

# PROPOSED AMENDMENT TO RULE 1127 – EMISSION REDUCTIONS FROM LIVESTOCK WASTE

## SURVEY FORM

Please complete the form as appropriate and indicate information you consider proprietary or confidential with asterisks (\*). Please use additional sheets for additional information.

### GENERAL INFORMATION

AQMD Facility ID  Temporary Facility  Permanent Facility   
*(Will be at this location less than 2 years from survey data)*

Facility (Farm) Name

Location Address

Mailing Address

Contact Person  Title

Phone  Fax  Email

Number of employees on payroll at this facility

### EMISSION CONTROLS CURRENTLY USED

#### 1. Feed and Silage Operations

Feed according to National Research Council guidelines Yes  No

Feed animals high moisture corn or steam-flaked corn Yes  No

Use modified feed to lower nitrogen content to lower odor (i.e., ammonia) Yes  No

Remove spoiled feed from feed lane Once/week  2 - 4 times/week  Other   
*(Frequency)*

Remove spilled feed from feed alleyways Once/2 weeks  Once/week  Other   
*(Frequency)*

Remove uneaten wet feed from feed bunks within 24 hours of a rain event Yes  No

Feed or dispose of rations within 48 hours of grinding and mixing rations Yes  No

Store grain in a weatherproof storage structure from October through May Yes  No

Cover the horizontal surface of silage piles Yes  No

Collect leachate from the silage piles and sent it to a waste treatment system, such as a lagoon Once/24 hours  Once/48 hours  Other   
(Frequency)

Describe alternative mitigation measure(s) not listed above & subject to AQMD approval, if appropriate

Enclose silage in a silage bag system Yes  No

Enclose silage in a weatherproof structure vented to a control device with at least 80% control efficiency Yes  No

Eliminate silage from animal diet Yes  No

**2. Milk Parlor**

Flush or hose milk parlor  
Immediately prior to  Immediately after  During each milking

Describe alternative mitigation measure(s) not listed above & subject to AQMD approval, if appropriate

Enclose and vent the milk parlor to a control device with at least 80% capture and control efficiency Yes  No

**3. Freestall Barns**

Vacuum or scrape freestalls Yes  No

Inspect water pipes and troughs, and repair leaks Once/day  Twice/day  Other   
(Frequency)

Use non-manure-based bedding (rubber mats, almond hulls, sand, or waterbeds) for at least 90% of the bedding material Yes  No

Remove wet manure from individual cow freestall beds  
Once/day  Twice/day  Other   
(Frequency)

Rake, harrow, scrape, or grade bedding  
Twice/week  3 – 4 times/week  Other   
(Frequency)

Use a dry manure handling system (scraping) Yes  No

Have no animals in exercise pens, corrals, or dry lots at any time Yes  No

Flush freestalls more frequently than milking schedule Yes  No

Describe alternative mitigation measure(s) not listed above & subject to AQMD approval, if appropriate

**4. Corrals**

Clean manure 4 times/year  5 - 8 times/year  Other   
(with at least 60 days between cleaning) (Frequency)

Clean corrals between April and July Once  2 - 4 times  Other   
(Frequency)

Clean corrals between October and December Once  2 - 4 times  Other   
(Frequency)

Clean concrete areas to maintain manure depth below 12 inches Yes  No

Manage corrals to maintain manure depth below 12 inches Yes  No

Knockdown fence line manure build-up prior to its exceeding 12 inches Yes  No

Scrape or flush feed aprons in all corrals Once/7days  2 - 4 times/7 days  Other   
(Frequency)

Slope the surface of the pens at least 3% where the space for each animal is 400 ft<sup>2</sup> or less Yes  No

Slope the surface of the pens at least 1.5% where the space for each animal is more than 400 ft<sup>2</sup> Yes  No

Maintain corrals to ensure drainage and prevent water from standing more than 48 hours after a storm Yes  No

Maintain corrals and drylots so that no puddles would remain for more than 48 hours Yes  No

Install floats on the troughs or use another AQMD approved method to ensure no water overflow or spill onto an earthen ground Yes  No

Inspect water pipes and troughs, and repair leaks Once/day  Twice/day  Other   
(Frequency)

Harrow, rake, or scrape pens to maintain a dry surface, unless corrals have been unoccupied in the last 30 days Yes  No

Use lime or similar absorbent in the pens Yes  No

Apply thymol to corral soil Yes  No

Apply eugenol to corral soil Yes  No

Describe alternative mitigation measure(s) not listed above & subject to AQMD approval, if appropriate

Install shade structures Yes  No

House animals in an enclosure vented to a control device with at least 80% control efficiency Yes  No

**5. Solid Manure/Separated Solids Handling**

Cover dry manure piles outside the pens with waterproof covering from October through May Yes  No

Cover dry separated solids outside the pens with waterproof covering from October through May Yes  No

Remove manure from the facility within 72 hours of removal from the pens or corrals Yes  No

Use manure additive to control odor or pH for ammonia emissions Reduction Yes  No

Brand name

Frequency

Describe alternative mitigation measure(s) not listed above & subject to AQMD approval, if appropriate

Compost manure from pens with an aerated static pile vented to a biofilter or other control device with at least 80% control efficiency Yes  No

Store all removed manure in an enclosure vented to control device with at least 80% control efficiency Yes  No

Send at least 51% of animal waste removed from site to a digester with at least 80% control efficiency, within 72 hours of removal from housing Yes  No

**6. Liquid Manure Handling**

Manage the facility such that lagoons only contain waste from the milking parlor and storm water

Yes

No

Use phototrophic lagoons

Yes

No

Use an anaerobic treatment lagoon

Yes

No

Remove solids from the waste system with a solid separator prior to the waste entering the lagoon

Yes

No

Maintain lagoon at a pH between 6.5 and 7.5

Yes

No

Describe alternative mitigation measure(s) not listed above & subject to AQMD approval, if appropriate

Use an aerobic lagoon

Yes

No

Use a mechanically aerated lagoon

Yes

No

Maintain organic loading in the lagoon such that total solid/volatile solid is less than 3.5 mg/L

Yes

No

Use AQMD approved additional non-standard equipment or chemicals (roller, screw presses, chemical coagulants/flocculants) to increase the percent of solid separation

Yes

No

Cover the lagoon or storage pond vented to a control device with at least 80% control efficiency

Yes

No

**7. Land Application of Liquid/Dry Manure**

Land incorporate all manure within 72 hours of removal

Yes

No

Only apply manure that is treated with an anaerobic digester, aerobic lagoon or digester

Yes

No

Allow liquid manure to stand in the fields no more than 24 hours after irrigation and apply liquid manure according to appropriate guidelines

Yes

No

Only apply solid manure with moisture content of less than 50%

Yes

No

Describe alternative mitigation measure(s) not listed above & subject to AQMD approval, if appropriate

**ADDITIONAL INFORMATION**

Please provide your best estimated capital and/or annual maintenance cost for each implemented control measure, if possible

**SUGGESTIONS**

Please describe in details any feasible and cost-effectiveness control measures/equipment that you would suggest for our consideration.

**SEND COMPLETED SURVEY TO:**

Ms. Tuyet-Le Pham  
Air Quality Specialist  
South Coast Air Quality Management District  
21865 Copley Dr.  
Diamond Bar, CA 91765-4182