

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. 94-295

NPDES NO. CA0082805

WASTE DISCHARGE REQUIREMENTS  
FOR  
CALIFORNIA MILK PRODUCERS, INC.  
TIPTON PLANT  
TULARE COUNTY

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

1. Waste Discharge Requirements (WDRs) Order No. 92-061 (NPDES Permit No. CA 0082805) was adopted by the Board on 27 March 1992. Order No. 92-061 prescribes requirements for a discharge of 0.3 million gallons per day (mgd) from California Milk Producers, Inc., (hereafter Discharger), Tipton Plant, to an adjacent reclamation area (Discharge Point 002), and the Lower Tule River Irrigation District (LTRID) Casa Blanca Canal (Discharge Point 001). California Milk Producers, Inc., is incorporated in California. On 27 March 1992, the Board also adopted Water Reclamation Requirements (WRRs) Order No. 92-057, which prescribes requirements for Mr. Charles Pitigliano (hereafter User), for the discharge of reclaimed water from the wastewater treatment plant (WWTP) to the reclamation area owned and operated by the User. The Discharger is building a dairy products facility three miles south of the community of Tipton, which manufactures butter and powdered milk. The processing facility will have a processing capacity of 4,000,000 pounds per day (lbs/day) of milk, with a BOD input of about 396,130 lbs/day.
2. Order No. 92-061 was established based on a Report of Waste Discharge and an engineering report, entitled *Proposed Treatment and Disposal of Wastewater from California Milk Producers Dairy Facility, Tipton, Tulare County*. The report recommended the process wastewater be treated through a combination of ultrafiltration (UF) and reverse osmosis (RO).
3. The Discharger switched to an evaporation concentrator as an alternative to the UF/RO treatment system during the construction of the WWTP. A single effect falling mechanical vapor recompression (MVR) concentrator will be used as the primary wastewater treatment system. Secondary treatment will be provided by two aerated lagoons. By letter of 15 March 1994, the Discharger was requested to provide a new engineering report.
4. The Discharger submitted the engineering report in April 1994. The new treatment processes are illustrated in Figure 1. The WWTP now includes: a pumping station, two equalization tanks, a MVR Concentrator, two aerated lagoons, a stabilization pond (pond #1), and three unlined storage ponds (ponds #2, #3, #4) with a total storage capacity of

128.5 acre feet. Process wastewater flows to the WWTP. Process wastewater may bypass the equalization tanks and the MVR concentrator to the aerated lagoons, or directly discharge from the MVR concentrator outlet to pond #1 under the condition that the effluent limits are met. Concentrate is stored in two stainless steel tanks, and used as animal feed at local farms. Condensate evaporated and condensed from milk, along with the other non-process wastewater that does not contain significant amounts of pollutants, will be pumped directly to unlined storage ponds. Although discharge will occur through evaporation and percolation, the primary purpose of the storage ponds is to store water during the non-irrigation season for reclamation during the irrigation season. The WWTP is in Section 18 of T22S, R25E, MDB&M, as shown in Attachment A, a part of this Order.

Discharge Point 001 was also moved from the Casa Blanca Canal to the south terminal of Morrison Ditch. Morrison Ditch is controlled by the LTRID. Whereas Order No. 92-061 limited the maximum discharge to 0.3 mgd at Discharge Points 001 and 002, an agreement between the Discharger and the LTRID arranged a maximum discharge at Discharge Point 001 of 2.5 mgd (1,700 gpm), the maximum capacity of the discharge pump.

5. Order No. 92-061 is no longer adequate due to the changes in treatment process and a change in quantity and location of the discharge.
6. The Discharger proposes to discharge a maximum of 450,000 gallons per day (gpd) of waste to unlined storage ponds in two separate streams. The two streams include maximum flows of 330,000 gpd of non-process wastewater (condensate, boiler blow-down, cooling water, and seal water) and 120,000 gpd of treated process wastewater. Final discharge will occur in the Tule Delta Hydrologic Area (No. 558.20) of the South Valley Floor Hydrologic Unit, and occur in two different locations:

Discharge Point 001 - Discharge to Surface Water: The Discharger proposes to discharge up to 2.5 mgd to Morrison Ditch when the storage ponds are full and the User does not need the irrigation water. Discharge Point 001 is in the SE 1/4 of Section 18, T22S, R25E, MDB&M (Latitude 36 deg., 0 min., 45 Sec. North, Longitude 119 deg., 18 min., 30 sec. East). Morrison Ditch is only about 3000 feet long and is used to deliver surface water from the Casa Blanca Canal for crop irrigation. The Morrison Ditch is nearly flat and has sufficient freeboard to allow flow in either a north or south direction. When the discharge occurs at Discharge Point 001, the effluent will flow from Morrison Ditch about 3000 feet north into the LTRID's Casa Blanca Canal shown in Attachment A. The Casa Blanca Canal occasionally spills to Tule River, a water of the United States.

