SACRAMENTO METROPOLITAN



777 12th Street, Ste. 300 Sacramento, CA 95814 Office (279) 207-1122 Fax (279) 207-1144

EmissionInventory@airquality.org

_ ANNUAL REPORT – DAIRY OPERATION (CAF)

(enter year here)

Company Name:	Permit #:
Facility Address:	
Facility Contact:	Facility Contact Title:
Phone Number:	Email:

Instructions:

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• Provide the data requested below.

1. ANIMAL HOUSING INFORMATION

Please provide animal counts for reporting year in the table below:

	Average Number of Animals			Percent of	Maximum Total Number of	
Herd Type	Flushed Freestalls	Scraped Freestalls	Flushed Corrals	Scraped Corral	Corrals That are Shaded	Animals on Any Given Day
Milk Producing						
Dry Bull & Cow						
Heifer (15- 24 mo. old)						
Heifer (7-14 mo. old)						
Heifer (4-6 mo. old)						
calf (under 3 mo. old)						

What percent of corral area is concrete?	% What percent of corral	area is dirt?	%
Percent of dairy cows by type at this facility: Holstein	% Jersey	% Other	%

2. ANIMAL FEED INFORMATION

Please provide silage information for reporting year in the table below:

Silage Information					
Feed Type	# Open Piles	Max Height (ft)	Max Width (ft)	Average Exposed Surface Area, ft ²	
Corn					
Alfalfa					
Wheat					

Average TMR (total mixed ration) feeding area per animal is:	ft ² per head
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Does this facility have an anaerobic treatment lagoon? (Yes/No) _____

Does this facility land apply liquid manure? (Yes/No) _____

Does this facility	y land apply	y solid manure?	(Yes/No)	
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Is any scraped manure sent to a lagoon? (Yes/No) ______

3. MITIGATION MEASURES USED IN REPORTING YEAR FOR EMISSION CONTROL

Please indicate yes or no for each of the listed mitigation measures below.

#	Mitigation Measure	Is the Mitigation Measure Used at this Facility? Yes/No
" 1	Feed according to NRC guidelines	
	Milking Parlor Floor Mitigations	
2	Flush or hose milk parlor immediately prior to, immediately after, or during each milking.	
	Corrals/Pens Mitigations	
3	Inspect water pipes and troughs and repair leaks at least once every 14 days.	
4	Clean manure from corrals at least four times per year with at least 60 days between cleaning, or clean corrals at least once between April and July and at least once between September and December.	
5	Scrape, vacuum, or flush concrete lanes in corrals at least once every day for mature cows and every seven days for support stock, or clean concrete lanes such that the depth of manure does not exceed 12 inches at any point or time.	
6	Implement one of the following: 1) slope the surface of the corrals at least 3% where the available space for each animal is 400 sq ft or less and slope the surface of the corrals at least 1.5% where the available space for each animal is more than 400 sq ft; 2) maintain corrals to ensure proper drainage preventing water from standing more than 48 hrs; 3) harrow, rake, or scrape pens sufficiently to maintain a dry surface.	

#	Mitigation Measure (continue)	Is the Mitigation Measure Used at this Facility? Yes/No
7	Install shade structures such that they are constructed with a light permeable roofing material.	
8	Install all shade structures uphill of any slope in the corral.	
9	Clean manure from under corral shades at least once every 14 days, when weather permits access into corral.	
10	Install shade structure so that the structure has a North/South orientation.	
11	Manage corrals such that the manure depth in the corral does not exceed 12 inches at any time or point, except for in-corral mounding. Manure depth may exceed 12 inches when corrals become inaccessible due to rain events. The manure facility must resume management of the manure depth of 12 inches or lower immediately upon the corral becoming accessible.	
12	Knockdown fence line manure build-up prior to it exceeding a height of 12 inches at any time or point. Manure depth may exceed 12 inches when corrals become inaccessible due to rain events. The facility must resume management of the manure depth of 12 inches or lower immediately upon the corral becoming accessible.	
13	Use lime or similar absorbent material in the corral, according to the manufacturer's recommendation, to minimize moisture in the corrals.	
14	Apply thymol to the corral soil in accordance with the manufacturer's recommendation.	
	Bedding Mitigations	
15	Use non-manure-based bedding and non-separated solids based bedding for at least 90% of the bedding material, by weight, for freestalls (e.g. rubber mats, almond shells, sand, or waterbeds).	
16	For a large dairy only (1,000 milk cows or larger) - Remove manure that is not dry from individual cow freestall beds or rake, harrow, scrape, or grade freestall bedding at least once every 7 days.	
17	For a medium dairy only (500 to 999 milk cows) - Remove manure that is not dry from individual cow freestall beds or rake, harrow, scrape, or grade freestall bedding at least once every 14 days.	
	Lanes Mitigations	
18	Pave feedlanes, where present, for a width of at least 8 feet along the corral side of the feedlane fence for milk and dry cows and at least 6 feet along the corral side of the feedlane for heifers.	
19	Flush, scrape, or vacuum freestall flush lanes immediately prior to or after, or during each milking; or flush or scrape freestall flush lanes at least 3 times per day.	
20	Have no animals in exercise pens or corrals at any time.	

