

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2008-0113

CEASE AND DESIST ORDER
REQUIRING
CALIFORNIA DAIRIES INC.
TIPTON MILK AND BUTTER PROCESSING FACILITY
TULARE COUNTY
TO CEASE AND DESIST
DISCHARGING WASTE CONTRARY TO REQUIREMENTS

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

1. California Dairies Inc., a California corporation, operates a Milk and Butter Processing Plant (hereafter Facility) near the intersection of Highway 99 South and Avenue 120 in Tulare County. The Facility generates wastewater in the form of COW water (condensate of milk) and other process wastewaters. Process wastewaters are treated in lined aerated ponds and then discharged to a series of unlined ponds where it is mixed with COW water. The effluent from the unlined ponds is ultimately discharged to Morrison Ditch. Morrison Ditch is an earthen channel adjacent to the Facility that extends about 3,000 feet north of the Facility and merges with Casa Blanca Canal, which is maintained by the Lower Tule River Irrigation District.
2. The discharge was regulated by Waste Discharge Requirements (WDRs) Order No. 94-295 (NPDES Permit No. CA0082805). WDRs Order No. 94-295 specified the discharger as California Milk Producers Inc. On 1 August 1999, California Milk Producers Inc. merged with two other dairy cooperatives in California and formed California Dairies Inc. WDRs Order No. R5-2008-0113, adopted on 31 July 2008, replaces Order No. 94-295 and identifies California Dairies Inc. as the Discharger.
3. In May 2001, CDI submitted an engineering report pertaining to renewal of the Order No. 94-295 and reported that the Facility had been expanded. The milk processing capacity was increased to seven (7) million pounds per day and the wastewater treatment facility (WWTF) was modified to accommodate flows greater than authorized by Order No. 94-295. CDI subsequently submitted a Report of Waste Discharge (RWD) in November 2006 and reported that the Facility was further expanded to accommodate a milk processing capacity of 10 million pounds per day.
3. Effluent Limitation No. B.2 of WDRs Order No. 94-295 specified that the BOD₅ and Total Suspended Solids (TSS) concentrations of the discharge to Morrison Ditch not exceed a 30-day average of 40 mg/L or a daily maximum of 80 mg/L.
4. Effluent Limitation IV.A.1. of WDRs Order No. R5-2008-0113 specifies that the BOD₅ and TSS concentrations of the discharge to Morrison Ditch shall not exceed a monthly average of 40 mg/L or a daily maximum of 80 mg/L.

5. Self-monitoring reports submitted by the Discharger between January 2004 and December 2007 indicate that the 30-day average BOD₅ concentration in the discharge exceeded 40 mg/L 18 times and the daily BOD₅ concentration exceeded 80 mg/L 17 times. The reports indicate the 30-day average TSS concentration in the discharge exceeded 40 mg/L 38 times and the daily TSS concentration exceeded 80 mg/L 20 times.
6. Based on Finding Nos. 3 through 5, the discharge violated Effluent Limitation No. B.2 of WDRs Order No. 94-295 and threatens to violate Effluent Limitation IV.A.1. of WDRs Order No. R5-2008-0113.
7. Effluent Limitation No. B.5 of WDRs Order No. 94-295 specifies that mineralization, as measured by electrical conductivity (EC), not exceed the average EC of the source water plus 500 umhos/cm, or a maximum of 1000 umhos/cm, whichever is less.
8. Effluent Limitation IV.A.1.d., and Discharge Specification IV.B.4., of WDRs Order No. R5-2008-0113 specify that the annual average EC of the discharge shall not exceed the annual average EC of source water plus 500 µmhos/cm, or 1000 umhos/cm, whichever is less.
9. Self-monitoring reports submitted by the Discharger indicate that the EC of the wastewater discharged from unlined storage ponds to the canal exceeded Effluent Limitation No. B.5 of WDRs Order No. 94-295 152 times in 2004, 126 times in 2005, 105 times in 2006, 43 times in 2007, and continues to be exceeded in 2008. Self-monitoring data from September 2001 to June 2004 also indicates that the EC of wastewater discharged from the lined treatment ponds to unlined Pond 2 averaged 2070 umhos/cm and from Pond 2 to the remaining unlined ponds averaged 2030 umhos/cm. These EC values substantially exceed the EC of the source water plus 500 umhos/cm (approximately 717 umhos/cm) and 1000 umhos/cm.
10. The information in Findings 7 through 9 indicates the discharge violated or threatened to violate Effluent Limitation No. B.5 of Order No. 94-295 and threatens to violate Effluent Limitation IV.A.1.d., and Discharge Specification IV.B.4., of WDRs Order No. R5-2008-0113.
11. The Discharger installed three groundwater monitoring wells in April and May 2006 to evaluate the underlying groundwater conditions. Five sampling events completed between May 2006 and July 2007 indicate the monitoring well upgradient from the unlined storage pond has an average EC of 318 umhos/cm and the monitoring wells downgradient from the ponds have average EC levels of 834 and 846 umhos/cm.
12. Receiving Water Limitation V.B., Interim Groundwater Limitations, states:

