

CDFA Alternative Manure Management Program  
 Submissions to Request for Proposals: Consideration of New Management Practices for  
 the Alternative Manure Management Program

**Proposals Received between July 6 and September 4, 2020**

Proposals are listed in the order of receipt. Titles and proposed practices extracted from submissions are intended only to provide a summary and may not be a full representation of the proposal.

<b>Name of Submitting Individual or Entity</b>	<b>Title of Proposal</b>	<b>Practice/Technology Proposed</b>
Morten Toft (BioCover A/S)	Proposal for use of storage acidification for methane gas and ammonia gas emission reduction under AMMP	Use of sulfuric acid to control pH value of manure slurry to reduce GHG and ammonia emissions.
Alexander Amoroso (Plant Nutrition Technologies Inc.)	Biomineral fertilizer	Application of a recycled, nutrient rich soil fertilizer to improve farmland health and carbon sequestration.
Scott Harrison (Figure 8 Environmental)	Flocculation Enhanced High-Rate Solid-Liquid Separation (FEHRSLS)	Use of large fiber removal devices and polymer flocculation in combination with mechanical equipment and solid compression systems to achieve high-rate separation efficiencies of manure slurry.
Mathew Hansen (Vogelsang USA)	Low Emission Slurry Spreading	Low emission slurry spreading allows producers to spread manure on a more regular basis in pastures and have a longer window to spread on arable land. Shallow disc injection, trailing shoe, and dribble bars reduce ammonia volatilization by reducing the exposure to the atmosphere.
Michael Malone (AST)	Static Floating Media Separation as a Tool for Concentrating Liquid Manure Mixtures	It is proposed that floating media filters be used to treat the effluents from the upstream treatment, typically screens, capturing the fine suspended particles that would otherwise contribute to methane and ammonia production in the downstream receiving lagoons.
Jeanne Merrill (California Climate and Agriculture Network)	Improved Grazing Incentives	Different than traditional grazing, prescribed grazing is a conservation method of animal and forage management done for a variety of outcomes, including improved herd and land management that can result in decreased greenhouse gas emissions.

Matias Sjogren (BioFiltro USA, Inc)	Vermifiltration	Vermifiltration is a waste management practice that relies on the use of worms to treat liquid organic wastes. In the process, wastewater is treated onsite making it into a reusable asset and contaminants are converted into a nutritious soil amendment.
Jeremy Vrieling (JOZ USA)	Nitrogen Cracker	The nitrogen cracker is able to work in combination with a separator and extracts ammonia by means of evaporation filtration and condensation by which 80% of the organic nitrogen substance will be turned into mineral nitrogen.
Kerry Doyle (Trident Processes LLC)	Fine Solids Flocculation Separation System	Systems for fine solids flocculation separation use chemical and mechanical processes for the separation of animal manures. Polymers added to the slurry/liquid ag waste stream initiate the separation process by forming flocs of suspended solids material, which subsequently undergoes a mechanical separation process to produce a clarified liquid and concentrated solids.
Karen Schuett (Livestock Water Recycling)	Polymer assisted solid-liquid separation	Polymer assisted solid-liquid separation is used in animal manure systems to achieve a variety of objectives including greenhouse gas reductions, nutrient capture, and clean water recycling. It has been found that the performance of all solid-liquid separation options can be enhanced with the addition of coagulants or flocculants.
Sanjai Parikh et al. (UC Davis, Pacific Biochar, USDA ARS)	Composting with biochar	It is proposed that co-composting animal manure with biochar prior to land application can aid in synergistically tackling many of California's most pressing challenges.
Steve Mahrt (Petaluma Farms)	Manure drying and pelleting systems for poultry manure	Such systems would allow producers to quickly dry manure, preventing the release of methane and nitrogen into the atmosphere, while also creating a viable fertilizer product for use in agriculture.