#	Mitigation Measure (continue)	Is the Mitigation Measure Used at this Facility? Yes/No
	Lagoons/Storage Ponds Mitigations	
21	Use phototropic lagoon	
22	Use an anaerobic treatment lagoon designed according to NRCS Guideline No. 359	
23	Remove solids from the waste system with a solid separator system, prior to the waste entering the lagoon.	
24	Maintain lagoon pH between 6.5 and 7.5	
	Liquid Manure Land Application Mitigations	
25	Only apply liquid manure that has been treated with an anaerobic or aerobic treatment lagoon, aerobic lagoon, or digester system	
26	Allow liquid manure to stand in the fields for no more than 24 hours after irrigation.	
27	Apply liquid/slurry manure via injection with drag hose or similar apparatus	
	Solid Manure Storage Mitigations	
28	Within 72 hours of removal from housing, either a) remove dry manure from the facility, or b) cover dry manure outside the housing with a weatherproof covering from October through May, except for times when wind events remove the covering, not to exceed 24 hours per event.	
	Separated Solids Piles Mitigations	
29	Within 72 hours of removal from the drying process, either a) remove separated solids from the facility, or b) cover separated solids outside the housing with a weatherproof covering from October through May, except for times when wind events remove the covering, not to exceed 24 hours per event.	
	Solid Manure Land Application Mitigations	
	Incorporate all solid manure within 72 hours of land application.	
30	Only apply solid manure that has been treated with an anaerobic treatment lagoon, aerobic lagoon or digester system.	
31	Apply no solid manure with a moisture content of more than 50%	
	Corn/Alfalfa/Wheat Silage Mitigations	
32	1. Utilize a sealed feed storage system (e.g. Ag-Bag) for bagged silage, or	
	 2. Cover the surface of silage piles, except for the area where feed is being removed from the pile, with a plastic tarp that is at least 5 mils thick (0.005 inches), multiple plastic tarps with a cumulative thickness of at least 5 mils (0.005 inches), or an oxygen barrier film covered with a UV resistant material within 72 hours of last delivery of material to the pile, and implement one of the following: a) build silage piles such that the average bulk density is at least 44 lb/cu-ft for corn silage and 40 lb/cu ft for other silage turges as measured in ascerdance with Section 	
	7.10 of Rule 4570,	
	b) when creating a silage pile, adjust filling parameters to assure a calculated average bulk density of at least 44 lb/cu-ft for corn silage and at least 40 lb/cu-ft for other silage types, using a spreadsheet approved by the District,	

		Is the Mitigation Measure Used at
#	Mitigation Measure (continue)	this Facility? Yes/No
32 (cont.)	c) harvest silage crop at > or = 65% moisture for corn; and >= 60% moisture for alfalfa/grass and other silage crops; manage silage material delivery such that no more than 6 inches of materials are uncompacted on top of the pile; and incorporate the applicable Theoretical Length of Chop (TLC) and roller opening for the crop being harvested.	
	Implement two of the following:	
	<u>Manage Exposed Silage</u> . a) manage silage piles such that only one silage pile has an uncovered face and the uncovered face has a total exposed surface area of less than 2,150 sq. ft., or b) manage multiple uncovered silage piles such that the total exposed surface area of all silage piles is less than 4,300 sq ft.	
	<u>Maintain Silage Working Face</u> . a) use a shaver/facer to remove silage from the silage pile, or b) maintain a smooth vertical surface on the working face of the silage pile	
	<u>Silage Additive</u> : a) inoculate silage with homolactic acid bacteria in accordance with manufacturer recommendations to achieve a concentration of at least 100,000 colony forming units per gram of wet forage or apply proprionic acid, benzoic acid, sorbic acid, sodium benzoate, or potassium sorbate at a rate specified by the manufacturer to reduce yeast counts when forming silage pile; or b) apply other additives at specified rates that have been demonstrated to reduce alcohol concentrations in silage and/or VOC emissions from silage and have been approved by the District and EPA.	
	TMR Mitigations	
33	Push feed so that it is within 3 feet of feedlane fence within 2 hrs. of putting out the feed or use a feed trough or other feeding structure designed to maintain feed within reach of the cows.	
34	Begin feeding total mixed rations within 2 hrs. of grinding and mixing rations.	
35	Feed steam-flaked, dry rolled, cracked or ground corn or other ground cereal grains.	
36	Remove uneaten wet feed from feed bunks within 24 hrs. after then end of a rain event.	
37	For total mixed rations that contain at least 30% by weight of silage, feed animals total mixed rations that contain at least 45% moisture.	

Any information presented must be true and correct to the best of your knowledge. California Health and Safety Code 42400.3.5 and 42402.4 establish separate criminal and civil penalties for any person who, knowingly and with intent to deceive, falsifies any document required to be kept pursuant to any rule, regulation, permit, or order from the Sacramento Metropolitan Air Quality Management District. By signing below, I certify that all information is true and accurate, and complete to the best of my knowledge and ability.

Name:	Signature:	Date:	