California Regional Water Quality Control Board

Central Valley Region

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FROM: MATTHEW S. SCROGGINS
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DATE: 7 June 2001

SIGNATURE:

SUBJECT: REVIEW OF PROGRAM ENVIRONMENTAL IMPACT REPORT (PEIR), REVISED DRAFT DAIRY ELEMENT OF THE KINGS COUNTY GENERAL PLAN (SCH #2000111133)

The following comments pertain to the subject document and are arranged by section number in ascending order:

1. SECTION 4.3: WATER RESOURCES; SETTING; WATER QUALITY; SURFACE WATER QUALITY, GENERAL INDUSTRIAL PERMIT (PG. 4.3-8)

   COMMENT:

   A discussion about the General Waste Discharge Requirements for Milk Cow Dairies (Order No. 96-270) does not seem appropriate in this section. The National Pollutant Discharge Elimination System (NPDES) General Permit (Order No. 97-03-DWQ) is a permit adopted by the State Water Resources Control Board and is implemented throughout the state by the storm water unit at each of the nine regional water quality control boards. It is a completely separate permit and may be issued for a facility regardless of whether Order No. 96-270, a conditional waiver, or individual Waste Discharge Requirements have been issued for a dairy.

2. SECTION 4.3: WATER RESOURCES, IMPACTS AND MITIGATION MEASURES, IMPACT 4.3-3 (PG. 4.3-16)

   The second paragraph in this section says, "*Under existing State regulations, confined animal facilities shall be designed and constructed to retain all facility wastewater generated, together with all precipitation on, and drainage through, manured areas during a 25-year, 24-hour storm event. All precipitation and surface drainage outside of manured areas shall be diverted away from manured areas unless it would be fully retained (CCR Title 27, Division 2, Subdivision 1, 22562(a)).*"

COMMENT:

This section should look like the following:

Under existing State regulations, confined animal facilities shall be designed and constructed to retain all facility wastewater generated, together with all precipitation on, and drainage through, manured areas during a 25-year, 24-hour storm event (CCR Title 27, Division 2, Subdivision 1, Chapter 7, Subchapter 2, Section 22562(a)). All precipitation and surface drainage outside of manured areas shall be diverted away from manured areas unless it would be fully retained (CCR Title 27, Division 2, Subdivision 1, Chapter 7, Subchapter 2, Section 22562(b)).

3. SECTION 4.3: WATER RESOURCES, IMPACTS AND MITIGATION MEASURES, IMPACT 4.3-5 (PG. 4.3-20)

COMMENT:

The third paragraph on page 4.3-20 says the same thing as item number two above in this memorandum. The same comment applies.

4. SECTION 4.3: WATER RESOURCES, IMPACTS AND MITIGATION MEASURES, IMPACT 4.3-7 (PG. 4.3-33)

The footnote on the bottom of the page cites Lonnie Wass of our office as saying that the estimated salt uptake rate by crops, depending on the type of crop, is approximately 1,200 pounds/acre/year. The footnote then goes on to conclude that the assimilative capacity of the subsurface would be roughly 1,800 pounds/acre/year given that the recommended maximum salt loading rates are 2,000 pounds/acre/year for single-cropped land and 3,000 pounds/acre/year for double-cropped land.

COMMENT:

The salt loading rates of 2,000 pounds/acre/year for single-cropped land and 3,000 pounds/acre/year for double-cropped land are recommended maximum rates for areas where salts have not already impaired groundwater. The assimilative capacity of the subsurface will vary from site to site and in some situations site-specific conditions may warrant reduced loading rates. It should be noted that these maximum loading rates for salts are based on recommendations made by the University of California in the 1970's. Last year, we requested that the University of California establish a committee of consultants to review these salt loading rates as well as other confined animal facility related water quality issues. A committee has since been formed and a review is currently underway.

5. SECTION 5: CEQA STATUTORY SECTIONS, CUMULATIVE IMPACTS, CUMULATIVE WATER QUALITY IMPACTS (PG. 5-17)

The second paragraph on the page states that the water quality regulations for confined animal facilities are presented in Sections 2510 through 2601 in Title 23, Chapter 15 of the California Code of Regulations.

COMMENT:

The confined animal facility regulations are codified in Title 27, Division 2, Subdivision 1, Chapter 7, Subchapter 2, Article 1, Sections 22560-22565 of the California Code of Regulations. They were promulgated in 1984 under Title 23 and subsequently moved in 1997 to its current location under Title 27.

6. APPENDIX A: OBJECTIVE DE 4.2 (PG. DE-31)

COMMENT:

This objective says that a *"Comprehensive Dairy Process Water Application Plan"* shall be prepared while Appendix J (Pg. J-6) refers to the plan as a *"Comprehensive Dairy Process Water Disposal Plan."* At no time should nutrients be "disposed." Nutrients should only be utilized for beneficial uses and applied at agronomic rates. Therefore, I suggest entitling the plan *"Comprehensive Dairy Process Water Application Plan."*

7. APPENDIX A: TABLE NO. 5, SECTION A

This section indicates that the maximum theoretical herd capacity of the county is 369,383 milk cows (517,136 animal units) and 410,015 head of support stock (324,348 animal units).

COMMENT:

The herd numbers in Table 5 do not match the estimated maximum herd numbers listed in the Summary and Project Description sections of the PEIR (pages 2-2 and 3-6). Pages 2-2 and 3-6 indicate the maximum theoretical herd capacity to be 381,980 milk cows (534,772 animal units) and 423,998 head of support stock (335,409 animal units).

8. APPENDIX B: DEFINITIONS OF TERMS USED IN THE DAIRY ELEMENT (PG. APPENDIX B-2)

Definition number two defines animal units as follows:

Animal Type	AU Factor	Holstein Factor	Equivalent Animal Units
Milk Cow	1.00	1.4	1.40
Dry Cow	0.75	1.4	1.05
Heifers (2 yrs. and older)	0.75	1.4	1.05
Heifers (1yr. to breeding)	0.70	1.4	0.98
Calves (3 mo.-1 yr.)	0.40	1.4	0.56
Baby Calves (less than 3 mo.)	0.25	1.4	0.35

COMMENT:

In order to be consistent with our office and the factors used in Table No. 5 of Appendix A, the above table should look like the following:

Animal Type	AU Factor	Holstein Factor	Equivalent Animal Units
Milk Cow	1.00	1.4	1.40
Dry Cow	0.8	1.4	1.12
Heifers (2 yrs. and older)	0.73	1.4	1.02
Heifers (1yr. to breeding)	0.73	1.4	1.02
Calves (3 mo.-1 yr.)	0.35	1.4	0.49
Baby Calves (less than 3 mo.)	0.21	1.4	0.29