Discharge Point 002 - Crop Irrigation: The Discharger proposes to discharge up to 2.5 mgd of effluent to 220 acres cropped with grapes, alfalfa, and cotton (hereafter reclamation areas) for reclamation by flood irrigation. The land is owned by Mr. Charles

WASTE DISCHARGE REQUIREMENTS  
CALIFORNIA MILK PRODUCERS, INC.  
TIPTON PLANT, TULARE COUNTY

-3-

Pitigliano and is adjacent to the WWTP in the SE 1/4 of Section 18, T22S, R25E, MDB&M, adjacent to Highway 99. The reclamation is regulated by WRRs Order No. 92-057.

Non-process wastewater in excess of crop requirements will be discharged directly or from storage ponds to Morrison Ditch (Discharge Point 001). Treated process wastewater in storage ponds may also be discharged to Morrison Ditch if testing indicates compliance with requirements for Discharge Point 001.

7. The waste discharge to Morrison Ditch is subject to NPDES permit regulations contained in Subparts 405 D and J, Butter and Dry Milk Subcategories, respectively, of Title 40, Code of Federal Regulations (40 CFR). For new sources, the Butter Subcategory is most stringent and 40 CFR specifies that:
  - a. The maximum daily effluent biochemical oxygen demand (BOD) shall not exceed BOD input (lbs/100 lbs/day) by a factor of 0.016.
  - b. The maximum daily effluent Total Suspended Solid (TSS) shall not exceed BOD input (lbs/100 lbs/day) by a factor of 0.020;
  - c. Monthly daily average BOD shall not exceed BOD input (lbs/100 lbs/day) by a factor of 0.008;
  - d. Monthly daily average TSS shall not exceed BOD input (lbs/100 lbs/day) by a factor of 0.010;
  - e. The discharge shall not have pH less than 6.0 or greater than 9.0 at any time.
8. Sanitary wastewater, generated by approximately 40 employees at the plant, will be treated in an on-site septic tank and disposed by an on-site leachfield system regulated by Tulare County Health Services Department.
9. The Report of Waste Discharge and the supplemental information provided by the Discharger describe the discharge as follows:

WASTE DISCHARGE REQUIREMENTS  
 CALIFORNIA MILK PRODUCERS, INC.  
 TIPTON PLANT, TULARE COUNTY

	<u>Discharge Point 001</u>	<u>Discharge Point 002</u>	<u>Discharge To Storage Ponds</u>
Maximum Daily Flow (mgd)	2.5	2.5	0.12 (Treated process waste) 0.33 (Non-process waste)

Average Temperature: 80°F summer, 70°F winter

Treated Process Wastewater

<u>Constituent</u>	<u>Maximum mg/l</u>	<u>Maximum lbs/day</u>
BOD <sub>5</sub> <sup>1</sup>	26	63 <sup>2</sup>
Suspended Solids	32	79 <sup>2</sup>
COD <sup>3</sup>	75	125
TOC <sup>4</sup>	15	38
Ammonia-N	5	13
Total Residual Chlorine	1	2.5
pH <sup>5</sup>		

<sup>1</sup> 5-day, 20 °C biochemical oxygen demand (BOD).

<sup>2</sup> Based on the maximum daily processing of 4,000,000 pounds of milk; for lower milk processing rates, the mass emissions in lbs/day are proportionately less.

<sup>3</sup> Chemical oxygen demand.

<sup>4</sup> Total organic carbon.

<sup>5</sup> 6.5 < pH < 8.5.

10. The U.S. Environmental Protection Agency (EPA) and the Board have classified this discharge as a minor discharge.
11. The Board adopted a Water Quality Control Plan for the Tulare Lake Basin (5D) (hereafter Basin Plan) which contains water quality objectives for all waters of the Basin. These requirements implement the Basin Plan.

