitoring Location M-001 .....	E-5
V. Whole Effluent Toxicity Testing Requirements .....	E-7
A. Definition of Toxicity .....	E-7
B. Acute Toxicity Effluent Monitoring Program .....	E-7
C. Chronic Toxicity Effluent Monitoring Program .....	E-8
D. Quality Assurance.....	E-8
E. Accelerated Monitoring and Initial Investigation Toxicity Reduction Evaluation Trigger .....	E-9
G. Steps in TRE and TIE Procedures .....	E-10
H. Reporting .....	E-11
VI. Land Discharge Monitoring Requirements .....	E-12
VII. Reclamation Monitoring Requirements.....	E-12
VIII. Receiving Water Monitoring Requirements – Surface Water and Groundwater.....	E-12
A. Monitoring Location R-001 .....	E-12
B. Monitoring Location R-002 .....	E-13
IX. Other Monitoring Requirements .....	E-13
X. Reporting Requirements .....	E-13
A. General Monitoring and Reporting Requirements .....	E-13
B. Self Monitoring Reports (SMRs).....	E-13
C. Discharge Monitoring Reports (DMRs).....	E-14
D. Other Reports .....	E-15

## **ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 6166**

The Code of Federal Regulations (CFR) at 40 CFR § 122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC sections 13267 and 13383 also authorize the 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. An effluent sampling station shall be established for the point of discharge (Discharge Point 001, Latitude 33°52'23" N, Longitude 118°04'56" W) and shall be located where representative samples of the effluent can be obtained.
- B. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- C. This Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- D. Pollutants shall be analyzed using the analytical methods described in 40 CFR §§ 136.3, 136.4, and 136.5 (revised May 14, 1999); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.
- E. For any analyses performed for which no procedure is specified in the USEPA guidelines or in the Monitoring and Reporting Program, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.
- F. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this Monitoring and Reporting Program".
- G. The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:
  - 1. An actual numerical value for sample results greater than or equal to the ML; or
  - 2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or,
  - 3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

Analytical data reported as "less than" for the purpose of reporting compliance with permit limitations shall be the same or lower than the permit limit(s) established for the given parameter.

Current MLs (Attachment G) are those published by the State Water Board in the SIP.

- H. Where possible, the MLs employed for effluent analyses shall be lower than the permit limitations established for a given parameter. If the ML value is not below the effluent limitation, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.

The Regional Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish a ML that is not contained in Attachment G to be included in the Discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Attachment G;
  2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in 40 CFR Part 136 (revised May 14, 1999);
  3. When the Discharger agrees to use an ML that is lower than that listed in Attachment G;
  4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment G, and proposes an appropriate ML for their matrix; or,
  5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.
- I. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR § 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.
- J. All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.
- K. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.

- L. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. The annual monitoring report required in Section X.D shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.
- M. When requested by the Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.
- N. For parameters that both average monthly and daily maximum limitations are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limitation, the Discharger shall collect four additional samples at approximately equal intervals during the month, until compliance with the average monthly limitation has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limitation.
- O. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:
  - 1. Types of wastes and quantity of each type;
  - 2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and
  - 3. Location of the final point(s) of disposal for each type of waste.If no wastes are transported off-site during the reporting period, a statement to that effect shall be submitted.
- P. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.

## II. MONITORING LOCATIONS

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

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	M-001	Latitude 33°52'23" N, Longitude 118°04'56" W
--	R-001	Coyote Creek, 50 feet upstream of Discharge Point 001
--	R-002	Coyote Creek, 50 feet downstream of Discharge Point 001

## III. INFLUENT MONITORING REQUIREMENTS

[Not Applicable]

## IV. EFFLUENT MONITORING REQUIREMENTS

### A. Monitoring Location M-001

- The Discharger shall monitor water condensate from the milk evaporators at M-001 as follows:

Parameter	Units	Sample Type	Minimum Frequency	Sampling	Required Analytical Test Method
Flow	Gal/day	--	1 / day		40 CFR Part 136 Methods <sup>1</sup>
<b>Conventional Pollutants</b>					
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	Grab	1 / month		40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / month		--
Oil and Grease	mg/L	Grab	1 / month		40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / month		--
PH	Standard units	Grab	1 / day		40 CFR Part 136 Methods <sup>1</sup>
Total Suspended Solids (TSS)	mg/L	Grab	1 / quarter		40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / quarter		--
<b>Non-Conventional Pollutants</b>					
Chlorine, Residual Total	mg/L	Grab	1 / month		40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / quarter		--
Acute Toxicity <sup>3</sup>	% survival	Grab	1 / semi-annual period		40 CFR Part 136 Methods <sup>1</sup>
Chronic Toxicity <sup>3</sup>	TUc	Grab	1 / year		40 CFR Part 136 Methods <sup>1</sup>
Ammonia (N)	mg/L,	Grab	1 / semi-annual period		40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / semi-annual period		--
Nitrite + Nitrate (as N)	mg/L,	Grab	1 / semi-annual period		40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / semi-annual period		--

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nitrite Nitrogen, Total (as N)	mg/L	Grab	1 / semi-annual period	40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / semi-annual period	--
Settleable Solids	ml/L	Grab	1 / quarter	40 CFR Part 136 Methods <sup>1</sup>
Sulfide	mg/L	Grab	1 / semi-annual period	40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / semi-annual period	--
Temperature	°F	Grab	1 / month	40 CFR Part 136 Methods <sup>1</sup>
Turbidity	NTU	Grab	1 / quarter	40 CFR Part 136 Methods <sup>1</sup>
<b>Priority Pollutants</b>				
Cadmium, Total Recoverable	µg/L	Grab	1 / month	40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / month	--
Copper, Total Recoverable	µg/L	Grab	1 / month	40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / month	--
Lead, Total Recoverable	µg/L	Grab	1 / month	40 CFR Part 136 Methods <sup>1</sup>
	lbs/day	Calculated <sup>2</sup>	1 / month	--
Mercury, Total Recoverable	µg/L	Grab	1 / month	40 CFR Part 136 Methods <sup>1</sup>
	Lbs/day	Calculated <sup>2</sup>	1 / month	--
Selenium, Total Recoverable	µg/L	Grab	1 / month	40 CFR Part 136 Methods <sup>1</sup>
	Lbs/day	Calculated <sup>2</sup>	1 / month	--
Silver, Total Recoverable	µg/L	Grab	1 / month	40 CFR Part 136 Methods <sup>1</sup>
	Lbs/day	Calculated <sup>2</sup>	1 / month	--
Thallium, Total Recoverable	µg/L	Grab	1 / month	40 CFR Part 136 Methods <sup>1</sup>
	Lbs/day	Calculated <sup>2</sup>	1 / month	--
Zinc, Total Recoverable	µg/L	Grab	1 / month	40 CFR Part 136 Methods <sup>1</sup>
	Lbs/day	Calculated <sup>2</sup>	1 / month	--
Remaining Priority Pollutants <sup>5</sup>	µg/L	Grab	1 / year	40 CFR Part 136 Methods <sup>1</sup>

MGD = million gallons per day

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP (and included as Attachment H of this Order), where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

<sup>2</sup> The mass emission (in lbs/day) for the discharge shall be calculated and reported using the reported concentration and the actual flow rate measured at the time of the discharge, using the formula:

$$\text{lbs/day} = 8.34 \times C \times Q$$

where:

C = actual measured concentration for a pollutant, in mg/L

Q = actual discharge flow rate in MGD

In accordance with Section VII.C of this Order, in calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for "Not Detected" (ND) and the estimated concentration for "Detected, but Not Quantified" (DNQ) for the calculation of the monthly average concentration. If all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations should be considered as zero for the calculation of the monthly average concentration.

<sup>3</sup> For acute and chronic toxicity testing, refer to Section V of this Order.

<sup>4</sup> Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.I of the Limitations and Discharge Requirements of this Order, and included as Attachment H.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Definition of Toxicity

#### 1. Acute Toxicity.

Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) effluent.

- a. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
- b. No single test shall produce less than 70% survival.

