

**Regional Water Quality Control Board
Central Valley Region
Board Meeting – 31 July/1 August 2008**

**Response to Written Comments on Tentative Waste Discharge Requirements for
California Dairies, Inc., Tipton Milk Processing Facility, Tulare County**

At a public hearing scheduled for 31 July/1 August 2008, the Regional Water Quality Control Board, Central Valley Region (Regional Water Board) will consider adoption of Waste Discharge Requirements (NPDES No. CA0082805) (hereafter Permit) and a Cease and Desist Order for the California Dairies, Inc. (Discharger), Tipton Milk Processing Facility (Facility). The proposed documents were circulated for public comment on 23 May 2008. Written comments from interested parties were required to be received by the Regional Water Board by noon on 23 June 2008 in order to receive full consideration. Only the Discharger commented.

Written comments from the Discharger are summarized below, followed by the staff responses.

CALIFORNIA DAIRIES, INC. (CDI) COMMENTS

CDI – COMMENTS 1 and 2: In comments 1 and 2, CDI questions the characterization in the tentative Permit of Morrison Ditch and the Casa Blanca Canal as waters of the U.S. and also asks that the limits based on the beneficial uses of municipal and domestic supply (MUN), water contact recreation (REC-1), and warm freshwater habitat (WARM) be revised and/or deleted. CDI indicates that the direct use of water in the Morrison Ditch and the Casa Blanca Canal for MUN is unlikely as flows are intermittent and there are no communities downstream. CDI states that the only current beneficial uses of the water in Morrison Ditch and the Casa Blanca Canal are agricultural supply (AGR) and groundwater recharge (GWR). CDI also states that WARM only occurs incidental to the ditch/canal's primary function of supplying water for AGR. CDI acknowledges that Morrison Ditch and the Casa Blanca Canal are part of the Lower Tule River Irrigation District (District) distribution system, which is hydraulically connected to the Tule River, a water of the U.S. CDI states that the connection is very rarely used and offers to forgo discharging to the District system during times the connection is active

RESPONSE: The District system is hydraulically connected to the Tule River, a water of the U.S. Because of this connection, the District system is by definition a water of the U.S. (See *Talent Irrigation District v Headwaters, Inc.*) The District system is also a water of the State pursuant to California Water Code Section 13050. Discharges of pollutants to waters of the U.S. require authorization under an NPDES permit and NPDES permit requirements must be consistent with the federal Clean Water Act, resulting federal regulations, and the requirements of the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, Revised January 2004* (Basin Plan).

Findings in the tentative Permit note that the Basin Plan incorporates State Water Board Resolution No. 88-63, which requires that all surface waters be considered suitable or potentially suitable for MUN. This notwithstanding, none of the requirements for discharge to Morrison Ditch are based on MUN as the discharge was not found to exceed applicable MUN criteria.

Findings in the tentative Permit also explain that because the waters in Morrison Ditch and the Casa Blanca Canal are waters of the U.S., they must be maintained to meet the federal CWA threshold of fishable (WARM) and swimmable (REC-1). Also, Regional Water Board staff has observed evidence of WARM in Morrison Ditch and Casa Blanca Canal (fresh water clam shells, etc.). CDI notes that WARM exists incidental to AGR. The Regional Water Board is required to protect existing uses of both waters of the State and the U.S.; thus, even if Morrison Ditch and the Casa Blanca Canal were not waters of the U.S., the Regional Water Board would still be obligated to protect the existing WARM use of these waters of the State.

Given the above characterization of Morrison Ditch and the Casa Blanca Canal as waters of the U.S., the assigned beneficial uses, and the concomitant Permit requirements (i.e., effluent limits for zinc, ammonia, toxicity, etc.), remain unchanged.

CDI - COMMENT - 3: CDI states that footnotes in Table 6 are incomplete and there is a formatting error in the related section numbering.

RESPONSE: Table 6 and the applicable section numbering have been corrected.

CDI - COMMENT - 4: CDI asks that boron and chloride be regulated at only one discharge point, Discharge Point 001, the discharge to Morrison Ditch.

RESPONSE: Effluent limitations and monitoring for chloride and boron at Discharge Point 001, the discharge to Morrison Ditch, are necessary to determine compliance with Basin Plan objectives for protection of surface water. Limitations and monitoring for chloride and boron at Discharge Point 002, the discharge to unlined storage ponds, are necessary to determine compliance with Basin Plan objectives for discharges to land for protection of the underlying groundwater. Thus, limitations and monitoring are necessary at both locations. The monitoring frequency at Discharge Point 002 for boron and chloride is monthly. The monitoring frequency at Discharge Point 001 for boron and chloride is quarterly **when discharge occurs in the quarter**. The additional monitoring required is minimal. No changes have been made.

