

SECTION V

DAIRY MONITORING PROGRAM

A. Monitoring Component:

This requirement is based on the CEQA requirement set forth in *CEQA Guidelines Section 15097*. CEQA requires that a *mitigation monitoring and reporting program, or plan*, be adopted and carried out to ensure that potential significant adverse effect to the environment and required mitigation measures are monitored to ensure that the operation stays within the limits of the approval. Monitoring that is documented by record keeping is also part of the *USDA/USEPA Strategy*.

This will be accomplished by a tracking program through the Dairy Monitoring Office, a subdivision of the Code Compliance Section of the Kings County Planning Agency. This Office shall operate a program that tracks the accumulated data, analyzes it to determine whether the standards are being met, and makes periodic reports. It will be under the direction of the Director of Planning and Building Inspection (Zoning Administrator), who will be responsible for submitting annual reports to the Planning Commission concerning the implementation of the policies in this Dairy Element of the General Plan. The report shall include at least the following information:

1. The results of the monitoring program.
2. Whether the goals, objectives, and policies are being met.
3. Any failures by operating dairies to report required data, and
4. Whether changes in standards or conditions of approval are necessary.

All records, reports, plans, programs, documentation and other material required as part of the monitoring and reporting requirements shall be maintained on the dairy site, and shall be made available to the personnel of the Kings County Dairy Monitoring Office upon request for review and inspection. The monitoring and reporting requirements are applicable to new dairies approved under this Dairy Element or the portion of a previously existing dairy that is expanded or effected by the expansion.

GOAL DE 6: Establish a Dairy Monitoring Program in the Kings County Dairy Monitoring Office, housed in the Kings County Planning Agency, and implement a monitoring program that both demonstrates the Dairy Element's effectiveness in protecting the environment, and the effectiveness of those mitigation measures for each operating dairy facility Dairy Facility in Kings County regulated by these policies.

Objective DE 6.1: Establish a Dairy Monitoring Program: Develop and implement as part of the monitoring program a method to document the data for all of the dairies as the overall county monitoring program. Individual dairy information will include such data as:

- A. Location of the animal concentrations on dairies,

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- B. "Dairy process water/nutrient use areas" covered by dairy process water use agreements,
- C. Soil characteristics, including types and classification,
- D. Dairy process water and nutrient usage and demand,
- E. Groundwater conditions, including depth, local perched water, etc.,
- F. Crop patterns and production,
- G. Floodplain designation, inundation potential, and incidental flooding,
- H. Other Confined Animal Feeding Operations (CAFOs) within one-quarter (¼) mile,
- I. Urban area development within one (1) mile,
- J. Dust control practices and Fugitive Dust Emissions Control Plan,
- K. Odor control practices as specified in the Odor Management Plan (OMP), and
- L. Manure Treatment Management Plan (MTMP) compliance data and effectiveness.

Policy DE 6.1a: There is hereby established a Dairy Monitoring Office within the Code Compliance Section of the Kings County Planning Agency under the direction of the Director of Planning and Building Inspection. The Dairy Monitoring Office shall:

- A. Track required data from individual dairies to determine that the Dairy Element and Program EIR standards and conditions of approval are being complied with.
- B. Prepare, as needed, specific reports on a case-by-case basis to address problems, and work with dairies to solve any problems and ensure compliance in a timely manner.
- C. Prepare annual written reports and submit them to the Planning Commission on the general results of the monitoring program.

(Mitigation for Impact 4.2-3, 4.3-7)

Policy DE 6.1b: The Dairy Monitoring Office shall include a qualified compliance specialist capable of reviewing the data of the monitoring programs (log book retained on-site) prepared by the dairies subject to the *Dairy Element*. The compliance specialist shall be familiar with air and water quality issues associated with dairy operations. The compliance specialist shall determine whether the practices documented in the log book are consistent with the monitoring and reporting requirements of all of the components of the Technical Report as outlined in Appendix J, and shall provide recommendations to modify the ongoing practices.

(Mitigation for Impact 4.2-3, 4.2-5, 4.2-7, 4.2-8, 4.2-9, 4.2-11, 4.2-13, 4.2-14, 4.2-15)

Objective DE 6.12: Protect the environment through monitoring the individual dairy industry's operational activities so that adjustments in the operation can be made when necessary to comply with the standards.