#### 2. Chronic Toxicity.

Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or ambient waters compared to that of the control organisms. Chronic toxicity shall be measured in  $TU_c$ , where  $TU_c = 100/NOEC$ . The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

This Order includes a chronic testing toxicity trigger defined as an exceedance of 1.0  $TU_c$  in a critical life stage test for 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed, 1  $TU_c$  in a critical life stage test.)

### B. Acute Toxicity Effluent Monitoring Program

1. The Discharger shall conduct acute toxicity tests on effluent grab samples by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821-R-02-012) or a more recent edition to ensure compliance in 100 % effluent.
2. The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish effluent. The method for topsmelt is found in USEPA's *Short-term Method for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, First Edition, August 1995 (EPA/600/R-95/136) or a more recent edition.

3. In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 48 hours of the chronic toxicity test as the results of the acute toxicity test.
4. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.

### **C. Chronic Toxicity Effluent Monitoring Program**

1. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.
2. Test Species and Methods:
  - a. The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100 percent effluent samples in accordance with USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, October 2002 (EPA/21-R-02-013) or USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, Third Edition, October 2002, (EPA/821/R-02-014), or a more recent edition.
  - b. The Discharger shall conduct tests as follows: with a vertebrate, an invertebrate, and a plant for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species.
  - c. Re-screening is required every 15 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive then re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.
  - d. In brackish waters, the presence of chronic toxicity may be estimated as specified using West Coast marine organisms according to USEPA's *Short-Term Methods for Estimating Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms*, August 1995 (EPA/600/R-95/136), or a more recent edition.

### **D. Quality Assurance**

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).
2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/821-R-02-014), then the Discharger must re-sample and re-test at the earliest time possible.
3. Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

**E. Accelerated Monitoring and Initial Investigation Toxicity Reduction Evaluation Trigger**

1. Special Provision VI.C.2.b of the Order requires the Discharger to develop and submit for approval an Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.
2. If toxicity exceeds the acute toxicity effluent limitations or chronic toxicity trigger (as defined below):

**Acute Toxicity:**

- a. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
- b. No single test shall produce less than 70% survival.

**Chronic Toxicity:**

- a. This Order includes a chronic testing toxicity trigger defined as an exceedance of 1.0 TU<sub>c</sub> in a critical life stage test for 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed, 1 TU<sub>c</sub> in a critical life stage test.)

then, the Discharger shall begin the investigation and evaluation as specified in the Dischargers's Initial Investigation TRE Workplan and begin accelerated monitoring by conducting six additional tests, one every 2 weeks, over a 12-week period. The samples shall be collected and the tests initiated no less than 7 days apart. The Discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the close of the test and the additional tests shall begin within 3 business days of the receipt of the result.

3. If implementation of the Initial Investigation TRE Workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger may discontinue the Initial Investigation TRE and resume routine testing frequency.
4. The first step in the Initial Investigation TRE Workplan for downstream receiving water toxicity can be a toxicity test protocol designed to determine if the effluent from Discharge Point 001 causes or contributes to the measured downstream chronic toxicity. If this first step in the Initial Investigation TRE Workplan shows that the Discharge Point 001 effluent does not cause or contribute to downstream chronic toxicity, using USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, October 2002 (EPA/821/R-02-013), or USEPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, Third Edition, October 2002, (EPA/821/R-02-014) then a report on this testing shall be submitted to the Regional Water Board and the Initial Investigation TRE will be considered to be completed. Routine testing in accordance with the MRP shall be continued thereafter.

#### **F. TRE/Toxicity Identification Evaluation (TIE) Trigger**

1. If the accelerated testing shows consistent toxicity as defined below:
  - a. Acute Toxicity:
    - 1) If the results of any two of the six accelerated tests are less than 90% survival, or
    - 2) If the initial test and any of the additional six acute toxicity bioassay tests result in less than 70% survival
  - b. Chronic Toxicity
    - 1) If the results of two of the six accelerated tests exceed 1.0 TU<sub>c</sub>

then, the Discharger shall immediately implement the TRE as described below.

#### **G. Steps in TRE and TIE Procedures**

1. Following a TRE trigger, the Discharger shall initiate a TRE in accordance with the Facility's Initial Investigation TRE workplan. At a minimum, the Discharger shall use USEPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. The Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of the trigger, which will include, but not be limited to:
  - a. Further actions to investigate and identify the cause of toxicity;
  - b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
  - c. Standards the Discharger will apply to consider the TRE complete and to return to normal sampling frequency; and,
  - d. A schedule for these actions.
2. The following is a stepwise approach in conducting the TRE:
  - a. Step 1 - Basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;
  - b. Step 2 - Evaluates optimization of the treatment system operation, Facility housekeeping, and the selection and use of in-plant process chemicals;
  - c. Step 3 – If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE by employing of all reasonable efforts and using currently available TIE methodologies. The Discharger shall use the USEPA acute and chronic manuals, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance. The objective of the TIE is to identify the substance or combination of substances causing the observed toxicity;
  - d. Step 4 – Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;

- e. Step 5 – evaluates in-plant treatment options; and,
- f. Step 6 – consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of implementation of these control measures may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the Facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there is no longer toxicity (or six consecutive chronic toxicity test results are less than or equal to 1.0 TU<sub>c</sub> or six consecutive acute toxicity test results are greater than 90% survival).

- 3. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required by this permit, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.
- 4. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance determination, if appropriate.
- 5. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of 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.

#### H. Reporting

- 1. The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported as % survival for acute toxicity test results and as TU<sub>c</sub> for chronic toxicity test results with the self monitoring reports (SMR) for the month in which the test is conducted.
- 2. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, then those results also shall be submitted with the SMR for the period in which the investigation occurred.
  - a. The full report shall be submitted on or before the end of the month in which the SMR is submitted.
  - b. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the acute toxicity average limitation or chronic toxicity limitation or trigger.
- 3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, 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. IC<sub>15</sub>, IC<sub>25</sub>, IC<sub>40</sub> and IC<sub>50</sub> values in percent effluent;
  - g. TU<sub>c</sub> values  $\left(TU_c = \frac{100}{NOEC}\right)$  ;
  - h. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);
  - i. NOEC and LOEC values for reference toxicant test(s);
  - j. IC<sub>25</sub> value for reference toxicant test(s);
  - k. Any applicable charts; and
  - l. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
4. The Discharger shall provide a compliance summary, which includes a summary Table of toxicity data from all samples collected during that year.

The Discharger shall notify by telephone or electronically, this Regional Water Board of any toxicity exceedance of the limitation or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan 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 the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

**VI. LAND DISCHARGE MONITORING REQUIREMENTS**

[Not Applicable]

**VII. RECLAMATION MONITORING REQUIREMENTS**

[Not Applicable]

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

**A. Monitoring Location R-001**

1. The Discharger shall monitor Coyote Creek at R-001 as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
PH	Standard units	Grab	1 / year	1
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1 / year	1
Salinity	g/L	Grab	1 / year	1
Priority pollutants (Refer to Attachment H) <sup>2</sup>	µg/L	Grab	1 / year	1

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR §§ 136.3, 136.4, and 136.5 (revised May 14, 1999); that meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

<sup>2</sup> Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.I of the Limitations and Discharge Requirements of this Order.

**B. Monitoring Location R-002**

1. The Discharger shall monitor Coyote Creek at R-002 as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
PH	Standard units	Grab	1 / year	1
Temperature	°F	Grab	1 / year	1
Dissolved Oxygen	mg/L	Grab	1 / year	1
Ammonia	mg/L	Grab	1 / year	1

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR §§ 136.3, 136.4, and 136.5 (revised May 14, 1999); that meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

**IX. OTHER MONITORING REQUIREMENTS**

**[Not Applicable]**

**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. If there is no discharge during any reporting period, the report shall so state.
3. Each monitoring report shall contain a separate section titled “Summary of Non-Compliance” which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.
4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

**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. Until such notification is given, the Discharger shall submit self-monitoring reports in accordance with the requirements described below.
2. The Discharger shall submit quarterly Self Monitoring Reports including the results of all required monitoring using USEPA-approved test methods or other test methods specified in

this Order. Quarterly reports shall be due on May 1, August 1, November 1, and February 1 following each calendar quarter.

