



California Natural Resources Agency  
**DEPARTMENT OF FISH AND GAME**

**ARNOLD SCHWARZENEGGER, Governor**  
**DONALD KOCH, Director**



<http://www.dfg.ca.gov>

Central Region  
1234 East Shaw Avenue  
Fresno, California 93710  
(559) 243-4005

April 6, 2009

Polly Lowry  
Regional Water Quality Control Board  
11020 Sun Center Drive, #200  
Rancho Cordova, California 95670-6114

**Subject: Waste Discharge Requirements (WDR) General Order No. R5-2007-0035 for Existing Milk Cow Dairies and Notice Tentative Order Amending Order No. R5-2007-0035 Waste Discharge Requirements General Order For Existing Milk Cow Dairies**

Dear Ms. Lowry:

The California Department of Fish and Game (Department) has reviewed the above documents:

1. Waste Discharge Requirements General Order No. R5-2007-0035 (General Order) for Existing Milk Cow Dairies, and
2. Notice Tentative Order Amending Order No. R5-2007-0035 Waste Discharge Requirements General Order for Existing Milk Cow Dairies

The proposed amendment will change the due date for the retrofitting plan and schedule of the Waste Management Plan (WMP) from July 1, 2009 to July 1, 2010. This includes retrofitting needed to improve storage capacity, flood protection, production area design, construction and documentations that there will be no cross connections that would allow the flow of wastewater into a water supply well, irrigation well or surface water. The due date for the report on the status of modifications to implement the WMP will change from July 1, 2010 to December 31, 2010. The Department does not concur with these delays.

The General Order was adopted on May 30, 2007. As stated in Attachment B, WMP for the Production Area for Existing Milk Cow Dairies, "The purpose of the WMP is to ensure that the production area of the dairy facility is designed, constructed, operated and maintained so that the dairy wastes generated at the dairy are managed in compliance with Waste Discharge Requirements General Order No. R5-2007-0035 in order to prevent adverse impacts to groundwater and surface water quality."

*Conserving California's Wildlife Since 1870*

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When the WDR were issued, dairy prices were at their peak. Almost two years have passed since the General Order's adoption; the WMP's purpose is yet to be adapted. The proposed amendment may not change the July 1, 2011 due date, when all improvements must be implemented, but this leaves the inception of retrofitting and facility improvements with just a year to complete. Thus, this could set up another request to delay implementation well beyond July 1, 2011. Because of the high numbers of dairy operations in the San Joaquin Valley, the Department has concerns about the potential for existing dairies to substantially affect wildlife and fisheries resources on adjacent, nearby, and distant lands and waters.

Dairy wastes contain nitrates and phosphorus. When too many nutrients enter the waterways, it contributes to the rapid growth of algae and other aquatic plants that consume much of the oxygen in the water. Overgrowth of aquatic plants can clog water intake pipes and filters and interfere with recreational activities, such as fishing, boating and swimming. The decay of aquatic plants can cause serious taste and odor problems in drinking water. Released pollutants increase Biological Oxygen Demand (BOD), increase nutrient loading that can result in algal blooms and decrease dissolved oxygen (DO). Algal blooms result in increased algal toxin production, decreased DO and have caused fish and waterbird die-offs the past few years in the San Joaquin Valley.

High concentrations of ammonia, increased salinity, and nutrient loading are three major concerns the Department has in relation to dairy waste discharges into waters of the state. Nutrient loading from the San Joaquin River watershed has been identified as one of the many causes of increased oxygen demand, thereby resulting in low DO to support aquatic life.

Dairy waste is generally high in salts. In our experience, most illegal discharges from dairies occur during the winter months. Frequently, these occur during high rainfall and run-off which results in dairy lagoon overflow. Most water quality issues arise because the dairy operators lack the storage capacity to store waste, especially during the rain and run-off season. The result is manure contaminated storm water from the lagoons, corrals and irrigated cropland areas flow overland and in waters of the State. Thus, we believe dairy waste discharges, at least during the winter months, is a contributing factor to salt loading into the San Joaquin River Watershed.

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If you have any questions regarding these comments, please contact Rachel McNeal, Environmental Scientist, at the address on this letterhead or by phone at (559) 243-4014, extension 256.

Sincerely,



Jeffrey R. Single, Ph.D.  
Regional Manager

cc: Department of Fish and Game  
Water Branch