WASTE DISCHARGE REQUIREMENTS  
CALIFORNIA MILK PRODUCERS, INC.  
TIPTON PLANT, TULARE COUNTY

-5-

12. The Casa Blanca Canal flows seasonally and carries surface waters for industrial and agricultural purposes from the San Joaquin River (via the Friant-Kern Canal) and the Tule River, both waters of the United States.
13. The beneficial uses of the Tule River below Lake Success and downstream of the discharge are municipal and domestic supply; agricultural supply; industrial service and process supply; water contact and non-contact water recreation; warm fresh water habitat; wildlife habitat, and ground water recharge.
14. The California Department of Fish and Game (DFG) reports there are several endangered species in the area, including the Kit Fox and the Tipton Kangaroo Rat. The DFG reports that Morrison Ditch and the Casa Blanca Canal are not a warm water fishery and are not expected to support a future fishery, and a limit on chlorine residual of the effluent is not necessary.
15. Morrison Ditch and the Casa Blanca Canal are not near residential developments and areas normally frequented by the general public. Tulare County Health Services Department (TCDHS) reports that the Ditch and Canal, although not identified as having recreational uses, may have potential recreational use on an informal basis.
16. The Lower Tule River Irrigation District reports that it may connect the Casa Blanca Canal to the Taylor Canal, which carries water to and from the Tule River, at a place about 10.5 miles downstream of the proposed discharge point in the near future.
17. Ground water beneath the reclamation site is about 130 feet below ground surface, is of good quality (EC of 265  $\mu$ mhos/cm), and flows northwesterly.
18. The beneficial uses of the underlying ground water are municipal and domestic, industrial, and agricultural supply.
19. Soils in the upper 19 feet beneath the site were classified as clayey silts, silty sands, and occasional layers of sand, with permeabilities from 0.20 to 0.02 feet per day.
20. The permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution 68-16. The impact on water quality will either be localized or insignificant. Morrison Ditch and the Casa Blanca Canal are not fisheries, which is the beneficial use that would most likely be affected by the pollutants discharged (BOD, suspended solids, chlorine residual, and temperature). The discharge, as previously and currently permitted, allows economic expansion in the area.

21. Statewide plans and policies applicable to this discharge and not referenced in the Basin Plan include the *Policy Statement on Wastewater Discharge to Watercourses in Water Deficient Areas, Resolution No. 79-45*; and the *Policy with Respect to Water Reclamation in California, Resolution No. 77-1*.
22. The State Department of Health Services has established reclamation criteria in Chapter 3, Division 4, Title 22, California Code of Regulations (CCR), hereafter Title 22. Tulare County recommends application of Title 22 to this discharge.
23. Effluent limitations, and toxic effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, and 307 of the Clean Water Act (CWA) and amendments thereto applicable to the discharge are contained herein.
24. On 17 March 1991, Tulare County certified a negative declaration for the proposed project in accordance with the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), and the State CEQA Guidelines. Compliance with these waste discharge requirements will mitigate or avoid the significant impacts on water quality.
25. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
26. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
27. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided EPA has no objections.

**IT IS HEREBY ORDERED** that Order No. 92-061 is rescinded and that California Milk Producers, Inc., its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

**A. Discharge Prohibitions:**

1. Discharge of treated wastewater at a location or in a manner different from that described in Finding Nos. 6 and 8 is prohibited.

2. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Standard Provision A.13.

**B. Effluent Limitations:**

1. Discharge of effluent from pond #1 to the storage ponds shall not exceed the following limits:

<u>Constituent</u>	<u>Pounds/100 pounds of BOD<sub>5</sub> input<sup>1</sup></u>	
	<u>30-day Average</u>	<u>Daily Maximum</u>
BOD <sub>5</sub>	0.008	0.016
Total Suspended Solids	0.010	0.020
pH <sup>2</sup>		

<sup>1</sup> Pounds of BOD<sub>5</sub> input means the BOD<sub>5</sub> of the materials entered into process, which may be calculated by multiplying the fats, proteins, and carbohydrates by factors of 0.89, 1.031, and 0.691, respectively.

<sup>2</sup> Discharge shall not have a pH less than 6.0 or greater than 9.0.

2. Discharge effluent at Discharge Point 001 shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>30-day Average</u>	<u>7-day Median</u>	<u>Daily Maximum</u>
BOD <sub>5</sub>	mg/l	40	--	80
Total Suspended Solid	mg/l	40	--	80
Settleable Solids	ml/l	0.1	--	0.5
Total Coliform Organisms	MPN <sup>1</sup> /100 ml	--	23	240
Boron	mg/l	--	--	1.0
Chlorides	mg/l	--	--	175
pH <sup>2</sup>	pH units	--	--	--

\* See footnotes next page

<sup>1</sup> Most probable number.

<sup>2</sup> Discharge shall not have a pH less than 6.0 or greater than 9.0.