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Policy DE 6.42a: *Continuous monitoring:* Although the total county capacity of cows in the dairy industry in Kings County can only be estimated in terms of dairy process water, manure, and nutrients generated, the overall industry can be monitored to determine whether the individual operations are being operated within the limits of the standards established by this Element, and whether the theoretical limit of the County has been reached.

If the countywide nutrient management capacity is exceeded then proposed new or expanded dairies will be required to go through the full conditional use permit and individual project environmental assessment process under CEQA.

(Mitigation for Impact 4.3-7)

~~**Policy DE 6.1b:** Establish a Dairy Monitoring Program: Develop a monitoring program methodology to document data for all of the dairies as the overall county monitoring program. Individual dairy information will include the following information:~~

- ~~A. Location of dairy (animal concentration);~~
- ~~B. "Dairy process water/nutrient use areas" covered by dairy process water use agreements;~~
- ~~C. Soil characteristics, including types and classification;~~
- ~~D. Dairy process water and nutrient usage and demand;~~
- ~~E. Groundwater conditions, including depth, local perched water, etc.;~~
- ~~F. Crop patterns and production;~~
- ~~G. Floodplain designation and inundation potential;~~
- ~~H. Other CAFOs within one quarter (1/4) mile;~~
- ~~I. Development within one (1) mile;~~
- ~~J. Other information identified to be relative to the activity;~~
- ~~K. Dust control practices and Fugitive Dust Emissions Control Plan;~~
- ~~L. Odor control practices as specified in the OMP, and~~
- ~~M. Manure Treatment Management Plan (MTMP) compliance data and effectiveness.~~

~~*(Mitigation for Impact 4.2-3, 4.2-5, 4.2-6, 4.2-7, 4.2-11, 4.2-12, 4.2-13, 4.2-14, 4.2-15, 4.3-7)*~~

Policy DE 6.42eb: The Every operator(s) shall be responsible for conducting an annual inspection of the interior and exterior slopes surrounding the manure separation pits and process water lagoons following the rainy season of each year. The inspections shall document the occurrence of any significant erosion (e.g., formation of rills or gullies longer than ten feet and/or deeper than one foot) or any significant slope failures (e.g., soil slips greater than 100 square feet in area). A report of the inspections shall be maintained at the dairy site and made available to the Kings County Dairy Monitoring Office (established under

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Objective DE-7.1 6.1) upon request. The report shall include recommendations and schedule for completing any necessary corrective action.

(Mitigation for Impact 4.1-1, 4.2-5, 4.2-6, 4.7-5)

Policy DE 6.12d: *Minimum standards for dust control monitoring:* The Kings County Dairy Monitoring Office shall establish requirements for monitoring the dust control measures specified under Policy DE 5.1d and e; at a minimum, the requirements shall include:

- A. Performance of periodic visual inspections at dust sources throughout the dairy (i.e., cattle movement at unpaved corrals and all other unpaved or gravel paved areas).
- B. Visual inspections shall be conducted and documented by the dairy operator to determine the effectiveness of dust control measures required under Policy DE 5.1e and presence/absence of breeding of mosquitoes and other vectors due to the implementation of dust control measures.
- C. Visual inspections shall be conducted at the dairy site boundaries and shall be conducted at least on a monthly basis during the dry season (April through October) and once during the remainder of the year. During periods of high winds and dry conditions, weekly inspections shall be conducted, as deemed necessary by the Dairy Monitoring Office.
- D. All visual inspections shall be documented by the dairy operator in logs maintained at the ~~dairy facility~~ Dairy Facility.
- E. Performance of inspection and documentation on the implementation of the Fugitive Dust Emissions Control Plan (FDECP) and BACM control measures required by the most recently adopted SJVUAPCD Regulation VIII by the dairy operator at the dairy shall be done no less frequently than monthly.

(Mitigation for Impact 4.2-3, 4.2-8, 4.2-9, 4.2-11)

Policy DE 6.12e: *Minimum standards for Odor Management Plan (OMP) and MTMP monitoring:* The Dairy Monitoring Office shall establish requirements for monitoring the implementation of the OMP ~~and MTMP~~ specified under Policies DE 5.1b, ~~and DE 5.1e~~; at At a minimum, the requirements shall include:

- A. ~~Periodically~~ The dairy operator shall conduct quality assurance/quality control on the implementation of the MTMP and the standard operating procedures described in the OMP.