CDI - COMMENT - 5: CDI requests that Total Suspended Solids (TSS) be regulated at Discharge Point 002, the discharge to the unlined storage ponds, instead of at Discharge Point 001, the discharge to the canal. CDI is concerned that algae that grows in the ponds may result in violations of TSS limits at Discharge Point 001.

RESPONSE: The TSS limitations in the tentative Permit are technology based limits. Compliance can be determined anywhere downstream of treatment provided the final discharge does not cause violations of water quality objectives and impairment of beneficial uses. Moving the compliance point as requested will not cause violations of applicable water quality objectives or impairment of beneficial uses. The requested change of the compliance point and monitoring location for TSS has been changed to Discharge Point 002.

CDI - COMMENT - 6: CDI requests that the upper pH limitation for discharge to the canal at Discharge Point 001 be changed from 8.3 to 9.0.

RESPONSE: The limitation is based on the Basin Plan water quality objective for pH. As the discharge is at times the only flow in Morrison Ditch and the Casa Blanca Canal, the pH limit has been set to ensure that the discharge does not cause an exceedance of this objective. No change has been made. Consideration of a different limit may be given in the next permit cycle if CDI provides a study showing that a higher limit would be consistent with the requirements of the Basin Plan.

CDI - COMMENT - 7: CDI requests that electrical conductivity (EC) be regulated at only one discharge point, Discharge Point 002, the discharge to the unlined storage pond.

RESPONSE: Effluent limitations and monitoring for EC at Discharge Point 001, the discharge to Morrison Ditch, are necessary to determine compliance with Basin Plan objectives for protection of surface water. Limitations and monitoring for EC at Discharge Point 002, the discharge to unlined storage ponds, are necessary to determine compliance with Basin Plan objectives for discharges to land for protection of the underlying groundwater. Therefore, limitations and monitoring are necessary at both locations. The monitoring frequency at Discharge Point 002 for EC is weekly. The monitoring frequency at Discharge Point 001 for EC is weekly only **when discharge occurs in the week**. The additional monitoring required is minimal. No changes have been made.

CDI - COMMENT - 8: CDI requests deletion of effluent limitations and monitoring for Total Coliform Organism (TCO), as the Facility does not treat domestic sewage and the Facility does not have disinfection capacity.

RESPONSE: Order No. 94-295 contained a limitation for TCO of 23 MPN/100mL as a 7-day median and 240 MPN/100mL as a daily maximum and required weekly sampling when discharging to Morrison Ditch. CDI has not consistently submitted TCO monitoring results. The TCO limitation is carried over from the previous order WDR No. 94-295 to this Permit. A provision has been added to the Permit to allow CDI to complete a study to determine whether the discharge contains human pathogens and whether the discharge will cause or contribute to an exceedance of the Basin Plan water quality objective for bacteria. If the study demonstrates that the discharge will not endanger public health, will not cause an exceedance of the Basin Plan water quality objective for coliform, and that removal of the limitation will meet federal antibacksliding requirements, then CDI may request that the permit be reopened to reconsider the effluent TCO requirements.

CDI - COMMENT - 9: Based on CDI's assertion in Comment 2 that WARM is not a beneficial use, CDI requests removal of the requirement for acute whole effluent toxicity testing.

RESPONSE: No change has been made regarding the request to remove acute toxicity testing. Toxicity testing is required by the *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) and is necessary to determine compliance with the Basin Plan water quality objective for toxicity. We have made a minor correction to clarify that toxicity testing is required at EFF-001 (Discharge to Morrison Ditch) and not EFF-002.

CDI - COMMENT – 10: CDI requests the Surface Water Limitation for pH be changed to an upper limit of 9.0.

RESPONSE: See response to Comment-6.

CDI - COMMENT – 11: CDI requests that compliance determination for BOD and TSS effluent limitations be based on a grab sample, rather than a 24-hour composite sample.

RESPONSE: Discharges from ponds with long detention times are generally considered to be adequately composited. Thus, the request is reasonable and the change has been made to Section VII.A. of the tentative Permit.

CDI - COMMENT – 12: CDI provided a revised flow diagram for Attachment C.

RESPONSE: Attachment C has been revised.

CDI - COMMENT – 13: CDI requests that for EFF-001, discharge of treated wastewater from unlined ponds to Morrison Ditch, the monitoring sample frequency for chloride, boron, zinc and ammonia be reduced from 1/month to 4/year and the standard minerals monitoring frequency be reduced from 1/month to 1/year.

RESPONSE: Attachment E, Table E-2 has been modified to reflect reduction in sample frequency for chloride and boron from 1/month to 4/year and standard minerals sample frequency has been reduced from 1/month to 4/year as historic sampling data has remained within a consistent range for these constituents and there is consistency in the effluent character from month to month. Sample frequencies for zinc and ammonia have not been changed, as these constituents have new limitations and monitoring is required to provide additional data on effluent characterization and to determine Permit compliance. Monitoring at EFF-001 is only required when CDI is discharging to Morrison Ditch.

