

## Dairy Potential BACT Requirements and Mitigation Measures

Emission Unit:		<b>Cow Housing</b>
Pollutant	Control Technology/Mitigation Technique	✓
VOC	Concrete freestall and drylot feed lanes and walkways (required)	
	Feed lanes and walkways to be flushed four times a day, scraped four times daily, or vacuumed four times daily (required)	
	Weekly scraping and/or manure removal using a pull type manure harvesting equipment, except during periods of rainy weather (required)	
	Drylots sloped to facilitate runoff and drying in accordance to Title 3. Food and Agriculture, Division 2. Animal Industry of the California Code of Regulations. Section 646.1 (required)	
	Pave feedlane at least 8 feet on the corral side of the fence (required)	
	Freestall enclosure with biogas vented to biofilter with 80% control (technologically feasible)	
PM <sub>10</sub>	Shade Structures on open corrals (required)	
	Weekly scraping and/or manure removal using a pull type manure harvesting equipment in morning hours when moisture in air except during periods of rainy weather (required)	
	Use of water and/or soil stabilizers on the dirt corral surfaces, as necessary to maintain optimum moisture content, such that PM and VOC emissions are minimized. A detailed proposal of this system needs to be provided to the District (technologically feasible)	
	Feeding Young Stock (heifers and calves) Near Dusk (required)	
	Individual Calve Hutches (Calves under three months) (required)	
	Concrete freestall and drylot feed lanes and walkways (required)	
	Drylots controlled by windbreaks – Downwind and upwind shelterbelts must meet the USDA National Research Conservation Services (NRCS) Conservation Practice Standard: Windbreaks/Shelterbelt Establishment - Code 380 (technologically feasible)	
NH <sub>3</sub>	Feed lanes and walkways to be flushed four times a day, scraped four times daily, or vacuumed four times a day (required)	
	Weekly scraping and/or manure removal using a pull type manure harvesting equipment, except during periods of rainy weather (required)	
	Drylots sloped to facilitate runoff and drying in accordance to Title 3. Food and Agriculture, Division 2. Animal Industry of the California Code of Regulations. Section 646.1 (required)	
	Pave feedlane at least 8 feet on the corral side of the fence (required)	

Emission Unit:		<b>Milking Barn</b>	
Pollutant	Control Technology/Mitigation Technique		✓
VOC	Flush/Spray after each batch of milking (required)		
	Enclosure of milk parlor with biogas vented to biofilter with 80% control (technologically feasible)		
NH <sub>3</sub>	Flush/Spray after each batch of milking (required)		

Emission Unit:		<b>Land Application of Liquid and Solid Manure</b>	
Pollutant	Control Technology/Mitigation Technique		✓
VOC	<b>Liquid Manure Handling:</b> Irrigation of crops using liquid and slurry manure from a holding / storage pond (required)		
	<b>Slurry Manure Handling:</b> Liquid injection of manure until the crops become tall enough that damage would occur (optional)		
	<b>Solid Manure Handling:</b> Rapid incorporation of the manure into the soil after land application (required)		
NH <sub>3</sub>	<b>Liquid Manure Handling:</b> Irrigation of crops using liquid and slurry manure from a holding / storage pond (required)		
	<b>Slurry Manure Handling:</b> Liquid injection of manure until the crops become tall enough that damage would occur (only applies to slurry)		
PM <sub>10</sub>	<b>On-field Crop(s) Activities (required):</b> <ol style="list-style-type: none"> <li>1. Minimize passes</li> <li>2. Practice conservation tillage</li> <li>3. Restrict field activity during high wind events (&gt;20 mph)</li> <li>4. Surface roughening of fallow fields</li> <li>5. Track-out prevention</li> </ol>		

Emission Unit:		<b>Liquid Manure Management</b>	
Pollutant	Control Technology/Mitigation Technique		✓
VOC	Aerobic lagoon (aeration) (technologically feasible)		
	Anaerobic digester system with 95% VOC control of captured biogas (IC engine w/catalyst or equivalent) (optional)		
	If not proposing an anaerobic digester, you <b>MUST</b> commit to install one if it is required by the final BACT guideline. If you agree, please check the box		
	Anaerobic Treatment Lagoon designed according to NRCS Guideline (two cell system: Mechanical separator – anaerobic treatment lagoon – Storage Pond – Flush from storage Pond) (required)		
NH <sub>3</sub>	Aerobic lagoon (aeration) (technologically feasible)		

Emission Unit:		<b>Mechanical Separators</b>	
Pollutant	Control Technology/Mitigation Technique		✓
VOC	Dewatering press to reduce moisture content of separated solids (dehydrator or screw press or similar) (required)		
	Weekly removal of separated solids (required)		
NH <sub>3</sub>	Dewatering press to reduce moisture content of separated solids (dehydrator or screw press or similar) (required)		
	Weekly removal of separated solids (required)		

Emission Unit:		<b>Settling basins/Weeping Walls</b>	
Pollutant	Control Technology/Mitigation Technique		✓
VOC	Dry contents in basins within a 2-week period (required)		
	Contents must either be directly incorporated into land or spread in thin layers, harrowed and dried (required)		
NH <sub>3</sub>	Dry contents in basins within a 2-week period (required)		
	Contents must either be directly incorporated into land or spread in thin layers, harrowed and dried (required)		

Emission Unit:		Feed	
Pollutant	Control Technology/Mitigation Technique		✓
VOC	Animals fed in accordance with NRC or other District approved guidelines utilizing routine nutritional analysis for rations (required)		
	Cover or ensile all silage Piles except the face of pile (required)		
	Collect leachate from the silage piles and send it to a waste treatment system such as a lagoon at least once every twenty-four (24) hours (required)		
	Uneaten feed should be re-fed or removed daily to minimize emissions from decomposing feed (required)		
	Silage Face Management (only disturb the required area of face – leave remaining area undisturbed) (required)		
PM <sub>10</sub>	Cover all silage piles (required)		
	All dry grain to be stored in commodity barns (required)		
NH <sub>3</sub>	Animals fed in accordance with NRC or other District approved guidelines utilizing routine nutritional analysis for rations (required)		
	Cover or ensile all silage Piles except the face of the pile (required)		
	Collect leachate from the silage piles and send it to a waste treatment system such as a lagoon at least once every twenty-four (24) hours (required)		
	Uneaten feed should be re-fed or removed daily to minimize emissions from decomposing feed (required)		
	Silage Face Management (only disturb the required area of face – leave remaining area undisturbed) (required)		