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- B. Quality assurance/quality control shall be conducted and documented by the dairy operator in a manner that will determine whether the implementation of the ~~MTMP~~ and specified standard operating procedures indicated in the OMP are effectively reducing or controlling odors generated from livestock handling, manure collection, treatment, storage, and land application.
- C. Quality assurance/quality control shall be conducted ~~at least on a weekly basis during conditions~~ by the dairy operator when the potential for odor release/migration is high (e.g., high temperature) and on a monthly basis during the remainder of the year.
- D. The results of all quality assurance/quality control shall be documented by the dairy operator in logs maintained at the ~~dairy facility~~ Dairy Facility.
(Mitigation for Impact 4.2-3, 4.2-6, 4.2-7, 4.2-8, 4.2-9, 4.2-11, 4.2-12, 4.2-13, 4.2-14, 4.2-15)

Policy DE 6.12fe: *Minimum standards for MTMP monitoring:* The Dairy Monitoring Office shall establish requirements for monitoring the implementation of the MTMP specified under Policy DE ~~6.1b.M~~ 5.1c.; ~~at~~ At a minimum, the requirements shall include:

- A. Maintain ~~daily~~ logs of the selected treatment technology(ies) operations. The logs shall identify general process operations, problems encountered from manure management, actions taken to resolve problems, and modifications made to the treatment process during the course of operation.
- B. ~~The daily logs shall be kept on-site at all times and shall be made available to the Kings County Dairy Monitoring Office upon request.~~ Volatile solids reduction for advanced manure treatment systems shall be demonstrated through collection and analysis of volatile solids content in representative samples of influent (untreated manure) and effluent (treated manure). Samples shall be collected on a quarterly basis for the first two years of the system operation and annually thereafter. Documentation of testing results shall be maintained at the Dairy Facility and made available to the Dairy Monitoring personnel upon their request.
- D. In the event that feasible and available standard testing methods are developed and required by the SJVUAPCD for ~~estimating~~ determining Reactive Organic Gases (ROG), Nitrous Oxides (NOx), hydrogen sulfide, ammonia, and methane emissions from the treatment process ~~become available~~, the dairy operator/owner shall implement these methods and provide results to the Kings County Dairy Monitoring Office. Dairy operators/owners shall coordinate with the Kings County Dairy

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Monitoring Office to determine the frequency of testing and the testing source points within the dairy operation.

- D. The results of all quality assurance/quality control shall be documented by the dairy operator in logs maintained at the Dairy Facility.
(Mitigation for Impact 4.2-5, 4.2-6, 4.2-7, 4.2-9, 4.2-12, 4.2-13, 4.2-14, 4.2-15)

Policy DE 6.1g: ~~Minimum standards for Livestock Management Plan (LMP) monitoring: The Dairy Monitoring Office shall establish requirements for monitoring the implementation of the LMP specified under Policy DE 5.1f; at a minimum, the requirements shall include:~~

- A. ~~Maintain a log of the following:~~
- ~~1) Practices being implemented to control disease and maintain herd health, such as use of appropriate antibiotics, vaccines, and other health maintenance products (e.g., regular deworming);~~
 - ~~2) Management practices for sick and new animals (e.g., quarantine and treat sick and new animals immediately);~~
 - ~~3) Feed quality and nutritional levels, feed intake levels, feed schedule;~~
 - ~~4) Herd nutrition including adding molasses, sugar beet pulp, grape pomace, brewery waste, and distillers grains into the feed; and~~
 - ~~5) Methods for selecting cattle.~~
- B. ~~Maintain a health and medication record keeping system of all cattle;~~
- C. ~~The logs shall be kept on site at all times and shall be made available to the Dairy Monitoring Office upon request.~~

(Mitigation for Impact 4.2-9, 4.2-13)

Policy DE 6.12hf: *Minimum standards for water quality monitoring program:* ~~The Dairy Monitoring Office shall establish requirements for the water quality monitoring program, and at minimum the requirements shall include: Water quality monitoring shall comply with the minimum requirements set forth below, and with any requirements and orders of the RWQCB.~~

- A. ~~Installation of groundwater monitoring wells at each dairy adequate to characterize the variations in depth to uppermost groundwater across the site and chemical quality of the uppermost groundwater zone. If non-continuous perched groundwater zones underlie the site, deeper aquifers may require monitoring. When appropriate and as determined by the County, vadose/Vadose zone monitoring using lysimeters shall be required to monitor the quality of soil water, particularly in the vicinity of the lagoons when appropriate. The design and installation of water quality-monitoring wells system shall be conducted by preformed under~~

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the direction of a Registered Geologist or a Professional Engineer in accordance with California Well Standards.