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

Sampling Frequency	Monitoring Period Begins On:	Monitoring Period	SMR Due Date
1 / month	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 <sup>st</sup> day of calendar month through last day of calendar month	First day of second calendar month following the quarter of sampling:
1 / quarter	First day of quarter following permit effective date or on permit effective date if that date is the first day of the quarter.	January 1 – March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	January-March: May 1 April-June: August 1 July-September: November 1 October – December: February 1
1 / year	January 1 following (or on) permit effective date	January 1 through December 31	
1 / Discharge Event	First day following the permit effective date	First day following the permit effective date through the last day of the permit term	

- The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.
- 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.
- Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.
- The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- 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:

California Regional Water Quality Control Board  
 Los Angeles Region  
 320 W. 4<sup>th</sup> Street, Suite 200  
 Los Angeles, CA 90013  
 Attn: Information Technology Unit

**C. Discharge Monitoring Reports (DMRs)**

**[Not Applicable]**

#### **D. Other Reports**

1. By March 1 of each year, the Discharger shall submit an annual report to the Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.
2. The Discharger shall include in the annual report, an annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used for cooling and/or boiler water treatment and which are discharged.
3. The Discharger shall file with the Regional Water Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Programs as directed by the Executive Officer.
4. The Discharger shall submit to the Regional Water Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.
5. This Regional Water Board requires the Discharger to file with the Regional Water Board, within 90 days after the effective date of this Order, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:
  - a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
  - b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.
  - c. Describe facilities and procedures needed for effective preventive and contingency plans.
  - d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

If an operation and maintenance report has been supplied to the Board previously and there have been no changes, a second report need not be provided.

This Regional Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the Discharger.

**Attachment F – Fact Sheet – Table of Contents**

Attachment F – Fact Sheet .....	F-3
I. Permit Information.....	F-3
II. Facility Description .....	F-4
A. Description of Wastewater and Biosolids Treatment or Controls .....	F-4
B. Discharge Points and Receiving Waters .....	F-5
C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data .....	F-5
D. Compliance Summary.....	F-6
E. Planned Changes .....	F-7
III. Applicable Plans, Policies, and Regulations .....	F-7
A. Legal Authorities .....	F-7
B. California Environmental Quality Act (CEQA).....	F-7
C. State and Federal Regulations, Policies, and Plans .....	F-7
D. Impaired Water Bodies on CWA 303(d) List.....	F-9
E. Other Plans, Polices and Regulations .....	F-9
[Not Applicable].....	F-9
IV. Rationale For Effluent Limitations and Discharge Specifications .....	F-9
A. Discharge Prohibitions .....	F-10
B. Technology-Based Effluent Limitations .....	F-10
1. Scope and Authority .....	F-10
2. Applicable Technology-Based Effluent Limitations.....	F-11
C. Water Quality-Based Effluent Limitations (WQBELs) .....	F-13
1. Scope and Authority .....	F-13
2. Applicable Beneficial Uses and Water Quality Criteria and Objectives.....	F-13
3. Determining the Need for WQBELs .....	F-14
4. WQBEL Calculations .....	F-16
5. WQBEL Based on Basin Plan Objectives .....	F-20
6. Final WQBELs .....	F-20
7. Whole Effluent Toxicity (WET) .....	F-22
D. Final Effluent Limitations.....	F-22
E. Interim Effluent Limitations.....	F-26
F. Land Discharge Specifications.....	F-26
G. Reclamation Specifications .....	F-27
V. Rationale for Receiving Water Limitations .....	F-27
A. Surface Water .....	F-27
B. Groundwater .....	F-27
VI. Rationale for Monitoring and Reporting Requirements .....	F-27
A. Influent Monitoring .....	F-27
B. Effluent Monitoring .....	F-27
C. Whole Effluent Toxicity Testing Requirements .....	F-28
D. Receiving Water Monitoring .....	F-28
1. Surface Water .....	F-28
2. Groundwater.....	F-29
E. Other Monitoring Requirements .....	F-30
VII. Rationale for Provisions .....	F-29
A. Standard Provisions.....	F-29
B. Special Provisions.....	F-29
1. Reopener Provisions .....	F-29
2. Special Studies and Additional Monitoring Requirements .....	F-29
3. Best Management Practices and Pollution Prevention.....	F-29
4. Compliance Schedules .....	F-31

5. Construction, Operation, and Maintenance Specifications .....	F-30
6. Special Provisions for Municipal Facilities (POTWs Only).....	F-30
7. Other Special Provisions .....	F-30
VIII. Public Participation.....	F-30
A. Notification of Interested Parties .....	F-30
B. Written Comments .....	F-30
C. Public Hearing .....	F-31
D. Waste Discharge Requirements Petitions .....	F-31
E. Information and Copying.....	F-31
F. Register of Interested Persons.....	F-32
G. Additional Information .....	F-32

**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.

**I. PERMIT INFORMATION**

The following Table summarizes administrative information related to the Facility.

**Table F-1  
 Facility Information**

<b>WDID</b>	4B192454001
<b>Discharger</b>	California Dairies, Incorporated
<b>Name of Facility</b>	Artesia Facility, Artesia
<b>Facility Address</b>	11709 East Artesia Boulevard
	Artesia, CA 90701
	Los Angeles County
<b>Facility Contact, Title and Phone</b>	Rico Hinojosa, Plant Manager, 562-865-1291
<b>Authorized Person to Sign and Submit Reports</b>	Rico Hinojosa, Plant Manager, 562-865-1291
<b>Mailing Address</b>	Same as the Facility Address
<b>Billing Address</b>	Same as the Facility Address
<b>Type of Facility</b>	Industrial (SIC codes 2021, 2022, 2023)
<b>Major or Minor Facility</b>	Minor
<b>Threat to Water Quality</b>	3
<b>Complexity</b>	C
<b>Pretreatment Program</b>	N
<b>Reclamation Requirements</b>	Not Applicable
<b>Facility Permitted Flow</b>	0.22 million gallons per day (MGD)
<b>Facility Design Flow</b>	Not Applicable
<b>Watershed</b>	San Gabriel River Watershed
<b>Receiving Water</b>	Coyote Creek
<b>Receiving Water Type</b>	Inland surface water

- A. California Dairies, Incorporated (hereinafter CDI or Discharger) is the operator of the Artesia Facility (hereinafter Facility), a milk transfer and processing plant.
- B. The Facility discharges wastewater to Coyote Creek, a water of the United States and is currently regulated under Order No. 99-136 which was adopted on December 9, 1999, and expired on November 10, 2004. The terms of the existing Order automatically continued in effect after the permit expiration date.
- C. The Discharger filed a Report of Waste Discharge and submitted an application for renewal of its WDRs and NPDES permit on February 4, 2004. A site visit was conducted on August 23, 2004, to observe operations and collect additional data to develop permit limitations and conditions.

## **II. FACILITY DESCRIPTION**

California Dairies operates a milk transfer and processing plant located at 11709 East Artesia Boulevard, Artesia, California. Attachment B depicts a topographic map of the area around the Facility. The Facility produces condensed and evaporated milk products. Raw milk and cream are received and processed into condensed milk, powdered milk, whole-milk condensed, cheese, butter, and ice cream mixes. The Facility operates 24 hours a day, 7 days per week. The Facility received approximately 21.5 million gallons of milk for processing each day. The Facility maintains an on-site storage capacity of approximately 33 million gallons for raw milk.

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

The production process involves evaporating the liquid part of skim milk to obtain concentrated milk solids. The steam condensate that is produced in the process of evaporating the liquid fraction of the milk is known as “cow water,” an industry term synonymous with reclaimed evaporator water. A portion of the “cow water” is an integral part of the CDI waste minimization and resource recovery program, as it is used for equipment washdown, surface cleaning, cooling tower makeup, and boiler makeup. The remaining volume of wastewater that cannot be reused is discharged to the storm drain through Discharge Point 001 (see Table on cover page) thence to the Coyote Creek, a water of the United States within San Gabriel River Watershed. CDI discharges up to 220,000 gallons per day of wastewater during the maximum production at the Facility. Attachment C depicts the Evaporator Condensate Process Schematic at Facility Production Limit.