3. Discharge of effluent at the Discharge Point 002 shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>30-day Average</u>	<u>Daily Maximum</u>
BOD <sub>5</sub>	mg/l	40	80
Settleable Solids	ml/l	0.2	0.5
pH <sup>1</sup>	pH units		

<sup>1</sup> The discharge shall not have a pH less than 6.0 or greater than 9.0

4. The discharge at Discharge Point 001 or Discharge Point 002 shall not exceed 2.5 mgd. The treated process wastewater discharge to the storage ponds shall not exceed 0.12 mgd, and non-process wastewater discharge to the storage ponds shall not exceed 0.33 mgd.
5. Mineralization, as measured by electrical conductivity (EC), shall not exceed the average EC of the source water plus 500 μ mhos/cm, or a maximum of 1000 μ mhos/cm, whichever is less.
6. Objectionable odors originating at the treatment, reclamation, or disposal areas shall not be perceivable beyond the limits of the wastewater treatment and reclamation areas.
7. As a means of discerning compliance with Discharge Specification B.6, the dissolved oxygen content in the upper zone (1 foot) of wastewater in ponds or any impoundment shall not be less than 1.0 mg/l.
8. The treatment plant and storage ponds shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
9. Ponds and impoundments shall be managed to prevent breeding of mosquitos. In particular:
- An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.

- b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
  - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
10. The storage ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation during the non-irrigation season and periods when discharge 001 is not available. Design seasonal precipitation shall be based on total annual precipitation using a return period of 25 years, distributed monthly in accordance with historical rainfall patterns. Freeboard shall never be less than 2.0 feet (measured vertically).
  11. On **1 October** of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification B.10.
  12. Public contact with wastewater at the treatment and disposal facilities shall be precluded through such means as fences, signs, and other acceptable alternatives.

**C. Sludge Disposal Specifications:**

1. Collected screenings, sludges, and other solids removed from liquid wastes and not recycled as animal feed shall be disposed of in a manner that is consistent with Chapter 15, Division 3, Title 23, of the CCR and approved by the Executive Officer.
2. Any proposed change in sludge use or disposal practice from a previously approved practice shall be reported to the Executive Officer and EPA Regional Administrator at least **90 days** in advance of the change.

**D. Receiving Water Limitations:**

Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit.

The discharge shall not cause the following in the receiving water:

1. Concentrations of dissolved oxygen to fall below 5.0 mg/l.
2. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
3. Oils, greases, waxes, floating material (liquids, solids, foams, and scums) or suspended material to create a nuisance or adversely affect beneficial uses.

4. Toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.
5. Esthetically undesirable discoloration.
6. Fungi, slimes, or other objectionable growths.
7. Turbidity to increase more than 20 percent over background levels.
8. The normal ambient pH to fall below 6.5, exceed 8.3, or change by more than 0.3 units.
9. Deposition of material that causes nuisance or adversely affects beneficial uses.
10. The normal ambient temperature to increase more than 5°F.
11. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.
12. Violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board pursuant to the CWA and regulations adopted thereunder.
13. The daily maximum electrical conductivity of the Tule River to exceed 450  $\mu$  mhos/cm, or the 10-year average to exceed 250  $\mu$  mhos/cm.

**E. Provisions:**

1. Use of reclaimed water shall be limited to flood irrigation of vineyards and to irrigation of fodder, feed, fiber, and seed crops, and pasture.
2. The Discharger shall use the best practicable cost-effective control technique currently available to limit mineralization to no more than a reasonable increment.
3. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)", dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provision(s)".
4. The Discharger shall comply with Monitoring and Reporting Program No. 94-295 which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.

5. Discharge to Morrison Ditch shall not occur until the water demands of the reclamation areas have been met and storage ponds are full.
6. This Order expires on **1 October 1999** and the Discharger must file a Report of Waste Discharge in accordance with Title 23, CCR, not later than 180 days in advance of such date in application for renewal of waste discharge requirements, if it wishes to continue the discharge.
7. The Discharger shall submit an Effluent and Receiving Water Quality Assessment Study by **1 April 1995**. The objectives of the study are to: (1) determine whether the discharge has pollutants that cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard, including the State narrative criteria for water quality; and (2) determine the most appropriate measures and/or actions to be taken to achieve compliance with potential effluent limitations. In implementing this provision, the Discharger shall perform a one-time sampling of the effluent for the following:
  - a. Volatile organic is by EPA Methods 601 and 602, or an equivalent method.
  - b. Semi-volatile organics and Acid and Base/Neutral Extractable by EPA Method 625, or an equivalent method.

The sampling shall be according to the following:

- a. By **15 January 1995**, a proposal to perform the sampling shall be submitted for approval.
- b. The results of the sampling shall be submitted by **90 days after** approval of the proposal.

Monitoring and Reporting Program No. 94-295 may be modified after review of the results of the required sampling.

8. Based on the results of sampling performed as required in Provision E.7 and Monitoring and Reporting Program No. 94-295, this permit may be reopened and additional effluent limits established. In addition, elevated concentrations of pollutants found in the effluent samples may lead to reopening of the permit to require the Discharger to assess the mixing and dilution characteristics of the discharge with the receiving water.
9. By **15 January 1995**, the Discharger shall submit a work plan addressing compliance with Sludge Disposal Specification C.1.