- B. Groundwater and soil water samples shall be analyzed, at minimum, for TDS, electrical conductivity, general mineral content, Nitrogen as nitrate and nitrite, phosphorus, and coliform or other appropriate indicator of biological contamination. This list of constituents to be analyzed may be modified at the request of the RWQCB. All samples should be analyzed by a State-certified analytical laboratory.
- C. Sampling of all wells and lysimeters shall be conducted, ~~at a minimum,~~ prior to dairy operation to establish background levels and thereafter on an annual basis. In addition, the depth to water in each well shall be measured to within an accuracy of 0.1 foot twice each year, once in the spring and once in the fall.
- D. Reporting requirements shall be according to the RWQCB and Policy 7.2d DE 6.4d, below.

(Mitigation for Impact 4.3-7, 4.3-7, 4.3-9)

Policy DE 6.2g: The logs shall be kept on-site at all times and shall be made available to the Kings County Dairy Monitoring Office upon request.

Objective DE 6.23: Implement a continuous monitoring program for each ~~operating~~ dairy regulated by these policies so that adjustments in the operation can be made when necessary.

Policy DE 6.23a: *Continuous Testing Program:* Each new or expanded dairy will be required to conduct annual tests ~~results~~ required by Goal 6 of the Dairy Element to demonstrate that the facility is still operating within its approved parameters. ~~If those parameters are exceeded, the operator will be required to either reduce the herd size or make other changes to balance nutrient management. Either will trigger a review of the facility's zoning permit. Testing requirements will be developed as part of the facility's monitoring program approved as part of the facility's zoning permit.~~ The test results shall be kept on the dairy site and shall be made available to the Dairy Monitoring Office personnel upon request. If those parameters are exceeded, the operator must make changes to bring the dairy into conformance with the requirements of the Dairy Element. If the changes in operation cannot or do not correct the problem, the County may modify or revoke the facility zoning permit.

(Mitigation for Impact 4.2-3, 4.2-6, 4.2-8, 4.2-9, 4.2-12, 4.2-13, 4.2-14, 4.2-15, 4.3-7)

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Objective DE 6.4: Establish a formal and effective process to evaluate and respond to public complaints regarding nuisances or conditions of approval violations at specific dairy operations to be managed by the Dairy Monitoring Office.

Policy DE 6.4a: All public complaints regarding dairy operations and facilities shall be recorded with the Dairy Monitoring Office. It is the responsibility of that office to authenticate the conditions cited in the complaint through inspection of the subject dairy. As necessary, the Dairy Monitoring Office shall rely on the expertise of other County Departments to verify the basis and severity of a complaint and establish appropriate corrective action. Timely performance of necessary corrective action shall be required of dairy operators and verified by the Dairy Monitoring Office.

(Mitigation for Impact 4.2-5, 4.5-4, 4.6-2)

Policy DE 6.4b: All dairy operators shall be required to provide the name of and contact information for the person responsible for responding to complaints regarding each dairy under their control.

(Mitigation for Impact 4.2-5)

Policy DE 6.4c: The Dairy Monitoring Office shall notify dairy operators of complaints and provide the opportunity to participate in the development of corrective action, if required.

(Mitigation for Impact 4.2-5, 4.5-4, 4.6-2)

Policy DE 6.4d: Each dairy operator shall retain a qualified professional (i.e., Professional Engineer or Certified Hydrogeologist) to compile and evaluate the water quality data required by Policy DE 6.2f. The Dairy Monitoring Office shall review the data to determine whether violations have occurred, or if corrective action is required. When considering response action for identified violations, the County shall consult with the RWQCB.

(Mitigation for Impact 4.3-9)

~~If the countywide nutrient management capacity is exceeded then proposed new or expanded dairies will have to go through the full conditional use permit and individual project environmental assessment process under CEQA.~~

~~B. Tracking Program:~~

~~The Dairy Monitoring Office shall track data developed and reported pursuant to the above policies. This Office shall be housed in the Planning Agency, and the Office under the direction of the Director of Planning and Building Inspection (zoning administrator) shall report to the Kings County Planning Commission. The Office shall operate a program that tracks the accumulated data, analyzes it to~~

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Public Hearing Draft - Dairy Element

determine whether the standards are being met, and submit annual reports to the Planning Commission concerning:

1. The results of the monitoring program;
2. Whether the goals, objectives, and policies are being met;
3. Any failures by operating dairies to report required data; and
5. Whether changes in standards or permit conditions are necessary.