In addition, a portion of the wastewater is also discharge to the sanitary sewer under an industrial waste discharge permit issued by the County Sanitation Districts of Los Angeles County (CSDLAC). Under the terms of CDI’s existing industrial waste discharge permit, the five-minute peak discharge of wastewater from the Facility to the county sewer must not exceed 320 gallons per minute. The peak discharge limitation is due to the infrastructure limitations within the CSDLAC sewerage system.

Condensate water from each of the four milk evaporators is directed through a turbidity and electroconductivity meter prior to merging into a single flow. If the condensate does not meet NPDES effluent limitations, flow from the individual milk evaporator is automatically diverted to the sanitary sewer. A second turbidity and electroconductivity meter tests the combined condensate flow. The combined condensate can also be diverted to the sanitary sewer if the condensate does not meet NPDES effluent limitations. If the condensate is not directed to the sanitary sewer, it is chlorinated and then discharged to one of seven on-site holding tanks for storage and plant processes. The wastewater is re-used for boiler supply, cooling waters, and caustic wash. When the holding tanks reach capacity (70,200 gallons), the condensate is discharged to the storm drain. Prior to discharging to the storm drain, the water is dechlorinated by a dechlorination unit.

Storm water discharges are currently covered under the state-wide General Permit for Industrial Activities. Storm water from a paved yard flows to a main sump. During times with no rain, collected flow is directed to a 6,000-gallon holding tank and neutralized prior to discharge to the sanitary sewer. During storm events, water collected in the main sump automatically bypasses the holding tank and discharges to the storm drain.

**B. Discharge Points and Receiving Waters**

The Facility discharges up to 220,000 gpd of condensate water expelled from milk evaporators. The wastewater discharges to a storm drain located on Fallon Street (Latitude 33°52'23" North, Longitude 118°04'56" West) and thence to Coyote Creek, at a point located approximately one-half mile south of Wardlow Road. Coyote Creek is tributary to the San Gabriel River, a water of the United States, above the San Gabriel River Estuary.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point 001 (Monitoring Location M-001) and representative monitoring data from the term of the existing Order are summarized in Table F-2:

**Table F-2  
 Summary of Effluent Limitations and SMR Data for Discharge Point 001**

Parameter (units)	Effluent Limitation		Monitoring Data (From February 1999 To December 2004)
	Average Monthly	Maximum Daily	Range of Reported Concentrations
pH (standard units)	--	6 – 9	5.68 – 7.88
Temperature (°F)	--	100	60 – 99
BOD (mg/L)	20	30	< 10 – 170
BOD (lbs/day)	37	56	NR
Nitrite (as Nitrogen) (mg/L)	--	1	NR
Nitrite (as Nitrogen) (lbs/day)	--	1.8	NR
Nitrite + nitrate (as Nitrogen) (mg/L)	--	8	NR
Nitrite + nitrate (as Nitrogen) (lbs/day)	--	14.7	NR
Oil and Grease (mg/L)	10	15	< 5 – 40
Oil and Grease (lbs/day)	18	28	NR
Settleable Solids (ml/L)	0.1	0.3	<0.1 – 0.1
Suspended Solids (mg/L)	50	150	< 1– 78
Suspended Solids (mg/L)	92	275	NR
Total Residual Chlorine (mg/L)	--	0.1	<0.05 – 4.5
Total Residual Chlorine (mg/L)	--	0.2	NR
Turbidity (NTU)	50	150	<0.05 – 4.83
Acute Toxicity (percent survival)	--	-- <sup>1</sup>	NR

Note: NR = not reported.

<sup>1</sup>Average survival in effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

Monitoring results submitted in the permit renewal application dated February 4, 2005 are as follows:

**Table F-3  
 Application Monitoring Results**

Parameter (units)	Maximum Daily Value	
	Concentration	Mass
Biochemical Oxygen Demand (mg/L)	18.72	1.72
Chemical Oxygen Demand (mg/L)	<4	<0.37
Total Organic Carbon (mg/L)	2.3	0.21
Total Suspended Solids (mg/L)	<6	<0.55
Ammonia (as Nitrogen) mg/L	<0.1	<0.01
PH (standard units)	6.57-7.17	--
Temperature, winter (Degrees Celsius)	34	
Temperature, summer (Degrees Celsius)	34	

Note: Minimum values were reported instead of mass values in the report of waste discharge.

**D. Compliance Summary**

Data submitted to the Regional Water Board indicate that the Discharger has exceeded existing permit limitations on multiple occasions as outlined in Table F-4 below. The identified violations are being evaluated for appropriate enforcement actions:

**Table F-4  
 Compliance Summary**

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
1/25/2000	1 Q 2000	Daily maximum	BOD	170	30	mg/L
1/25/2000	1 Q 2000	Daily maximum	Residual Chlorine	4.5	0.1	mg/L
6/15/2001	3 Q 2001	Daily maximum	BOD	120	30	mg/L
6/15/2001	3 Q 2001	Daily maximum	Oil and Grease	35	15	mg/L
7/25/2001	3 Q 2001	Daily maximum	Oil and Grease	40	15	mg/L
12/21/2001	4 Q 2001	Daily maximum	Oil and grease	27	15	mg/L
12/21/2001	4 Q 2001	Daily maximum	Residual chlorine	0.48	0.1	mg/L
10/2/2003	4 Q 2003	Daily maximum	BOD	108.5	30	mg/L
12/24/2003	4 Q 2003	Daily maximum	Residual chlorine	0.12	0.1	mg/L
1/23/2004	1 Q 2004	Daily maximum	BOD	35.6	30	mg/L
4/19/2004	2 Q 2004	Daily maximum	PH	5.79	6	Standard units
12/7/2004	4 Q 2004	Daily maximum	PH	5.68	6	Standard units

**E. Planned Changes**

**[Not Applicable]**

**III. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

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

**A. Legal Authorities**

This Order is issued pursuant to section 402 of the Federal CWA and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the CWC. It shall serve as a NPDES permit for point source discharges from this Facility to surface waters. The Order also serves as WDRs pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

**B. California Environmental Quality Act (CEQA)**

This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

**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 Los Angeles 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, State Water Board Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to Coyote Creek are as follows:

**Table F-5  
 Beneficial Uses for Coyote Creek**

<b>Discharge Point</b>	<b>Receiving Water Name</b>	<b>Beneficial Use(s)</b>
001	Coyote Creek	<u>Existing:</u> Preservation of rare, threatened or endangered species (RARE). <u>Intermittent:</u> Non-contact (REC-2) water recreation. <u>Potential:</u> Municipal and domestic water supply (MUN), industrial service supply (IND), industrial process supply (PROC), water contact recreation (REC-1), warm freshwater habitat (WARM), and wildlife habitat (WILD).

2. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Table 3-4. However, those ammonia objectives were revised on March 4, 2004, by the Regional Water Board with the adoption of Resolution No. 2004-022, Amendment to the Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including enclosed bays, estuaries and wetlands) with the Beneficial Use designations for protection of "Aquatic Life". The ammonia Basin Plan amendment has not yet been approved by the Office of Administrative Law or the USEPA. The revised criteria are not available for use until the aforementioned approvals have been obtained.
3. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.
4. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge. The provision for compliance schedules sunseted on May 17, 2005.
5. **State Implementation Policy.** On March 2, 2000, 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 Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for and calculating water quality-based effluent limitations (WQBELs), and requires Dischargers to submit data sufficient to do so. The State Water Board adopted amendments to the SIP on February 24, 2005, was approved by the Office of Administrative Law (OAL) on May 31, 2005, and the USEPA approved it on July 13, 2005. The CTR's Compliance Schedule provisions sunseted on May 17, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed five years from permit issuance or May 17, 2010, whichever is sooner.
6. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that 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, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing water quality is maintained unless degradation is justified based on specific findings. As discussed in detail in this Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR § 131.12 and State Water Board Resolution No. 68-16.
7. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR § 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 existing permit, with some exceptions in which limitations may be relaxed. All effluent

limitations in the Order are at least as stringent as the effluent limitations in the existing Order.

8. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.
9. **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 CFR 131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved 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.

#### D. Impaired Water Bodies on CWA 303(d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Water Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The USEPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) list and have been scheduled for TMDL development.