10. The Discharger shall submit to the Board on or before each compliance report date, a report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Board by letter when it returns to compliance with the time schedule.
11. Prior to making any change in Discharge Point 001, place of use, or purpose of use of the wastewater, Discharger shall obtain approval of or clearance from the State Water Resources Control Board (Division of Water Quality and Water Rights).
12. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

13. At least **90 days** prior to termination or expiration of any lease, contract, or agreement involving disposal or reclamation areas or off-site reuse of effluent, if used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.

WASTE DISCHARGE REQUIREMENTS  
CALIFORNIA MILK PRODUCERS, INC.  
TIPTON PLANT, TULARE COUNTY

-13-

I, WILLIAM H. CROOKS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 28 October 1994.

WILLIAM H. CROOKS, Executive Officer

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YP:cjs: 10/28/94

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 94-295

NPDES NO. CA0082805

FOR  
CALIFORNIA MILK PRODUCERS, INC.  
TIPTON PLANT  
TULARE COUNTY

Specific sample station locations shall be established under direction of the Board's staff, and a description of the stations shall be attached to this Order.

**INFLUENT MONITORING**

Influent samples shall be collected at approximately the same time as effluent samples of treated process wastewater and should be representative of the materials entered into process. Influent monitoring shall include at least the following:

<u>Sampling Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
Milk	mgd	Metered	Daily
Milk	lbs/day	Calculated	Daily
BOD <sub>5</sub> input	100 lbs/day	Calculated <sup>1</sup>	Daily

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<sup>1</sup> This parameter shall be calculated from direct analyses of fats, protein, and carbohydrates of the material entered into the processes required to make butter and powder milk; and by multiplying the fats, proteins, and carbohydrates by factors of 0.890, 1.031, and 0.691, respectively. Organic acids (e.g., lactic acid) must be included as carbohydrates.

**EFFLUENT MONITORING**

Effluent samples should be representative of the volume and quality of the discharge. Samples collected from the outlet structure of pond #1 and the storage ponds will be considered adequately composited. Time of collection of samples shall be recorded.

NON-PROCESS AND PROCESS WASTEWATER

1. For discharge of treated process wastewater from the stabilization pond (pond #1) to the storage ponds, effluent samples shall be collected from pond #1 outlet. The effluent monitoring shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
BOD <sub>5</sub>	mg/l	Grab	Weekly
BOD <sub>5</sub>	lbs/day	Calculated	Weekly
BOD <sub>5</sub> ratio <sup>1</sup>	--	Calculated	Weekly
TSS	mg/l	Grab	Weekly
TSS	lbs/day	Calculated	Weekly
TSS ratio <sup>1</sup>	--	Calculated	Weekly
pH	pH units	Grab	Weekly

<sup>1</sup> The ratios shall be the effluent mass emissions of BOD and TSS for the day during which the sample is collected, in lbs/day, divided by the calculated influent BOD for the same day, in 100 lbs/day.

2. Non-process wastewater and treated process wastewater shall be metered prior to discharge at the Discharge Points 001, 002, and to the storage ponds as prescribed below:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Non-process wastewater	mgd	Metered	Continuous
Process wastewater	mgd	Metered	Continuous

DISCHARGE POINT 001

When discharging non-process wastewater, treated process wastewater, or a mixture thereof directly to Discharge Point 001, effluent samples shall be collected prior to mixing with any water in Morrison Ditch. Effluent monitoring for Discharge Point 001 shall include at least the following:

MONITORING AND REPORTING PROGRAM  
 FOR CALIFORNIA MILK PRODUCERS  
 TIPTON PLANT, TULARE COUNTY

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Metered	Continuous
Settleable Solids	ml/l	Grab	Daily
BOD <sub>5</sub>	mg/l	8-hr. Composite	Weekly
Suspended Solids	mg/l	8-hr. Composite	Weekly
pH	pH units	Grab	Daily
EC @ 25 °C	μ mhos/cm	8-hr. Composite	Weekly
Total Coliform Organisms	MPN/100 ml	Grab	Weekly
Chlorides	mg/l	Grab	Monthly <sup>1</sup>
Boron	mg/l	Grab	Monthly <sup>1</sup>
Total Dissolved Solids <sup>2</sup>	mg/l	Grab	Monthly <sup>1</sup>

<sup>1</sup> At least one sample shall be taken each month.

<sup>2</sup> Shall be determined by EPA Method 160.4.

If the discharge is intermittent rather than continuous, the Discharger shall monitor and record data for all of the constituents listed above on the first day of each intermittent discharge and thereafter the frequencies in the schedule shall apply. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the schedule provided above.