All records, reports, plans, programs, documentation and other material required as part of the monitoring and reporting requirements shall be maintained on the dairy site, and shall be made available to the personnel of the Kings County Dairy Monitoring Office upon request for review and inspection.

GOAL DE 7: Establish a Dairy Monitoring Program in the Kings County Dairy Monitoring Office, housed in the Kings County Planning Agency.

Objective DE 7.1: Establish a Dairy System Monitoring Program: Develop and implement as part of the monitoring program a method to document the data for all of the dairies as the overall county monitoring program. Individual dairy information will include such data as:

- A. Location of dairy (animal concentration);
- B. Dairy process water/nutrient use areas covered by dairy process water use agreements;
- C. Soil characteristics, including types and classification;
- D. Water and nutrient usage and demand;
- E. Groundwater characteristics, including depth, local perched water, etc.;
- F. Crop patterns and production;
- G. Floodplain designation and inundation charts;
- H. Other CAFOs in the vicinity;
- I. Development in the vicinity;
- J. Other information specifically required for individual projects to resolve unique issues.

Policy DE 7.1a: Track required data from individual dairies to determine that standards and permit conditions are being met.

(Mitigation for Impact 4.2-3)

Policy DE 7.1b: Prepare, as needed, specific reports on a case by case basis to address problems, and work with dairies to solve any problems in a timely manner.

(Mitigation for Impact 4.2-3, 4.3-7)

Policy DE 7.1c: Prepare annual written reports and submit them to the Planning Commission of the general results of the monitoring program.

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Public Hearing Draft - Dairy Element

(Mitigation for Impact 4.2-3)

~~**Policy DE 7.1d:** The Dairy Monitoring Office shall include a qualified compliance specialist capable of reviewing the data of the monitoring programs (log book retained on site) prepared by the dairies subject to the Dairy Element. The compliance specialist shall be familiar with air and water quality issues associated with dairy operations. The professional shall determine whether the practices documented in the log book are consistent with the LMPs, FDECPs, OMPs, and MTMPs and shall provide recommendations to modify the ongoing practices, if necessary.~~

~~*(Mitigation for Impact 4.2-3, 4.2-5, 4.2-7, 4.2-8, 4.2-9, 4.2-11, 4.2-13, 4.2-14, 4.2-15)*~~

~~**Objective DE 7.2:** Establish a formal and effective process to evaluate and respond to public complaints regarding nuisances or permit violations at specific dairy operations to be managed by the Dairy Monitoring Office.~~

~~**Policy DE 7.2a:** All public complaints regarding dairy operations and facilities shall be recorded with the Dairy Monitoring Office. It is the responsibility of that office to authenticate the conditions cited in the complaint through inspection of the subject dairy. As necessary, the Dairy Monitoring Office shall rely on the expertise of other County Departments to verify the basis and severity of a complaint and establish appropriate corrective action. Timely performance of necessary corrective action shall be required of dairy operators and verified by the Dairy Monitoring Office.~~

~~*(Mitigation for Impact 4.2-5, 4.5-4, 4.6-2)*~~

~~**Policy DE 7.2b:** All dairy operators shall be required to provide the name of and contact information for the person responsible for responding to complaints regarding each dairy under their control.~~

~~*(Mitigation for Impact 4.2-5)*~~

~~**Policy DE 7.2c:** The Dairy Monitoring Office shall notify dairy operators of complaints and provide the opportunity to participate in the development of corrective action, if required.~~

~~*(Mitigation for Impact 4.2-5, 4.5-4, 4.6-2)*~~

~~**Policy DE 7.2d:** The Dairy Monitoring Office shall require each dairy operator to retain a qualified professional (i.e., Professional Engineer or Certified Hydrogeologist) to compile and evaluate the water quality data. Data shall be compared to applicable State water quality objectives to determine whether violations have occurred and mitigation is required. In the evaluation of salinity, which requires data on concentration variation with time, a statistical methodology for determining trends in numerical data, e.g., Mann-Kendall, shall be selected by the County. The first trend~~

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~~analysis shall be conducted for each dairy after five years of data collection, and then each year thereafter. When considering response action for identified violations, the County shall ensure that water quality criteria and Basin Plan objectives used in the evaluation of the site-specific data are appropriate and current and shall consult with the RWQCB to confirm that a violation has occurred and that remedial action is required.~~

(Mitigation for Impact 4.3-9)

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