The 2002 State Water Board's California 303(d) List classifies the Coyote Creek as impaired. The pollutants of concern include abnormal fish histology, algae, dissolved copper, high coliform counts, dissolved lead, total selenium, and dissolved zinc. To date no TMDLs have been developed; therefore, no conditions in the tentative Order are based on TMDLs.

The Facility discharges condensate water from milk evaporators. Available effluent data indicate that copper, lead, and zinc are present in the discharge and could contribute to impairment in the receiving water. Effluent limitations for copper, lead, and zinc have been established to protect Coyote Creek from impairment caused by copper, lead, and zinc.

#### E. Other Plans, Policies and Regulations

[Not Applicable]

### IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges 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: 40 CFR § 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR §

122.44(d) requires that permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established three options exist to protect water quality: 1) 40 CFR § 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); 2) proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established.

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

California Dairies receives raw milk and cream and processes condensed milk, powdered milk, whole-milk condensed, butter, cheese, and ice cream mixes. Condensate wastewaters are generated in the milk evaporators. Wastewater is collected in holding tanks and is discharged when storage capacity (70,200 gallons) is reached. Wastewater is chlorinated and dechlorinated prior to discharge to the storm drain.

Effluent limitations in the existing Order were established for pH, temperature, biochemical oxygen demand, nitrite (as nitrogen), nitrite+nitrate (as nitrogen), oil and grease, settleable solids, suspended solids, total residual chlorine, turbidity, and acute toxicity because they are considered pollutants of concern in the condensate water from milk evaporators discharged from the Facility. Solids have the potential to accumulate in the holding tanks; therefore, turbidity, settleable solids, and total suspended solids are considered pollutants of concern. Oil and grease and BOD are pollutants used to characterize wastewater discharges; therefore, these pollutants are also pollutants of concern. Because of the nature of operation, chlorine, nitrate, and nitrate plus nitrite could also be present in the discharge; therefore, these pollutants are pollutants of concern.

Pursuant to 40 CFR §122.45(d), permit limitations for continuous discharges shall be expressed, unless impracticable, as both average monthly effluent limitations (AMELs) and maximum daily effluent limitations (MDELs). Therefore, both average monthly effluent limitations (AMELs) and maximum daily effluent limitations (MDELs) are established for this Facility because the discharge is continuous.

#### **A. Discharge Prohibitions**

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Board's plans and policies, CWC, and existing permit provisions, and are consistent with the requirements set for other discharges regulated by NPDES permit to the Coyote Creek.

#### **B. Technology-Based Effluent Limitations**

##### **1. Scope and Authority**

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- a. 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 nonconventional pollutants.

- b. 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 nonconventional pollutants.
- c. 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.
- d. 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.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR § 125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR § 125.3.

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

There are currently no national ELGs for dairy production facilities.

The Order includes technology-based effluent limitations based on BPJ in accordance with 40 CFR § 125.3. Effluent limitations for biochemical oxygen demand, nitrate, nitrate+nitrite, oil and grease, settleable solids, and total residual chlorine have been carried over from the existing Order. These limitations were determined on a case-by-case basis and are similar to those established for similar facilities within the Los Angeles Region. Further, they continue to be appropriate for this Facility. The MDELs for total suspended solids and turbidity have been revised to be consistent with Orders authorizing similar discharges (i.e., condensate wastewater) recently adopted by the Regional Board. The technology-based limitations are summarized in Table F-6.

**Table F-6  
 Summary of Technology-based Effluent Limitations  
 Discharge Point 001**

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD	mg/L	20	30	--	--
	Lbs/day <sup>1</sup>	37	55	--	--
Oil and Grease	mg/L	10	15	--	--
	Lbs/day <sup>1</sup>	18	28	--	--
Total Suspended Solids (TSS)	mg/L	50	75	--	--
	Lbs/day <sup>1</sup>	92	138	--	--
Chlorine, Total Residual	mg/L	--	0.10	--	--
	Lbs/day <sup>1</sup>	--	0.18	--	--
Nitrate Nitrogen (as N)	mg/L	--	1.0	--	--
	Lbs/day <sup>1</sup>	--	1.8	--	--
Nitrate Plus Nitrite (as N)	mg/L	--	8.0	--	--
	Lbs/day <sup>1</sup>	--	15	--	--
Settleable Solids	ml/L	0.1	0.30	--	--
Turbidity	NTU	50	75	--	--

<sup>1</sup> Mass-based effluent limitations for pollutants are based on a maximum discharge flow rate of 220,000 gpd (0.220 mgd).

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

### **1. Scope and Authority**

As specified in 40 CFR § 122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. 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 water quality criteria contained in the CTR and NTR. The specific procedures for determining reasonable potential for discharges from the California Dairies Facility, and if necessary for calculating WQBELs, are contained in the SIP.

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

As noted in Section II of the Limitations and Discharge Requirements, the Regional Water Board adopted a 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 Basin Plan. The beneficial uses applicable to Coyote Creek are summarized in Section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

The priority pollutant water quality criteria in the CTR are applicable to Coyote Creek. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with 40 CFR § 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the Coyote Creek a water of the United States in the vicinity of the discharge.

Some water quality criteria are hardness dependent. The Discharger provided hardness data for the receiving water (Coyote Creek) as part of their required CTR monitoring. The hardness values reported ranged from 100 mg/L to 780 mg/L as CaCO<sub>3</sub>. The lowest hardness value, representing the most conservative approach for establishing criteria, was used for evaluation of reasonable potential.

The following Table summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the RPA for the Order.

**Table F-7  
 Applicable Numeric Water Quality Criteria**

CTR No.	Constituent	Selected Criteria μg/L	CTR/NTR Water Quality Criteria					
			Freshwater		Saltwater		Human Health for Consumption of:	
			Acute μg/L	Chronic μg/L	Acute μg/L	Chronic μg/L	Water & Organisms μg/L	Organisms only μg/L
1	Antimony, Total Recoverable	4300	--	--	N/A		4300	
2	Arsenic, Total Recoverable	150	340	150			--	
3	Beryllium, Total Recoverable	No criteria	--	--			--	
4	Cadmium, Total Recoverable	2.46	4.52	2.46			-- <sup>1</sup>	
5	Chromium III	206.98	1736.51	206.98			--	
6	Copper, Total Recoverable	9.33	14.00	9.33			--	
7	Lead, Total Recoverable	3.18	81.65	3.18			-- <sup>1</sup>	
8	Mercury, Total Recoverable	0.051	--	--			0.051	
9	Nickel, Total Recoverable	52.16	469.17	52.16			4600	
10	Selenium, Total Recoverable	5.00	20.00	5.00			-- <sup>1</sup>	
11	Silver, Total Recoverable	4.06	4.06	--			--	
12	Thallium, Total Recoverable	6.3	--	--			6.3	
13	Zinc, Total Recoverable	119.82	119.82	119.82			--	
24	Chloroethane	No criteria	--	--			--	
34	Methylbromide	4000	--	--	4000			
36	Methylene chloride	1600	--	--	--			
43	Trichloroethylene	81	--	--	--			

N/A = Not applicable, receiving water is not saltwater and does not have municipal and domestic supply (MUN) as an existing beneficial use.

<sup>1</sup> Narrative criteria have been established for these parameters.

### 3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Regional Water Board conducts a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent

concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the B are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board identifies the MEC and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

- 1) Trigger 1 – If the  $MEC \geq C$ , a limit is needed.
- 2) Trigger 2 – If background water quality ( $B > C$ ) and the pollutant is detected in the effluent, a limitation is needed.
- 3) Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and receiving water data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. Nine data sets for effluent and receiving water for the period from September 2001 through September 2003 were available. The available effluent data were used to evaluate the reasonable potential of the priority pollutants and to calculate the effluent limitations based on the RPA for Discharge Point 001, the following pollutants demonstrated reasonable potential to exceed water quality standards: cadmium, copper, lead, mercury, selenium, silver, thallium, and zinc. Thus, effluent limitations and effluent monitoring requirements for these pollutants have been established. Refer to Attachment I for a summary of the RPA and associated effluent limitation calculations.

The RPA summary for all priority pollutants that were detected (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc, chloroethane, methylbromide, methylene chloride, and trichloroethylene) is shown below.