DISCHARGE POINT 002

When discharging non-process wastewater, treated process wastewater, or a mixture thereof directly to Discharge Point 002, effluent samples shall be collected prior to discharge to the reclamation area. When discharging from storage ponds to Discharge Point 002, effluent samples shall be collected from the pond outlets. Effluent monitoring for Discharge Point 002 shall include at least the following:

MONITORING AND REPORTING PROGRAM  
 FOR CALIFORNIA MILK PRODUCERS  
 TIPTON PLANT, TULARE COUNTY

<u>Sampling Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
Flow	mgd	Metered	Continuous
Settleable Solids	ml/l	Grab	Daily
pH pH units	Grab	Weekly	
BOD <sub>5</sub>	mg/l	8-hr. Composite	Weekly
Suspended Solids	mg/l	8-hr. Composite	Weekly
EC @ 25 °C	μ mhos/cm	8-hr. Composite	Weekly
Total Dissolved Solids <sup>2</sup>	mg/l	Grab	Monthly <sup>1</sup>

<sup>1</sup> At least one sample shall be taken each month.

<sup>2</sup> Shall be determined by EPA Method 160.4.

**RECEIVING WATER MONITORING**

All receiving water samples shall be grab samples. Monitoring stations shall be established as follows:

<u>Station</u>	<u>Description</u>
R-1	Casa Blanca Canal at a point 500 feet upstream from the junction of Morrison Ditch and the Casa Blanca Canal
R-2	Morrison Ditch at a point 100 feet north of Discharge Point 001
R-3	Casa Blanca Canal 500 feet downstream from the junction of Morrison Ditch and Casa Blanca Canal

Receiving water monitoring shall include at least the following:

<u>Constituents</u>	<u>Units</u>	<u>Station</u>	<u>Sampling Frequency</u>
Flow	cfs (estimate)	R-1	Daily

MONITORING AND REPORTING PROGRAM  
 FOR CALIFORNIA MILK PRODUCERS  
 TIPTON PLANT, TULARE COUNTY

<u>Constituents</u>	<u>Units</u>	<u>Station</u>	<u>Sampling Frequency</u>
Dissolved Oxygen	mg/l	R-1, R-2, R-3	Daily
pH	pH units	R-1, R-2, R-3	Daily
Turbidity	NTU	R-1, R-2, R-3	Weekly
Temperature	°F	R-1, R-2, R-3	Daily
EC @ 25°C	µ mhos/cm	R-1, R-2, R-3	Monthly <sup>1</sup>

<sup>1</sup> At least one sample shall be taken each month.

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by Stations R-1, R-2 and R-3. Attention shall be given to the presence or absence of:

- |                                 |  |
|---------------------------------|--|
| a. Floating or suspended matter | f. Fungi, slimes, or objectionable growths |
| b. Discoloration                | g. Potential nuisance conditions           |
| c. Bottom deposits              | e. Visible films, sheens or coatings       |
| d. Aquatic life                 |  |

Notes on receiving water conditions shall be summarized in the monitoring report. Receiving water monitoring, except for logging of conditions, is not required when the discharge represents the entire flow in the Casa Blanca Canal.

**STORAGE PONDS MONITORING**

The freeboard shall be monitored on all storage ponds in use to the nearest tenth of a foot. Pond monitoring shall include at least the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Dissolved Oxygen <sup>1</sup>	mg/l	Grab	Daily
Freeboard	feet	Observation	Weekly

<sup>1</sup> Samples shall be collected at a depth of one foot from each pond in use, opposite the inlet, and analyzed for dissolved oxygen. Samples shall be collected between 0800 and 0900 hours.

Permanent markers shall be placed in each pond with calibrations indicating the water level at design capacity and available operational freeboard.

In addition, the Discharger shall inspect the condition of the ponds once per week and write visual observations in a bound log book. Notations shall include observations of whether weeds are developing in the water or along the bank, and their location; whether dead algae, vegetation, scum, or debris are accumulating on the pond surface and their location; whether burrowing animals or insects are present; and the color of the pond (e.g., dark sparkling green, dull green, yellow, grey, tan, brown, etc.). A copy of the entries made in the log during each month shall be submitted along with the monitoring report the following month. Where the O&M manual indicates remedial action is necessary, the Discharger shall briefly explain in the transmittal what action has been taken or is scheduled to be taken.

### WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Water supply monitoring shall include at least the following:

<u>Constituents</u>	<u>Units</u>	<u>Sampling Frequency</u>
Standard Minerals	mg/l	Quarterly <sup>1</sup>
Electrical Conductivity <sup>2</sup> @ 25°C	μ mhos/cm	Monthly
Total Dissolved Solids	mg/l	Quarterly

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<sup>1</sup> Samples shall be collected and analyzed for standard minerals quarterly for a period of a year, then annually thereafter.