Release of waste constituents from the Facility shall not cause or contribute to groundwater:

1. Containing concentrations of constituents identified below, or natural background quality, whichever is greater:
 - a. Nitrate as nitrogen of 10 mg/L.
 - b. Electrical conductivity of 900 umhos/cm.
 - c. Total Coliform Organisms of 2.2 MPN/100 mL.
 - d. For constituents identified in Title 22, the MCLs quantified therein.
 2. Containing taste or odor-producing constituents, toxic substances, or any other constituents, in concentrations that cause nuisance or adversely affect beneficial uses.
13. The EC levels in the unlined ponds as described in Finding 9 above and the groundwater data described in Finding 11 above indicates the EC of the discharges to unlined ponds threatens to violate Receiving Water Limitation V.B.2. of WDRs Order No. R5-2008-0113.
14. The 2006 RWD indicates that the Discharger proposes to implement following measures to remedy the violations and threatened violations described in Findings 6, 10, and 13 above:
- a. Install additional salinity removal treatment technology (RO or more likely an additional MVR evaporator) to reduce the salinity of its high strength waste streams.
 - b. Divide and convert storage Pond 2 to three aerated treatment ponds to increase the WWTF treatment capacity.
 - c. Line the resulting Pond 2 treatment ponds to preclude the percolation of higher salinity waste waters to groundwater.
 - d. Install of pumps to return treated effluent to Ponds A and B for possible denitrification.
 - e. Adding aeration and mixing capacity in the treatment ponds to reduce BOD and TSS concentrations.
 - f. Complete piping and plumbing improvements to Ponds A and B to improve flow distribution and treatment capacity.
 - g. Combine its higher salinity waste streams, following treatment as described in a. above, with its lower salinity waste streams such that the discharge from lined treatment ponds to storage will have a projected EC of approximately 650 umhos/cm.
 - h. Install additional unlined storage ponds to increase disposal and storage capacity.
15. California Water Code, Section 13301, states, in part, that:

When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and

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direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. In the event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to such system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing, or in accordance with the procedure set forth in Section 13302.

16. Section 13267 of the California Water Code states, in part, that:

(a) A regional board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement or authorized by this division, may investigate the quality of any waters of the state within this region.

(b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any ... citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, ... or who proposes to discharge wastes within its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

17. The technical reports required by this Order are necessary to assure compliance with the Cease and Desist Order and Waste Discharge Requirements. The Discharger operates the facility that discharges the waste subject to this Order.
18. The issuance of this Order is an enforcement action by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act, pursuant to Title 14, California Code of Regulations, Section 15321(a)(2).
19. On 31 July 2008, in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, a public hearing was held and evidence received to consider a Cease and Desist Order.
17. Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board to review the action in accordance with, Title 23, California Code of Regulations, Sections 2050 through 2068. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the Regional Water Board action took place. Copies of the law and regulations applicable to filing petitions are available at www.waterboards.ca.gov/water_laws/index.html and also will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to sections 13301 and 13267 of the California Water Code, the California Dairies, Inc., as well as its agents, successors, and assigns, shall:

1. Cease and desist discharging wastes in violation and threatened violation of Waste Discharge Requirements Order No. R5-2008-0114. No term or condition of Order No. R5-2008-0114 is superseded or stayed by this Cease and Desist Order.
2. **Effluent Salinity Reduction.** In order to ensure compliance with Effluent Limitation IV.A.1.d. (EC), and Discharge Specification IV.B.4. (EC) of WDRs Order No. R5-2008-0114 the Discharger shall complete the following tasks no later than the dates in the following time schedule:

Task	Effluent Salinity Reduction	Compliance Date
a.	Submit a technical report in the form of a work plan and proposed time schedule that describes in detail, including appropriate engineering calculations and design information, measures proposed for implementation reduce the salinity of wastewater discharge from the lined treatment ponds to unlined ponds and to Morrison Ditch to ensure compliance with Effluent Limitations No. IV.A.1.d., and Discharge Specification No. IV.B.4.	30 August 2008
b.	Implement approved work plan.	30 days after Executive Officer approval of work plan and time schedule
c.	Achieve full compliance.	In accordance with approved schedule but by no later than 31 July 2010

3. **Pond 2 Liner.** The Discharger shall line treatment ponds constructed from Pond 2 by completing the following tasks no later than the dates in the following time schedule:

Task	Pond 2 Liner	Compliance Date
a.	Submit a Technical Report in the form of a proposed liner design for Pond 2, as proposed for modification, to ensure compliance with the groundwater limitations in Order No. R5-2008-0113 and the implementation of BPTC. The proposed design may consist of: <ol style="list-style-type: none"> i. A double liner constructed with 60-mil high density polyethylene or material of equivalent durability with a leachate collection and removal system (constructed in accordance with Section 20340 of Title 27) between the two liners, or ii. An alternate liner design which the Discharger must 	31 October 2008

Task	Pond 2 Liner	Compliance Date
	<p>demonstrate through submittal of technical reports is protective of groundwater quality and representative of BPTC.</p> <p>For type i. and ii. liners, the technical report shall include:</p> <ol style="list-style-type: none"> (1) Design calculations demonstrating that adequate containment will be achieved, (2) Details on the liner and leachate collection and removal system (if appropriate) materials, (3) A schedule for construction and certification of completion, (4) A construction quality assurance plan describing testing and observations needed to document construction of the pond in accordance with the design and Sections 20323 and 20324 of Title 27, and (5) An operations and maintenance plan for the pond. <p>For a type ii. pond design, the technical report shall also include an evaluation and groundwater model that demonstrates the proposed design will result in compliance with the groundwater limitations of Order No. R5-2008-0114 and implementation of BPTC, including calculations that demonstrate the volume and quality of seepage from the proposed pond and its effect on groundwater quality.</p>	
b.	Begin construction of approved liner.	Within 30 days of Executive Officer approval of the Technical Report required by Task a.
c.	Complete construction of approved liner and provide certification.	In accordance with the approved construction schedule, but by no later than 31 July 2010

4. **WWTF Modifications.** In order to ensure compliance with Effluent Limitations IV.A.1., for BOD and TSS the Discharger shall complete the following tasks no later than the dates in the following time schedule:

Task	WWTF Modifications	Compliance Date
a.	Complete all proposed modifications proposed in Finding 14.	31 July 2010
b.	Provide engineering certification of completion of WWTF improvements along with certification of final design treatment and disposal capacity of WWTF.	31 January 2011

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All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be (a) prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1; and (b) subject to written Executive Officer Approval. To demonstrate compliance with Title 16, CCR, sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

If, in the opinion of the Executive Officer, the Discharger violates this Order, the Executive Officer may refer the matter to the Attorney General for judicial enforcement or, alternately issue a formal complaint for Administrative Civil Liability.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 31 July 2008.

PAMELA C. CREEDON, Executive Officer

WDH: dab 9/16/08