**Table F-8  
 Summary of Reasonable Potential Analysis**

CTR No.	Constituent	Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limitation ?	Reason <sup>1</sup>
		µg/L	µg/L	µg/L		
1	Antimony, Total Recoverable	4,300	80	1.8	No	MEC<C, B<C
2	Arsenic, Total Recoverable	150	4.6	2.3	No	MEC<C, B<C
3	Beryllium, Total Recoverable	--	2	1.2	No	No criteria
4	Cadmium, Total Recoverable	2.46	4	4	Yes	MEC>C
5	Chromium III	206.98	16	16.5	No	MEC<C, B
6	Copper, Total Recoverable	9.33	16	50	Yes	MEC>C
7	Lead, Total Recoverable	3.18	19.5	18	Yes	MEC>C
8	Mercury, Total Recoverable	0.051	0.33	78	Yes	MEC>C
9	Nickel, Total Recoverable	52.16	5.5	37	No	MEC<C, B<C
10	Selenium, Total Recoverable	5.00	2.6	11	Yes	B>C
11	Silver, Total Recoverable	4.06	4	5	Yes	B>C
12	Thallium, Total Recoverable	6.3	14	45	Yes	MEC>C
13	Zinc, Total Recoverable	119.83	113	212	Yes	B>C
24	Chloroethane	--	0.3	--	No	No criteria
34	Methylbromide	4,000	2	--	No	MEC<C, B is ND
36	Methylene chloride	1,600	1.79	1.51	No	MEC<C, B<C
43	Trichloroethylene	81	0.48	0.46	No	MEC<C, B<C

<sup>1</sup> MEC = Maximum effluent concentration; B = Maximum receiving water concentration; C = Lowest criteria; ND = not detected.

**4. WQBEL Calculations**

- a. If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:
  - 1) If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).
  - 2) Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

- 3) Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.
- b. Final WQBELs for cadmium, copper, lead, mercury, selenium, silver, thallium, and zinc are based on monitoring results and following the procedure based on the steady-state model, available in Section 1.4 of the SIP.
- c. Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is being allowed. However, in accordance with the reopener provision in Section VI.C.1.e in the tentative Order, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Regional Water Board.
- d. WQBELS Calculation Example

Using copper and mercury as examples, the following demonstrates how WQBELs were established for the tentative Order. The Tables in Attachment I summarize the development and calculation of all WQBELs for the Order using the process described below.

Concentration-Based Effluent Limitations

A set of AMEL and MDEL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health. The AMEL and MDEL limitations for aquatic life and human health are compared, and the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL.

*Calculation of aquatic life AMEL and MDEL:*

**Step 1:** For each constituent requiring an effluent limitation, identify the applicable water quality criteria or objective. For each criteria determine the effluent concentration allowance (ECA) using the following steady state equation:

$$ECA = C + D(C-B) \text{ when } C > B, \text{ and}$$

$$ECA = C \text{ when } C \# B,$$

Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value of 100 mg/L (as CaCO<sub>3</sub>) was used for development of hardness-dependant criteria, and a pH of 7.1 was used for pH-dependant criteria.

D = The dilution credit, and

B = The ambient background concentration

As discussed below, for this Order, dilution was not allowed; therefore:

$$ECA = C$$

For copper the applicable water quality criteria are:

$$ECA_{\text{acute}} = 14 \mu\text{g/L}$$

$$ECA_{\text{chronic}} = 9.33 \mu\text{g/L}$$

For mercury the applicable water criterion is:

$$ECA_{\text{human health}} = 0.051 \mu\text{g/L}$$

**Step 2:** For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the Tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

$$LTA_{acute} = ECA_{acute} \times Multiplier_{acute\ 99}$$

$$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic\ 99}$$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6.

For copper, the following data was used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

No. of Samples	CV	ECA Multiplier <sub>acute 99</sub>	ECA Multiplier <sub>chronic 99</sub>
9	0.6	0.32108	0.52743

$$LTA_{acute} = 14 \mu\text{g/L} \times 0.32108 = 4.495 \mu\text{g/L}$$

$$LTA_{chronic} = 9.33 \mu\text{g/L} \times 0.52743 = 4.9209 \mu\text{g/L}$$

**Step 3:** Select the most limiting (lowest) of the LTA.

$$LTA = \text{most limiting of } LTA_{acute} \text{ or } LTA_{chronic}$$

For copper, the most limiting LTA was the  $LTA_{acute}$

$$LTA = 4.495 \mu\text{g/L}$$

For mercury, the LTA is not applicable because no aquatic life criteria have been established. Calculations for health based WQBELS for mercury are shown in Steps 5, 6, and 7.

**Step 4:** Calculate the WQBELS by multiplying the LTA by a factor (multiplier). WQBELS are expressed as AMELs and MDELs. Average monthly effluent limitations (AMELs) are not prescribed in the tentative Order because the discharge is not continuous; therefore, pursuant to 40 CFR 122.45(e), monthly average discharge limitations were not developed for this Facility. Calculations of AMELs are shown below as they relate to the calculations of MDELs. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (CV) of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limitation. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples.

Equations to develop the multipliers in place of using values in the Tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$$AMEL_{\text{aquatic life}} = LTA \times AMEL_{\text{multiplier 95}}$$

$$MDEL_{\text{aquatic life}} = LTA \times MDEL_{\text{multiplier 99}}$$

AMEL multipliers are based on a 95<sup>th</sup> percentile occurrence probability, and the MDEL multipliers are based on the 99<sup>th</sup> percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For copper, the following data was used to develop the AMEL and MDEL for aquatic life using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>
9	0.6	3.1145	1.5524

$$AMEL_{\text{aquatic life}} = 4.495 \times 1.5524 = 6.98 \mu\text{g/L}$$

$$MDEL_{\text{aquatic life}} = 4.495 \times 3.1145 = 14.00 \mu\text{g/L}$$

*Calculation of human health AMEL and MDEL:*

**Step 5:** For the ECA based on human health, set the AMEL equal to the ECA<sub>human health</sub>

$$AMEL_{\text{human health}} = ECA_{\text{human health}}$$

However, for copper:

ECA<sub>human health</sub> = Not Available. The copper water quality criterion protective of human health for the consumption of water and organisms does not apply, as the receiving water does not support municipal and domestic supply (MUN) as an existing beneficial use. Therefore, only the water quality criterion protective of human health for the consumption of organisms is applicable. However, since the CTR does not contain a numeric copper criterion protective of human health for the consumption of organisms (only), it was not possible to develop a copper AMEL based on human health criteria.

**Step 6:** Calculate the MDEL for human health by multiplying the AMEL by the ratio of the Multiplier<sub>MDEL</sub> to the Multiplier<sub>AMEL</sub>. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples per month.

A copper MDEL<sub>human health</sub> could not be calculated because a copper AMEL<sub>human health</sub> was not available. However, for illustrative purposes, if a AMEL<sub>human health</sub> was available, the following data and equation would have been used to develop the MDEL<sub>human health</sub>:

No. of Samples Per Month	CV	Multiplier <sub>MDEL</sub>	Multiplier <sub>AMEL</sub>	Ratio
4	0.60	3.11	1.55	2.01

$$MDEL_{\text{human health}} = AMEL_{\text{human health}} \times (\text{Multiplier}_{\text{MDEL}} / \text{Multiplier}_{\text{AMEL}})$$

**Step 7:** Select the lower of the AMEL and MDEL based on aquatic life and human health as the water-quality based effluent limitation for the tentative Order.

For copper:

AMEL <sub>aquatic life</sub>	MDEL <sub>aquatic life</sub>	AMEL <sub>human health</sub>	MDEL <sub>human health</sub>
<b>6.98 µg/L</b>	<b>14 µg/L</b>	Not Available	Not Available

The lowest (most restrictive) effluent limitations for copper are based on aquatic life toxicity and were incorporated into the Order. These effluent limitations for copper will be protective of aquatic life.

- e. Calculation of Mass-Based Effluent Limitations for cadmium, copper, lead, mercury, selenium, silver, thallium, and zinc.

