



CDQAP – RB2 Conditional Waiver Reference Binder
 TAB 7.5 May, 2017
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Operation and Maintenance Plan

Dairy Name: _____ **Reporting Year:** _____

Dairy Address: _____

Based on available housing and existing storage capacity and pasture management practices the facility is designed and managed to have _____ milking cows and _____ replacement animals.

Dairy is a certified organic facility (circle one): **YES** **NO**

This document encompasses management practices implemented in the Production area of dairy operations to protect surface waters and water quality.

Facility Operation & Maintenance Checklist

Instructions for completion: Identify all practices currently implemented on your dairy with a v or x mark under column YES. Check N/A if a practice does not apply to your facility. Indicate the frequency these practices are conducted (daily (D), weekly (W), monthly (M), annually (A) or other). Identify any corrective actions taken or planned for practices as appropriate. Indicate a completion date for corrective actions. Attach additional pages to document corrective actions over time. Identify infrastructure improvements (what you plan to do in the production area) to bolster the facility’s ability to contain manure and feed nutrients.

Milk Barn Area

Completed by: _____

	Yes	N/A	O&M Plan Scheduled Frequency	Corrective Action Taken or Planned	Completion Date
Water supply in good condition			D W M A Other:		
Hoses in good condition			D W M A Other:		
Floors in good condition			D W M A Other:		
Floor drains clear, functioning			D W M A Other:		
Flush valves clear and functioning			D W M A Other:		
Curbing/wastewater flow control good			D W M A Other:		
Waste milk collected and contained in liquid storage structure			D W M A Other:		
Other:			D W M A Other:		
Staff trained in milk barn area operation & maintenance					

Feed Storage Area

Completed by: _____

	Yes	N/A	O&M Plan Scheduled Frequency	Corrective Action Taken or Planned	Completion Date
Storage area surface in good condition					
Area draining properly			D W M A Other:		
Diversion control measures in good condition			D W M A Other:		
Run off controls in good condition			D W M A Other:		
Pumps and equipment functioning properly			D W M A Other:		
Pumps and equipment serviced according to recommended schedule			D W M A Other:		
Feed covers in good condition			D W M A Other:		
Silage or other wet commodity leachate collected and contained in liquid storage structure			D W M A Other:		
Spoiled feed disposed of properly			D W M A Other:		
Trash and debris picked up to prevent clogging of runoff collection system			D W M A Other:		
Other:			D W M A Other:		
Staff trained in feed storage area operation & maintenance					

D=Daily; W=Weekly; M=Monthly; A=Annually

Animal Housing Area

Completed by: _____

	Yes	N/A	O&M Plan Scheduled Frequency	Corrective Action Taken or Planned	Completion Date
Roof gutters clear and functioning			D W M A Other:		
Gutters or drainage pipes leaking			D W M A Other:		
Trash & debris cleared from lanes			D W M A Other:		
Flush lanes draining properly			D W M A Other:		
Flush valves clear and functioning			D W M A Other:		
Pumps functioning properly			D W M A Other:		
Pump manufacturer recommended maintenance completed			D W M A Other:		
Location of feed and water troughs, shade, and salt/nutrient blocks away from watercourses			D W M A Other:		
Feed aprons draining properly			D W M A Other:		
Animals fenced or excluded from surface water or perennial streams passing through the confined area			D W M A Other:		
Corrals draining properly			D W M A Other:		
Measures implemented to prevent ponding in corrals			D W M A Other:		
Corrals winterized for rainy season to minimize erosion			D W M A Other:		
Corral runoff collected and store in retention pond			D W M A Other:		

	Yes	N/A	O&M Plan Scheduled Frequency	Corrective Action Taken or Planned	Completion Date
Corral solids removed prior to rainy season (no later than November 30)			D W M A Other:		
Manure removed from corral fence lines			D W M A Other:		
Diversion pipes functioning properly			D W M A Other:		
Berms and ditches in good condition			D W M A Other:		
Run-on/-off controls in good condition			D W M A Other:		
Fences in good condition			D W M A Other:		
Use of bridges, culverts, or armored crossings, fencing, barriers or other control measures to maintain riparian areas in production area			D W M A Other:		
Use of fencing, barriers, vegetative buffers, vegetative cover and/or other control measures to maintain riparian areas in the production area			D W M A Other:		
Bedding stored and used to protect erosion and nutrient runoff from corrals			D W M A Other:		
Other:			D W M A Other:		
Staff trained in animal housing area operation & maintenance					