CDI - COMMENT – 14: CDI requests that for Discharge Point 002, discharge of treated wastewater to unlined ponds, the monitoring sample frequency for chloride and boron be reduced from 1/month to 4/year.

RESPONSE: Monitoring for these constituents at this location is a new requirement and there is no data to characterize the discharge from the treatment ponds to the storage ponds. A footnote has been added to Table E-4 that allow the frequencies to be reduced after one year upon CDI's request for reduction and demonstration that

sample results are consistent and more frequent monitoring is unnecessary; and the approval of the Executive Officer.

CDI - COMMENT – 15: CDI requests clarification on whether pond monitoring requirements apply to treatment or storage ponds, or both.

RESPONSE: Language has been modified in Attachment E, Table E-1 and Section VI.B., to clarify pond monitoring requirements apply to unlined storage ponds only.

CDI - COMMENT – 16: CDI requests a reduction in receiving water sampling frequency for ammonia from 1/month to 4/year because of the varying duration of irrigation water deliveries by the District. CDI also requests clarification of whether Footnote 4 in Table E-6 refers to monitoring in Table E-2.

RESPONSE: This Permit includes new interim and final effluent limitations for ammonia based on the Basin Plan's narrative toxicity objective. There is limited receiving water ammonia data. CDI may request a reduction in monitoring frequency after a sufficient number of samples have been collected to provide a statistically valid characterization of the receiving water quality. No change has been made to the monitoring frequency. The footnote in Table E-6 has been modified to clarify that receiving water ammonia samples should be taken concurrently with ammonia samples from Discharge Point 001.

CDI - COMMENT – 17: CDI requests the sampling frequencies for groundwater depth, elevation, pH, nitrate, EC and TDS be reduced from 4/year to 2/year, and requests the sampling frequency for groundwater ammonia be reduced from 4/year to 1/year. CDI believes there is sufficient data available from prior monitoring to warrant a reduction in sample frequency.

RESPONSE: Sufficient data has been collected to characterize background groundwater quality and sample results have generally remained in a consistent range over an extended period of time. Reduction in the sampling frequencies is warranted, and the requested changes have been made.

CDI - COMMENT – 18: CDI provided updated information for Attachment F, Section II.B., regarding the set points for diversion of high strength wastewater to the Mechanical Vapor Recompression wastewater evaporator and the average flow number.

RESPONSE: The requested changes have been made.

CDI - COMMENT – 19: CDI provided corrected information in Attachment F, II.B. regarding the pond liners and pond detention time.

RESPONSE: The requested changes have been made.

CDI - COMMENT – 20: CDI identified a typographical error in the information in Table F-3 regarding the maximum daily flow.

RESPONSE: The error has been corrected.

CDI - COMMENT – 21: CDI summarizes the measures it has implemented to reduce salinity and requests that the EC limitation be increased from 500 umhos/cm over background source water to 1000 umhos/cm. CDI also clarifies that it plans to use well water for blending of the effluent to meet the stated requirements.

RESPONSE: No change has been made to the EC limitation. The limitation is required by the Basin Plan. The Permit allows use of blending of wastewater with water from other sources to meet effluent EC limitation provided CDI complies with Provision VI.C.2.e. Monitoring requirements for dilution are included in Attachment E, Section IX.B.

CDI - COMMENT – 22: CDI objects to the statement in Attachment F, V.B.3. that discharge to unlined storage ponds has degraded the quality of underlying groundwater, as downgradient sampling has shown improvement in some constituents.

RESPONSE: Based on sample results submitted to date, some groundwater degradation has occurred. The tentative Permit requires CDI to conduct a study to provide information necessary to determine appropriate final groundwater limitations to protect beneficial uses of the underlying groundwater. The extent of groundwater degradation and appropriate limitations will be determined when the study is completed. No changes have been made.

CDI - COMMENT – 23: CDI noted that Attachment G, the Reasonable Potential Analysis summary, was not included in the TWDRs.

RESPONSE: Attachment G has been attached.

CDI - COMMENT – 24: CDI requests clarification on how compliance will be determined prior to completion of proposed facility improvements.

RESPONSE: CDI will be expected to comply with the requirements of the tentative Permit once adopted at the various compliance points therein. The accompanying Cease and Desist Order (CDO) puts CDI on a schedule to complete proposed and required improvements. As noted in the CDO, Order Paragraph No. 1, the CDO does not stay any requirement of the Permit. We have revised CDO, Order Paragraph Nos. 2 and 4, to make this clearer.