Mass-based effluent limitations in lbs/day were calculated using the following formula:

$$M = 8.34 \times C \times Q$$

Where:

M = mass-based effluent limitation in lbs/day

C = concentration-based effluent limitation in mg/L

Q = maximum flow in million gallons per day (220,000 gpd or 0.220 MGD)

## 5. WQBEL Based on Basin Plan Objectives

The Basin Plan states that the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge. Based on the requirements of the Basin Plan an instantaneous minimum limitation of 6.5 and an instantaneous maximum limitation of 8.5 for pH are included in the permit. The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. Based on the requirements of the Thermal Plan and a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, a maximum effluent temperature limitation of 86 °F is included in the permit. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. The new temperature effluent limit is reflective of new information available that indicates that the 100°F temperature is not protective of aquatic organisms. A survey was completed for several kinds of fish and the 86°F temperature was found to be protective.

## 6. Final WQBELs

Summaries of the water quality effluent limitations are described in Table F-9.

**Table F-9  
 Summary of Water Quality-based Effluent Limitations  
 Discharge Point 001**

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
PH	standard units	--	--	6.5	8.5
Cadmium, Total Recoverable	µg/L	2.02	4.0	--	--
	Lbs/day <sup>1</sup>	0.0037	0.0074	--	--
Copper, Total Recoverable	µg/L	6.98	14	--	--
	Lbs/day <sup>1</sup>	0.013	0.026	--	--
Lead, Total Recoverable	µg/L	2.61	5.2	--	--
	Lbs/day <sup>1</sup>	0.0048	0.010	--	--
Mercury, Total Recoverable	µg/L	0.051	0.10	--	--
	Lbs/day <sup>1</sup>	0.001	0.00019	--	--
Selenium, Total Recoverable	µg/L	4.1	8.2	--	--
	Lbs/day <sup>1</sup>	0.008	0.015	--	--
Silver, Total Recoverable	µg/L	2.023	4.1	--	--
	Lbs/day <sup>1</sup>	0.0037	0.0074	--	--
Thallium, Total Recoverable	µg/L	6.3	13	--	--
	lbs/day <sup>1</sup>	0.012	0.023	--	--
Zinc, Total Recoverable	µg/L	59.72	120	--	--
	lbs/day <sup>1</sup>	0.11	0.22	--	--
Temperature	°F	--	--	--	86

<sup>1</sup> Mass-based effluent limitations for pollutants are based on a maximum discharge flow rate of 220,000 gpd (0.22 mgd).

## 7. Whole Effluent Toxicity (WET)

WET protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. 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 toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental response includes but is 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 contains acute toxicity limitations and monitoring requirements in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. The Discharger did not submit any acute toxicity monitoring data during the term of the existing Order. Consistent with Basin Plan requirements, this Order carries over the acute toxicity limitations from the existing Order. Because there is no data submitted as required under the existing Order, the Discharger is required to monitor acute toxicity in semi-annual basis.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters.

The discharges from Discharge Point 001 could contribute to long-term toxic effects within the receiving water. However, no chronic toxicity data are available for the discharge. In accordance with the SIP, the Discharger will be required to conduct chronic toxicity testing in order to determine reasonable potential and establish WQBELs as necessary. In addition, the Order establishes thresholds that when exceeded, requires the Discharger to conduct accelerated toxicity testing and/or conduct TRE/TIE studies.

## D. Final Effluent Limitations

Section 402(o) of the CWA and 40 CFR § 122.44(l) require effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted monitoring data. Effluent limitations for pH, temperature, BOD<sub>5</sub>, nitrite, nitrate plus nitrite, oil and grease, settleable solids, suspended solids, total residual chlorine, turbidity, and acute toxicity are being carried over from the existing Order (Order No. 99-136). Removal of these numeric limitations would constitute backsliding under CWA section 402(o). The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility and that backsliding is not appropriate. Effluent limitations for pH and temperature have been revised to reflect water quality objective changes in the Basin Plan and Thermal Plan, and effluent limitations for total suspended solids and turbidity have been revised to be consistent with similar permits in the Los Angeles Region. The effluent limitations for cadmium, copper, lead, mercury, selenium, silver, thallium, and zinc have been added to the Order because the Facility’s discharge was found to have reasonable potential to exceed water quality objectives for these parameters.

## 1. **Mass-based Effluent Limitations**

Mass-based effluent limitations in lbs/day were calculated using the following formula:

$$\text{Mass (lbs/day)} = \text{flow rate (MGD)} \times 8.34 \text{ effluent limitation}$$

Where:

Mass = mass limitation for a pollutant (lbs/day)

Effluent limitation = concentration limitation for a pollutant (mg/L)

Flow rate = discharge flow rate (MGD)

**Table F-10  
 Summary of Final Effluent Limitations  
 Discharge Point 001**

Parameter	Units	Effluent Limitations				Basis <sup>1</sup>
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	20	30	--	--	Existing Order
	lbs/day <sup>2</sup>	37	55	--	--	
Oil and Grease	mg/L	10	15	--	--	Existing Order
	lbs/day <sup>2</sup>	18	28	--	--	
PH	standard units	--	--	6.5	8.5	Basin Plan
Total Suspended Solids (TSS)	mg/L	50	75	--	--	Existing Order
	lbs/day <sup>2</sup>	92	138	--	--	
Cadmium, Total Recoverable	µg/L	2.02	4.0	--	--	CTR, SIP
	lbs/day <sup>2</sup>	0.0037	0.0074	--	--	
Copper, Total Recoverable	µg/L	6.98	14	--	--	CTR, SIP
	lbs/day <sup>2</sup>	0.013	0.026	--	--	
Lead, Total Recoverable	µg/L	2.61	5.2	--	--	CTR, SIP
	lbs/day <sup>2</sup>	0.0048	0.010	--	--	
Mercury, Total Recoverable	µg/L	0.051	0.10	--	--	CTR, SIP
	lbs/day <sup>2</sup>	0.001	0.00019	--	--	
Selenium, Total Recoverable	µg/L	4.1	8.2	--	--	CTR, SIP
	lbs/day <sup>2</sup>	0.008	0.015	--	--	
Silver, Total Recoverable	µg/L	2.023	4.1	--	--	CTR, SIP
	lbs/day <sup>2</sup>	0.0037	0.0074	--	--	
Thallium, Total Recoverable	µg/L	6.3	13	--	--	CTR, SIP
	lbs/day <sup>2</sup>	0.012	0.023	--	--	
Zinc, Total Recoverable	µg/L	59.72	120	--	--	CTR, SIP
	lbs/day <sup>2</sup>	0.11	0.22	--	--	
Acute toxicity	Percent survival	The acute toxicity of the effluent shall be such that the average survival in the undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test less than 70% survival.				Existing Order

Parameter	Units	Effluent Limitations				Basis <sup>1</sup>
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Chlorine, Total Residual	mg/L	--	0.10	--	--	Existing Order
	lbs/day <sup>2</sup>	--	0.18	--	--	
Nitrite Nitrogen (as N)	mg/L	--	1.0	--	--	Existing Order
	lbs/day <sup>2</sup>	--	1.8 <sup>2</sup>	--	--	
Nitrate Plus Nitrite (as N)	mg/L	--	8.0	--	--	Existing Order
	lbs/day <sup>2</sup>	--	15 <sup>2</sup>	--	--	
Settleable Solids	ml/L	0.1	0.30	--	--	Existing Order
Temperature	°F	--	--	--	86	Thermal Plan
Turbidity	NTU	--	75	--	--	Existing Order

<sup>1</sup> CTR = California Toxics Rule; SIP = State Implementation Policy.

<sup>2</sup> Mass-based effluent limitations for pollutants are based on a maximum discharge flow rate of 222,000 gpd (0.22 mgd).

**E. Interim Effluent Limitations**

Based on effluent monitoring data submitted by the Discharger, a comparison between the MEC and calculated MDEL values shows that the Discharger may be unable to consistently comply with the average monthly effluent limitations established in the Order for cadmium, copper, lead, mercury, silver, thallium, and zinc. Therefore, the Order contains interim limitations for these parameters and a compliance schedule that allows the Discharger up to three years to comply with the final effluent limitations. Within 1 year after the effective date of the Order, the Discharger must prepare and submit a compliance plan that describes the steps that will be taken to ensure compliance with applicable limitations.