<sup>2</sup> If the source water is from more than one well, the EC shall be reported as a weighted average and include copies of supporting calculations.

### REPORTING

Monitoring results shall be submitted to the Regional Board by the **20th day of the month** following sample collection. Quarterly and annual monitoring results shall be submitted by the **20th day of the month** following each calendar quarter and year, respectively.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be

MONITORING AND REPORTING PROGRAM  
FOR CALIFORNIA MILK PRODUCERS  
TIPTON PLANT, TULARE COUNTY

-7-

summarized in such a manner to illustrate clearly whether the discharge complies with waste discharge requirements.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

By **30 January of each year**, the Discharger shall submit a written report to the Executive Officer containing the following:

- a. The names, titles, and general responsibilities of persons in charge of wastewater management.
  - b. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
  - c. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.6).
  - d. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.
- a. Annual sludge production in dry tons and percent solids and description of disposal methods.

The Discharger may also be requested to submit an annual report to the Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

MONITORING AND REPORTING PROGRAM  
FOR CALIFORNIA MILK PRODUCERS  
TIPTON PLANT, TULARE COUNTY

-8-

The Discharger shall implement the above monitoring program on the first day of the month following effective date of this Order.

Ordered by: \_\_\_\_\_  
WILLIAM H. CROOKS, Executive Officer

\_\_\_\_\_  
28 October 1994  
(Date)

YP: cjs: 10/28/94

## INFORMATION SHEET

CALIFORNIA MILK PRODUCERS, INC.  
TIPTON PLANT  
TULARE COUNTY

California Milk Producers (hereafter Discharger) submitted an application, dated 30 September 1991, for a permit to discharge wastes under the National Pollutant Discharge Elimination System (NPDES) from an industrial wastewater treatment plant (WWTP) to the Lower Tule Irrigation District's Casa Blanca Canal and to land for crop irrigation.

The Board adopted Waste Discharge Requirements Order No. 92-061 and NPDES Permit No. CA0082805 on 27 March 1992. Water Reclamation Requirements (WRRs) Order No. 92-057 was issued at the same time to Charles Pitigliano, a farmer with the land adjacent to the WWTP, for water reclamation.

The Discharger is building a dairy products facility three miles south of the community of Tipton, and proposes to discharge a maximum of 450,000 gallons per day (gpd) of wastes to the unlined storage ponds in two separate streams, which include maximum flows of 330,000 gpd of non-process wastewater (condensate, boiler blow-down, cooling water and seal water) and 120,000 gpd of treated process wastewater. The WWTP is in Section 18 of T22S, R25E, MDB&M.

The Discharger submitted a design report in April 1994, which informed the Board of changes of the wastewater treatment process. The WWTP now includes: a pumping station, two equalization tanks, a MVR Concentrator, two aerated lagoons, a stabilization pond and three storage ponds. Discharge Point 001 is also modified from the Casa Blanca Canal to the south terminal of Morrison Ditch. Morrison Ditch is only about 3000 feet long and is used to deliver surface water from the Casa Blanca Canal for crop irrigation. The Morrison Ditch is nearly flat and has sufficient freeboard to allow flow in either a north or south direction. When the discharge occurs at Discharge Point 001, the effluent will flow from Morrison Ditch north into the LTRID's Casa Blanca Canal at the location shown in Attachment A. The maximum discharge to Discharge Point 001 and 002 will be increased from the original 0.3 million gallons per day (mgd) to 2.5 mgd.

Process wastewater flows to the WWTP for treatment prior to discharge to the storage ponds. Process wastewater high in dissolved solids is treated in the MVR Concentrator. Lower strength process water is treated in two aerated lagoons. Concentrate from the MVR Concentrator is stored in two stainless steel tanks, and used as animal feed at local farms. Both non-process wastewater and treated process wastewater will be stored in ponds and used for crop irrigation by Charles Pitigliano (Discharge Point 002). Non-process wastewater in excess of crop requirements will be discharged directly, or from storage ponds, to Morrison Ditch (Discharge Point 001). Treated process wastewater in storage ponds may also be discharged to the Morrison Ditch if testing indicates compliance with requirements for Discharge Point 001.

The Report of Waste Discharge and the supplemental information provided by the Discharger describe the treated process wastewater as follows:

INFORMATION SHEET - Continued

CALIFORNIA MILK PRODUCERS  
TIPTON PLANT, TULARE COUNTY

-2-

<u>Constituent</u>	<u>Maximum mg/l</u>	<u>Maximum lbs/day</u>
BOD <sub>5</sub> <sup>1</sup>	26	63
TSS 32	79	
COD <sup>2</sup>	75	125
TOC <sup>3</sup>	15	38
Ammonia-N	5	13
Total Residual Chlorine	1	2.5

<sup>1</sup> 5-day, 20 °C biochemical oxygen demand (BOD).

