

April 23, 2007

Ms. Polly Lowry  
Sr. Engineering Geologist  
Regional Water Quality Control Board, Central Valley Region  
11020 Sun Center Drive #200  
Rancho Cordova, CA 95670-6114

RE: Comments on the Tentative Waste Discharge Requirements General Order for Existing Milk Cow Dairies (To be discussed at the May 3<sup>rd</sup> & 4<sup>th</sup> Board Meeting).

Ms. Lowry,

Enclosed please find my comments on the updated Waste Discharge Requirements General Order for Existing Milk Cow Dairies, which will be discussed at the Regional Board Meeting on May 3<sup>rd</sup> & 4<sup>th</sup>.

I would like to commend the Regional Board for reviewing all past comments and incorporating some of those comments into the proposed Order.

If you have any questions or comments about my review, please feel free to contact me at either (559) 268-9755 or [betsy@jmlordinc.com](mailto:betsy@jmlordinc.com).

Sincerely,

Betsy K. Gerwig, PE  
Agricultural Engineer

1. Depth Marker: Waste Discharge Req, pg 14, item B.13

There needs to be more clarification on this issue. It is difficult to install a marker for the 25-year, 24-hour storm without another reference point. Is this depth included below the freeboard level or included within the freeboard? By design, the storm volume should be included in the total storage volume of the pond, which measured from below the freeboard level. So it would stand to reason to just have one marker for the freeboard, which should be maintained at all times.

2. Salinity Report: Waste Discharge Req, pg 21, item H.1.e

By what means is a Discharger to identify salt sources and salt production at the dairy. There appears to be no testing requirements for salts. To what extent does a Discharger need to minimize salt production in waste to be considered in compliance? How feasible is it for dairies to reduce salt production in the waste stream? Is this report necessary at this time? Or is record keeping on salt application sufficient to meet this objective?

3. Table 3: Inspections: Monitoring & Reporting Program, pg MRP-2, item A

What is the purpose of taking photographs of the freeboard level each month? Currently, there is no inclusion for a freeboard marker in the Order. The production area inspection should include the freeboard level during the inspection as documented by the Discharger. This should be more than sufficient, especially since Dischargers have to certify all records. Required photographs, without just cause, suggest the Board expects the falsification of records.

4. Table 2: Nutrient Monitoring: Monitoring & Reporting Program, pg MRP-3, item A

Wastewater: What is the need for the field measurement of electrical conductivity (EC)? This data is not used in the application calculations nor appears to be addressed elsewhere in the Order. Why should a Discharger conduct field testing for EC and have to maintain sampling equipment if there is no use for the data? This also applies to water supply wells in the Groundwater Monitoring Program.

Manure: Based on my experience, most laboratories do no test for Ammonium-Nitrogen on manure samples. It is not considered a reliable test. Most suggest testing for Total Nitrogen instead.

When exporting manure offsite, Dischargers should be given the option to test for moisture at time of removal, instead on laboratory testing. It would be more beneficial to the hauler to have this information at time of removal so loads can be adjust to prevent overloading the transport vehicle.

5. Record Keeping: Monitoring & Reporting Program, pg MRP-9&10, item B.j & B.k

These two items request documentation of the same calculations. It is not necessary to duplicate the calculations and results.

6. Annual Report: Monitoring & Reporting Program, pg MRP-12, item C

General Section - Item #4 and Item #7 will be defined in the Nutrient Management Plan. There is no need to recalculate the nutrient production again. If the facility makes changes which affect the nutrient production, this should be addressed in a NMP update. A simple statement of confirmation by the Discharger, about not exceeding the anticipated nutrient application to the fields as defined in the NMP, should meet the intention.

7. Attachment A: Monitoring & Reporting Program

Item A.10 – Is this supposed to be an evaluation of the data or a proposal for an evaluation? The wording is conflicting as to which is the intent.

Item B.1.a – How are Dischargers supposed to identify wells located outside their property? It should not be their responsibility to locate wells on land not under their control. Although, some wells may be identified from a public road; the use and condition of the wells can not be determined from that vantage point.

8. Attachment B: Waste Management Plan

Item II.A.3 – What is the justification for using 1.5 times the normal precipitation when estimating the required storage volume? What advantage is this additional volume when the normal rainfall and the 25-year, 24 hours storm volumes are already included? What source recommends using 1.5 times the normal rainfall for pond design? There should be documentation as to the need for including this additional volume in the design.

9. Attachment C: Nutrient Management Plan

Pg C-2 (1<sup>st</sup> paragraph): “Copies of these assessments shall be maintained for 10 years.” This contradicts the rest of the Order, which states records shall be maintained for 5 years. This statement may be in error. Please review.

Item I.C – Is there a need for a written agreement with third parties and the Tracking Manifest (Attachment D)? The Manifest is supposed to be filled out during each

removal event, thus eliminating the need for a written agreement that could quickly become outdated.

Item I.D – Dischargers should not be required to identify any land holdings that will not be used for waste application by the dairy. This information is not of any value in regards to managing animal waste. At such time, any additional land will be used for waste application; the Discharger should update any necessary documents to include the additional acreage. Otherwise, the Discharger should not have to provide such information.