

STAFF REPORT

CONSIDERATION OF ADOPTION OF GENERAL WASTE DISCHARGE REQUIREMENTS AND GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

FOR EXISTING MILK COW DAIRY CONCENTRATED ANIMAL FEEDING OPERATIONS WITHIN THE CENTRAL VALLEY REGION

BACKGROUND

There are currently approximately 1440 existing milk cow dairies in the Central Valley. While a small number of these facilities are regulated under individual Waste Discharge Requirements, the majority are regulated under Waste Discharge Requirements General Order for Existing Milk Cow Dairies, Order No. R5-2007-0035 (General Order). The General Order, adopted by the Central Valley Water Board on 3 May 2007 required dairies to submit information on their nutrient management and waste management practices according to a schedule, with all submittals and implementation to be complete by July 2012. The General Order does not serve as a federal NPDES permit, and thus derives its authority solely from state law.

THE FEDERAL CAFO PROGRAM

The United States Environmental Protection Agency (EPA) has issued regulations on surface water discharges from concentrated animal feeding operations (CAFOs), using its authority under the federal Clean Water Act. CAFOs include all types of animal feeding operations, provided that the operations meeting specific requirements based on the number and type of animals, and the operation of the animal facility.

In general, EPA defines an animal feeding operation (AFO) as a lot or facility where animals have been, are, or will be stabled or confined and fed or maintained for a total of forty-five days or more in any 12-month period and where the animals are fed by means other than grazing. A concentrated animal feeding operation, or CAFO, is a type of AFO. For mature dairy cattle, CAFOs are divided into large, medium, and small. A large CAFO is defined as an AFO with 700 or more mature dairy cattle. A medium CAFO is defined as an AFO with 200 to 699 mature dairy cattle and which discharges pollutants into waters of the United States. A small AFO (less than 199 mature dairy cattle) can be designated as a CAFO if certain conditions relating to the discharge of pollutants to waters of the United States and facility operation are met.

Under the federal CAFO program, owners and operators (“Dischargers”) of dairies are required to apply for and receive an NPDES permit if the dairy is a Large CAFO and discharges or proposes to discharge pollutants to waters of the United States. A dairy “proposes to discharge” if it is designed, constructed,

operated, or maintained such that discharge will occur. Dairies defined as medium CAFOs or designated as small CAFOs must also apply for and receive a permit under the NPDES program.

The Central Valley Water Board administers the federal NPDES program in the Central Valley. The most recent revisions to the federal NPDES CAFO Rule became effective in November 2008. This Order will serve as an NPDES permit for those existing milk cow dairies that are classified as CAFOs within the jurisdiction of the Central Valley Water Board.

HOW DOES THIS ORDER COMPARE TO THE GENERAL ORDER?

The General Order, while intended to be compatible with the United States Environmental Protection Agency's NPDES regulations for concentrated animal feeding operations, is not an NPDES permit. This CAFO Order is written to follow the format of the General Order as closely as feasible, while incorporating language and requirements of the Federal CAFO Rule. There are, however, some significant differences:

1. The General Order regulates all dairies of whatever size. This CAFO Order only regulates dairies that meet the definition of CAFO, including the condition that they discharge or propose to discharge to waters of the United States.
2. The General Order requires submittal of Waste Management Plans and Annual Reports, and requires that Nutrient Management Plans be available for review at dairies. Also, all dairies which filed a Report of Waste Discharge by 17 October 2005 and which have not increased their herd size above 15% are automatically covered under the General Order. This CAFO Order requires CAFOs that "discharge or propose to discharge" to file a Notice of Intent, a Waste Management Plan, and a Nutrient Management Plan. Those three documents, together with a Site-Specific Order containing conditions derived from those documents, will be posted for a 30 day review period prior to Board consideration of adoption of the Site-Specific Order for that dairy at a regular Board meeting.
3. Under the General Order, the only off-property discharges that are allowed are tailwater and storm water runoff from fields managed in accordance with a Nutrient Management Plan designed to limit the discharge of any pollutants. No discharges from the production area (where the barns, lagoons, and manure/feed storage areas are located) are allowed. Under this CAFO Order, discharges from the production area are allowed under certain extreme rainfall conditions, and the bypass and upset provisions of the NPDES program authorize discharges under certain limited circumstances.
4. The Monitoring and Reporting Program of the General Order has been modified to include some additional monitoring and sampling to meet the information requirements of the Federal CAFO program.

5. While the General Order uses a phased implementation for its requirements, Dischargers applying for this CAFO Order must have completely implemented their Nutrient Management Plan and made any improvements identified in their Waste Management Plan before their Site-Specific Order is approved by the Board.

HOW DOES THIS ORDER COMPARE TO THE FEDERAL CAFO RULE?

This Order differs from the Federal CAFO Rule in several ways:

1. This Order only covers existing milk cow dairies. Other types of CAFOs, such as feedlots, poultry facilities, and heifer/calf operations, will be regulated under permits to be written in the future. Since dairies are the most common type of CAFO in the Central Valley, staff developed the NPDES permit for dairies first.
2. This Order incorporates provisions and requirements designed to be protective of groundwater. The Federal CAFO Rule does not include provisions relative to groundwater because the Clean Water Act does not include groundwater provisions.
3. This Order retains the definition of “existing facility” as defined in the General Order. Dairies that have expanded their herd of mature dairy cows more than 15% since 17 October 2005 are not considered existing facilities and must apply for an individual Order. The Federal CAFO rule defines a “new source” as a dairy that has expanded (buildings) since 12 February 2003. This Order uses the 2005 date because that is the earliest date for which we have a comprehensive inventory of dairy locations and herd sizes.
4. This Order does not provide a process for CAFOs to file a voluntary certification that the dairy facility does not “discharge or propose to discharge”.
5. This Order does not require field specific calculations to evaluate dairy cropland for phosphorus loading. Instead, the Order controls the application of nitrogen to cropland and relies on erosion control measures to minimize phosphorus discharges. The Order also requires direct measurement of phosphorus in storm water and some tailwater discharges to determine if control measures are effective.

COMMENTS RECEIVED ON THIS ORDER

Four comment letters were received on this Order. Comments received from EPA Region 9 pointed out that, to comply with the federal CAFO Rule, phase in of the Nutrient Management Plan or Waste Management Plan implementation should not be allowed, unlike the approach taken in the tentative General Order. Also, EPA Region 9 requested additional justification of the approach taken in the Order relative to phosphorus controls. Language has been modified in the Order to remove the phase in of the NMP and WMP and to require them to be completely implemented at the time of Board adoption of the Site-Specific Order.

Additional language describing the approach to phosphorus control taken in this Order has been added to the Fact Sheet under Section H.

The remaining three comment letters provided a variety of editorial changes, the bulk of which were made to the Order. Several comments requested removal of the prohibition against discharge of tailwater where the last application of manure or wastewater was made within 60 days; the language of that section (Prohibition 16) has been amended to clarify that such tailwater discharges are prohibited unless the discharge is sampled in accordance with the Monitoring and Reporting Program that is part of this Order, the land application area has been managed in accordance with a Nutrient Management Plan that meet the terms of this Order, and turbidity limits set in the Basin Plans and restated in this Order have been met. Several requested removal of the requirement for a rain gauge at the dairy. This requirement was removed when staff determined that the requirement was not specifically required by the federal CAFO Rule and was not necessary to protect water quality.

Many comments were received regarding the requirements of the Monitoring and Reporting Program (Attachment D). While the requirements in this Order are based on the Monitoring and Reporting Program of the General Order, some modifications were made to reflect federal requirements. The specific responses to each comment are provided in the Response to Comments.