<sup>2</sup> Chemical oxygen demand.

<sup>3</sup> Total organic carbon.

The Lower Tule River Irrigation District (LTRID) reports that the Casa Blanca Canal flows seasonally and carries surface waters for industrial and agricultural purposes from the San Joaquin River (via the Friant-Kern Canal) and the Tule River, both waters of the United States. For the past four years, the Canal only carried water from April to August. LTRID also reports that it may connect the Casa Blanca Canal to the Taylor Canal at a place about 10.5 miles downstream of the proposed discharge point in the near future.

This Order prescribes separate effluent limits for the treated process wastewater, Discharge Point 001 and Discharge Point 002. The limits and provisions contained in sections B, C, D, and E of the Order are based on the volume of the discharge, effluent characteristics, the nature of the receiving water bodies (surface water and land), and provisions of various state and federal regulations. The regulations include the *Water Quality Control Plan for the Tulare Lake Basin (5D)*, the *Porter-Cologne Water Quality Control Act*, Titles 22 and 23 of the California Code of Regulations (CCR), the *Clean Water Act*, and sections 405.45 and 405.105 of Title 40, Code of Federal Regulations (CFR).

The Order requires the Discharger to treat process wastewater prior to storage to standards of performance for new sources in 40 CFR 405, described as follows:

30-day	7-day	Daily	Limit
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INFORMATION SHEET - Continued

CALIFORNIA MILK PRODUCERS  
TIPTON PLANT, TULARE COUNTY

-3-

<u>Constituents</u>	<u>Units</u>	<u>Average</u>	<u>Median</u>	<u>Maximum</u>	<u>Basis</u>
BOD <sub>5</sub>	<sup>1</sup>	0.008	--	0.016	<sup>2</sup>
TSS	<sup>1</sup>	0.010	--	0.020	<sup>2</sup>
pH <sup>3</sup>	pH units	--	--	--	<sup>2</sup>

<sup>1</sup> Pounds per 100 pounds of the BOD<sub>5</sub> of the materials entered into process.

<sup>2</sup> 40 CFR 405.

<sup>3</sup> Discharge shall not have a pH less than 6.0 or greater than 9.0.

The basis for the effluent limits for Discharge Point 001 follows:

<u>Constituents</u>	<u>Units</u>	<u>30-day Average</u>	<u>7-day Median</u>	<u>Daily Maximum</u>	<u>Limit Basis</u>
BOD <sub>5</sub>	mg/l	40	--	80	<sup>1</sup>
TSS	mg/l	40	--	80	<sup>1</sup>
Settleable Solids	ml/l	0.1	--	0.5	
Total Coliform Organisms	MPN/100 ml	--	23	240	<sup>2</sup>
Boron	mg/l	--	--	1.0	<sup>3</sup>
Chlorides	mg/l	--	--	175	<sup>3</sup>
EC	µmhos/cm	--	--	<sup>4</sup>	<sup>3</sup>

<sup>1</sup> Proposed by the Discharger and concurred by the Regional Board staff.

<sup>2</sup> Proposed by the Discharger because of high bacterial content of milk waste and concurred by the Regional Board staff.

<sup>3</sup> Basin Plan 5D.

<sup>4</sup> Not to exceed 1000 µmhos/cm or the source water plus 500 µmhos/cm.

Chlorine and un-ionized ammonia limits for Discharge Point 001 are not specified in the draft order because the Casa Blanca Canal is not a warm water fishery and is not expected to be one in the future. The total coliform limits for Discharge Point 001 are necessary to protect the health of any recreational uses of the surface water.

Areal ground water occurs in an unconfined aquifer and is about 130 feet below the ground surface and is of good quality (EC of 265 µmhos/cm). Soils beneath the site are sandy silts, silty sands, and clays with moderate to low permeabilities.

INFORMATION SHEET - Continued

CALIFORNIA MILK PRODUCERS  
TIPTON PLANT, TULARE COUNTY

-4-

Average annual precipitation and evapotranspiration for the area are about 6.5 and 49.0 inches, respectively.

Tulare County certified a negative declaration for the proposed project in accordance with the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), and the State CEQA Guidelines. The Board staff reviewed the negative declaration and compliance with these requirements will prevent and/or mitigate adverse impacts on water quality.

In accordance with 40 CFR, the discharge, if it remains in compliance with this permit, will not cause, does not have a reasonable potential to cause, or contribute to an in-stream excursion above narrative or numeric criteria within a state water quality standard.