



CDQAP - WDR General  
Order Reference Binder  
TAB 11.1, Version 2-29-08

## **NUTRIENT MANAGEMENT PLAN: REQUIRED DOCUMENTS FOR MEETING THE JULY 2008 DEADLINE**

As part of the ongoing, overall water quality requirements, dairy producers must complete the following steps for the Nutrient Management Plan (NMP) **by July 1, 2008**. Most nutrient management sampling **must begin by May 3, 2008**. The NMP is in Attachment C of the General Order (GO).

**Statement of Completion.** The **statement of completion** is a summary form that is submitted to the Central Valley Regional Water Quality Control Board (Regional Board). Signing this form verifies that the dairy operator has taken all of the following steps (A through D below) to develop and maintain information about the land application area; to prepare a sampling and analysis plan; to identify protective setbacks, buffers, or alternative measures; and to identify records that will be kept for the land application area.. The information referred to in the form and below do not need to be submitted, but all records **must be maintained on the dairy for at least five years**, and must be made available to Regional Board staff in the event of an inspection.

**A. Land Application Area Information (GO Attachment C-I A.1 & 2 and I D).** The dairy operator must prepare a detailed map or aerial photo of the area where manure or process wastewater is applied. Information and maps provided should include:

- Assessor's parcel numbers
- Land application area by name or number
- Total acreage of each land application area
- Crops grown and rotation schedule
- Indication as to if the land is owned, rented or leased by the dairy operator
- Types of manure applied - solid manure process wastewater (lagoon water) or both
- Drainage flow direction in each field
- Nearby surface waters
- Tailwater and storm water discharge points and sampling locations
- Subsurface (tile) drainage systems (including discharge points and lateral extent)
- Irrigation supply and groundwater monitoring wells
- Sampling location for discharges of storm water and tailwater to surface water from the field
- Identification of each field under the control of the Discharger and within 5 miles of the dairy where neither process wastewater nor manure is applied-APN, total acreage and indication as to who owns or leases the field.

**B. Sampling and Analysis Methods and Records (GO Attachment C-II).** To complete the NMP the dairy operator must keep on file a written description of how nutrient management testing is conducted. This must include:

- Description of the sampling method including how and where samples are collected, and the method of analysis to be used.
- Frequency of sampling
- Sampling must be done for:
  - Soil
  - Manure
  - Process wastewater (lagoon water)
  - Irrigation water
  - Plant tissue

In addition, records of laboratory analytical results must be kept on file at the dairy. All sampling except soil sampling must begin on or before May 3, 2008. Soil sampling must begin during summer 2008.

**C. Setbacks, Buffers and Other Alternative to Protect Surface Water (GO Attachment C-IV).** Unless special measures are taken, the regulations prohibit manure and process wastewater from being applied closer than 100 feet to sensitive areas, which include:

- Well heads (agricultural or domestic) and open tile drain intakes
- Down gradient surface waters
- Sinkholes or other conduits to surface water

All potential surface waters or conduits to surface water that are within 100 feet of any land application must be identified. For each land application area that is within 100 feet of a surface water or conduit to surface, the setback, vegetated buffer or other alternative practice that will be implemented to protect surface water must be identified. A 35-foot vegetated buffer, physical barrier (such as a berm), or alternative conservation practices/field specific conditions may be substituted for the 100-foot setback if “equivalent or better.” A vegetated buffer may be used for the protection of surface waters but is NOT a suitable protection for well heads, open tile drain intakes, or sinkholes. If a vegetated buffer is used, include a description of how it is maintained.

Note: Setbacks are doubled for drinking water supply wells in a sole-source aquifer. The only sole source aquifer in the Central Valley is the Fresno Sole Source Aquifer. Go to <http://www.epa.gov/region09/water/groundwater/ssa-pdfs/Fresno%20SSA%20map.pdf> to view a map that outlines the boundaries of the Fresno Sole Source Aquifer.

**D. Other record-keeping requirements for the NMP (GO Attachment C-VI).** In addition to the general physical description of the land and cropping patterns, additional information must be recorded and kept on site at the dairy for at least five years, including:

- Expected and actual crop yields
- For each field, identify the crop, acreage, and planting and harvest dates
- Dates, location, approximate weight and moisture content (or volume and density) of solid manure applied to each field
- Dates, location, and volume of process wastewater applied to each field
- Record weather conditions at time of application and for 24 hours prior
- Written description of the process used to determine application rate for solid manure or wastewater
- Calculations showing total nitrogen, phosphorus and potassium to be applied to each field (from all sources) and the amount actually applied.
- Method used for each application (e.g. spreading, flood irrigation, etc.)

**REMINDER: Only the “Statement of Completion” must be submitted to the Regional Water Quality Control Board. Records described in A through E do not need to be submitted, but must be maintained at the dairy for a period of five years and must be made available to a Regional Board inspector presenting proper identification.**

*Information in this document was compiled by CDQAP to assist dairy producers in understanding and complying with the General Order Waste Discharge Requirements for Existing Milk Cow Dairies (Central Valley Regional Water Quality Control Board Order R5-2007-0035). Effort has been made to ensure accuracy, but these summaries are not official regulatory guidance and are not legal advice. Producers are advised that these summaries are not intended to be a substitute for producers reading the complete order and consulting their own legal counsel to ensure compliance with the waste discharge requirements. Should any information here conflict with the General Order and/or official information provided by the Regional Board, Board-provided information takes precedence.*

Technical review provided by: Regional Water Quality Control Board 5 CAFO staff. Financial support was provided wholly or in part by grants received from the California Dairy Research Foundation, and from the SWRCB Grant number 05-095-550-0. The contents of this document do not necessarily reflect the views and policies of the US EPA, SWRCB, or RWQCB, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.