D=Daily; W=Weekly; M=Monthly; A=Annually

Manure Storage Area

Completed by: _____

	Yes	N/A	O&M Plan Scheduled Frequency	Corrective Action Taken or Planned	Completion Date
Solid manure covers in good condition			D W M A Other:		
Solid manure covers in place			D W M A Other:		
Run-off collection system functioning properly			D W M A Other:		
Standing water in manure storage areas			D W M A Other:		
Recommended equipment maintenance performed			D W M A Other:		
Spare parts for emergency equipment available on-farm			D W M A Other:		
Separator screen clear and functioning properly			D W M A Other:		
Ponds are cleaned out and inspected prior to the rainy season and no later than November 30			D W M A Other:		
Annual clean-out of ponds is done to prevent structural damage of pond(s)			D W M A Other:		
Removal of solids from any lined pond is done to prevent damage to the pond liner			D W M A Other:		
Vegetation management used to stabilize side banks of ponds			D W M A Other:		
Freeboard is managed to maintain structural integrity of retention pond side banks			D W M A Other:		

	Yes	N/A	O&M Plan Scheduled Frequency	Corrective Action Taken or Planned	Completion Date
Burrowing animals prevented from damaging side banks of retention ponds			D W M A Other:		
Nuisance conditions prevented at retention ponds (odors, mosquitoes, flies)			D W M A Other:		
Retention pond storage capacity is maintained to hold winter needed based on anticipated land application opportunities			D W M A Other:		
If storage capacity calculations did not use 1.5 times normal rainfall, a contingency plan exists on farm for wastewater retention and management*			D W M A Other:		
Other:			D W M A Other:		
Staff trained in manure storage area operation & maintenance					

D=Daily; W=Weekly; M=Monthly; A=Annually

*The contingency plan shall include names and numbers for emergency waste haulers and pump rental companies, and alternative waste disposal options, such as nearby waste ponds with adequate capacity or municipal waste treatment facilities willing to accept wastewater in an emergency situation.

Land Application Area

Completed by: _____

	Yes	N/A	O&M Plan Scheduled Frequency	Corrective Action Taken or Planned	Completion Date
Contract hauler applies liquid/slurry manure to my fields			D W M A Other:		
Contract hauler removes manure from dairy			D W M A Other:		
Manifests are maintained onsite for all manure transferred offsite			D W M A Other:		
Liquid manure application equipment in good repair			D W M A Other:		
Liquid manure application equipment calibrated			D W M A Other:		
Recommended flow meter maintenance performed			D W M A Other:		
Solid manure application equipment in good repair			D W M A Other:		
Solid manure application equipment calibrated			D W M A Other:		
Field valves operating properly			D W M A Other:		
Ditches and pipelines free from debris and trash			D W M A Other:		
Spare parts for emergency equipment available on-farm			D W M A Other:		
Other:			D W M A Other:		
Staff trained in land application area operation & maintenance					

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Chemical Area Items

Completed by: _____

Chemicals (cleaning products including soaps/sanitizers/teatdips, equipment/machinery fluids, pesticides, herbicides, fungicides, fertilizers) used at this dairy include:

Product	Volume	Frequency

	Yes	N/A	O&M Plan Scheduled Frequency	Corrective Action Taken or Planned	Completion Date
Chemicals are used according to regulations			D W M A Other:		
Only compounds used in the production area are contained in the lagoon			D W M A Other:		
Any other chemicals used in the production area (including petroleum products) are disposed of according to manufacturer's recommendation			D W M A Other:		
Other:			D W M A Other:		
Staff trained in chemical area item operation & maintenance					

D=Daily; W=Weekly; M=Monthly; A=Annually

Other Operation & Maintenance Items

Completed by: _____

	Yes	N/A	O&M Plan Scheduled Frequency	Corrective Action Taken or Planned	Completion Date
Mortality are handled appropriately (not buried or disposed of in dairy lagoon); maintain invoices			D W M A Other:		
Onsite food processing waste (cheese) managed properly**			D W M A Other:		
Solid and liquid waste from onsite slaughtering managed properly			D W M A Other:		
Unused veterinary products disposed of in sanitary dump			D W M A Other:		
Other:			D W M A Other:		
Staff trained in item operation & maintenance					

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**Note: if cheese waste and/or wastewater is co-mingled with the animal production waste stream (such as onsite cheese-making operations). Such a description must include, at a minimum, an analysis of all waste constituents and concentrations, estimates of daily volumes generated, pollution prevention management measures for such activities, and documentation that the existing waste containment system has the capacity to include such wastes.

University of California
Agriculture and Natural Resources



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FUTURE WATER QUALITY PROJECTS

List identified future potential water quality discharge concerns from the production area. A concern does not indicate that the production area is currently causing a water quality impairment. Consider multiple options for fixing water quality concerns such as implementing new practices, or changing management practices not currently implemented as current maintenance routines. Estimate the approximate cost of each option as well as the amount of time needed to conduct maintenance. Give each project a priority, relative to other potential projects, indicating preferred order implementing the project. Assignment of priority recognizes that the availability of financial and technical assistance determines when work is done. List the steps taken to plan for the project including participation in technical & financial assistance programs (ranch visits, meetings, applications, expected contract dates, etc.). Use additional sheets if needed.

Water Quality Concern		Location (<i>pasture/ field</i>)	Options for Maintenance, Management Changes, or Practice(s) to Implement	Estimate Cost of Each Option	Priority	Implementation Planning
#	Describe					