40 CFR § 131.38(e) provides conditions under which interim effluent limitations and compliance schedules may be issued. The SIP allows inclusion of an interim limitation with a specific compliance schedule included in an NPDES permit for priority pollutants if the limitation for the priority pollutant is based on CTR criteria and the Discharger demonstrates that it is infeasible to achieve immediate compliance with the effluent limitations.

Pursuant to the SIP (Section 2.2.1, Interim Requirements under a Compliance Schedule), when compliance schedules are established in an Order, interim limitations must be included based on current treatment Facility performance or existing permit limitations, whichever is more stringent, to maintain existing water quality. Since there are no effluent limitations for cadmium, copper, lead, mercury, silver, thallium, and zinc in the existing Order, the MECs serve as the basis for the interim AMEL/MDEL effluent limitations. Therefore, the interim effluent limitations for cadmium, copper, lead, mercury, silver, thallium, and zinc are set based on the MEC.

The SIP requires that the Regional Water Board establish other interim requirements such as requiring the discharger to develop a pollutant minimization plan and/or source control measures and participate in the activities necessary to achieve the final effluent limitations. These interim limitations shall be effective until two years after the effective date of this Order, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

**Table F-11  
 Interim Effluent Limitations**

Parameter	Units	Interim Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Cadmium, Total Recoverable	µg/L	4	--	--	--
Copper, Total Recoverable	µg/L	16	16	--	--
Lead, Total Recoverable	µg/L	20	20	--	--
Mercury, Total Recoverable	µg/L	0.33	0.33	--	--
Silver, Total Recoverable	µg/L	4	--	--	--
Thallium, Total Recoverable	µg/L	14	14	--	--
Zinc, Total Recoverable	µg/L	113	--	--	--

**F. Land Discharge Specifications**

**[Not Applicable]**

## G. Reclamation Specifications

**[Not Applicable]**

## V. RATIONALE FOR RECEIVING WATER LIMITATIONS

### A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 CFR § 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in the Order are included to ensure protection of beneficial uses of the receiving water.

### B. Groundwater

**[Not Applicable]**

## VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program, Attachment E of the 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 Monitoring and Reporting Program for this Facility.

### A. Influent Monitoring

**[Not Applicable]**

### B. Effluent Monitoring

Monitoring for those pollutants expected to be present in the discharge at monitoring location M-001, will be required as shown on the tentative Monitoring and Reporting Program (Attachment E) and as required in the "*Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*" adopted March 2, 2000.

Monitoring for pH is once per day, and for temperature is once per month are required to ensure compliance with final effluent limitations. Quarterly monitoring for settleable solids, suspended solids, and turbidity is required in Order to determine compliance with final effluent limitations and is carried over from the existing permit. Monitoring for oil and grease, total residual chlorine, and biochemical oxygen was changed from quarterly to monthly because the Discharger has exceeded existing permit limitations for these pollutants on multiple occasions. Because there is no monitoring data submitted for acute toxicity, the Discharger is required to monitor for acute toxicity in semi-annual basis. Monitoring for chronic toxicity is required in an annual basis. Semi-annual monitoring is required for nitrite, nitrite plus nitrate, sulfide, and ammonia. Because effluent data collected from Discharge Point 001 demonstrate reasonable potential to exceed state water quality criteria, CTR-based WQBELs have been established for cadmium, copper, lead, mercury, selenium, silver, thallium, and zinc; therefore, the Order establishes monthly monitoring requirements at Discharge Point 001 for these pollutants to determine compliance with final and interim effluent limitations.

As discussed earlier, the Regional Water Board issued a letter on August 3, 2001 that required California Dairies to monitor for priority pollutants regulated in the CTR, and submit the data by April 15, 2003. As discussed previously, the Discharger has submitted data for the period from September 2001 to September 2003, and these data were used to conduct the RPA. The SIP states that the Regional Water Board will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.

This permit will combine the periodic reporting requirements of the SIP with the existing permit monitoring requirements. The Order requires the Discharger to conduct annual monitoring for all CTR priority pollutants, as listed in the *MRP*, in the discharge for the life of the permit. The Regional Water Board will use the additional data to conduct the RPA and determine if a WQBEL is required, and may reopen the permit to incorporate additional effluent limitations and requirements, if necessary.

### **C. Whole Effluent Toxicity Testing Requirements**

WET protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. The Order includes limitations for acute toxicity, and therefore, monitoring requirements are included in the *MRP* (Attachment E) to determine compliance with the effluent limitations established in Limitations and Discharge Requirements, Effluent Limitations, Section IV.A.1.a of the Order.

Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Therefore, in accordance with the SIP, the Discharger will be required to conduct chronic toxicity testing in order to determine reasonable potential and establish WQBELs as necessary.

### **D. Receiving Water Monitoring**

#### **1. Surface Water**

This Order includes receiving water limitations and therefore, monitoring requirements are included in the *MRP* (Attachment E) to determine compliance with the receiving water limitations established in Limitations and Discharge Requirements, Receiving Water Limitations, Section V.A of this Order. Monitoring for temperature, ammonia, pH, and dissolved oxygen in the downstream receiving water is included in the permit. The Facility is also required to perform general observations of the receiving water when discharges occur and report the observations in the monitoring report. Attention shall be given to the presence or absence of: floating or suspended matter, discoloration, aquatic life, visible film, sheen or coating, and fungi, slime, or objectionable growths.

According to the SIP, the Discharger is required to monitor the receiving water upstream from the discharge point for the CTR priority pollutants, to determine reasonable potential. Accordingly, the Regional Water Board is requiring that the Discharger conduct upstream receiving water monitoring of the CTR priority pollutants at Monitoring Location R-001. The Discharger also must analyze salinity, pH, and hardness of the receiving water upstream from the discharge point at the same time the samples are collected for priority pollutants analysis.

**2. Groundwater**

**[Not Applicable]**

**E. Other Monitoring Requirements**

**[Not Applicable]**

**VII. RATIONALE FOR PROVISIONS**

**A. Standard Provisions**

**1. Federal Standard Provisions**

Standard Provisions, which in accordance with 40 CFR §§ 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D to the Order.

**2. Regional Water Board Standard Provisions**

Regional Water Board Standard Provisions are based on the CWA, USEPA regulations, and the CWC.

**B. Special Provisions**

**1. Reopener Provisions**

This provision is based on 40 CFR Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

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

a. Chronic Toxicity Trigger. This provision is based on Section 4 of the SIP, Toxicity Control Provisions.

b. Initial Investigation Toxicity Reduction Evaluation Workplan. This provision is based on Section 4 of the SIP, Toxicity Control Provisions.

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

According to the SIP, pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. This permit also requires that the Discharger develop and implement a Pollution Minimization Plan for mercury. Pursuant to section 2.4.5.1 of the SIP, pollution minimization includes: monitoring for potential sources of the pollutants, periodic monitoring, control strategy, control measure implementation, and an annual status report sent to the Regional Water Board.

#### **4. Compliance Schedules**

This provision is based on the SIP, Section 2.1, Compliance Schedules. CTR's Compliance Schedule provisions sunseted on May 17, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed 5 years from issuance or past May 17, 2010, which ever is sooner. The Discharger is required to develop and submit a Compliance Plan.

#### **5. Construction, Operation, and Maintenance Specifications**

This provision is based on the requirements of 40 CFR § 122.41(e) and the existing Order.

#### **6. Special Provisions for Municipal Facilities (POTWs Only)**

**[Not Applicable]**

#### **7. Other Special Provisions**

**[Not Applicable]**

### **VIII. PUBLIC PARTICIPATION**

The California Regional Water Quality Control Board, Los Angeles 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 California Dairies, Incorporated. 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.

#### **B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should 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 the tentative Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on October 6, 2005.

### **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: November 3, 2005  
Time: 9:00 A.M.  
Location: City of Simi Valley, City Council Chambers  
2929 Tapo Canyon Road,  
Simi Valley, CA

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/losangeles> 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, 22<sup>nd</sup> Floor  
Sacramento, CA 95812-0100  
Attn: Elizabeth Jennings, Senior Staff Counsel

### **E. Information and Copying**

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address below 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 (213) 576-6600.

California Regional Water Quality Control Board  
Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

**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 the Order should be directed to Rosario Aston at (213) 576-6653.