CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
2022 Alternative Manure Management Program
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#	Project Title	Description*	County	GHG Emission Reduction Over 5 Years ($MTCO_2e$)**	Requested Grant Funds	Matching Funds	Primary Management Practice
1	A & C Vieira Dairy Manure Separator	The A & C Vieira Dairy is proposing to replace an existing separator that is not functioning well with a new separator to reduce the amount of manure going to the lagoons to reduce methane emissions from manure at the dairy.	Yolo	16,060	$ 596,597.00	$ -	Solid Separation, Composting
2	Adamscows Dairy-Compost Bedded Pack Facility	The proposed project is to build a bedded pack compost barn, approximately 125 feet wide and 330 feet long, with an irrigated exercise pasture to replace the current open lot housing. The purpose of the irrigated pasture is to create an exercise area for the herd without the risk of creating Particulate Matter (PM) from bare soil, as well as reduce the manured area that produces runoff to the lagoon that forms methane. An additional benefit of this project is the reclamation of farmland that is currently our feed storage area, and the four corrals to the west of the proposed facility; this would increase our farm-able acres as well as reduce the amount of manured area that drains to the lagoons in the winter, further reducing risk to ground water. Finally, replacing the dry-lot corrals with this new facility and an irrigated exercise pasture, will result in a reduced risk to water quality and reduce GHG by containing all manure in a covered structure, and speeding up the time and distance to feed cows by two hours/day. It will also further reduce GHG through the conversion of carbon dioxide into oxygen by the biological processes of the additional acreage gained by planting the reclaimed farmland. The pack barn will reduce 435 MTCO2e, and the reduction in diesel use results in large ROG, NOx, PM2.5, and Diesel PM reductions. The first 5 years of the project is estimated to save 22,500 gallons of diesel.	Fresno	435	$ 663,372.00	$ -	Compost Bedded Pack Barn
3	Alberto Dairy Manure Separator	This project proposes to significantly upgrade the manure management system at the Alberto Dairy. By redesigning and adding an additional processing pit and sloped screen separator to the existing manure management system which is not currently able to handle and separate all of the flush water from the dairy. This project will significantly increase the amount of manure solids removed from the flush water at the dairy and handle that manure as a solid to reduce the amount of methane formed from manure at the dairy.	Stanislaus	9,151	$ 750,000.00	$ 207,891.00	Solid Separation, Composting
4	Albin Livestock Manure Separation Project for methane reductions	The Albin Livestock LLC dairy proposes to install a new screw press manure separator to minimize the amount of manure stored anaerobically at the dairy and therefore methane emissions from the manure.	Humboldt	514	$ 317,695.00	$ -	Solid Separation, Solid Storage
5	Alexandre Acres Manure Separating System	Our intent is to remove manure solids out of our manure lagoon faster and more efficiently than the very slow process of waiting for a crust to develop and excavate to dry. We would like to install a sand trap pit, manure transfer pump, manure separator, and concrete pad for windrowed composting. This would remove the solids prior to entering into our manure lagoons and remove the need to use an excavator entirely. With a more efficient separating system, we will see a reduction of GHGs and total energy use.	Humboldt County	836	$ 442,800.00	$ 213,000.00	Solid Separation, Composting
6	Autumn Farms and Gardens Foundation, Inc. - Manure Management Program	Program to better manage manure output on the farm and implement alternative methods to processing the manure in order to reduce gas emissions and use in cropland areas post-processing.	California	-12	$ 250,000.00	$ 20,000.00	Conversion from Flush to Scrape, Composting

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7	B6 Dairy Compost Bedded Pack Barn	B6 Dairy proposes to house milk cows in a compost bedded pack barn and handle the manure from the loafing area of the barn by composting it in the barn instead of flushing it to an anaerobic lagoon to reduce methane emissions from manure.	Merced	8,387	$ 750,000.00	$ 60,756.00	Compost Bedded Pack Barn
8	Bartelink Dairy Mechanical Separator Project	Bartelink Dairy is proposing to install a mechanical separator through the AMMP Grant Program as a means to reducing methane emissions on the dairy facility. The dairy is proposing to install a Valmetal dual screen separator with a goal of removing 55% of the solids from the waste stream.	San Joaquin	10,584	$ 741,042.00	$ 173,315.00	Solid Separation, Composting
9	Boersma Dairy Scrape & Compost Project	Funds to be used for the purchase of a self-propelled Manure Vacuum to vacuum front of alleyways & wet areas in dry lot corrals. wet manure would be taken out of dry lots and sprayed/spread on Passive compost windrows and turned with a new Tractor with composter.	Riverside	1,571	$ 675,735.00	$ 36,000.00	Conversion from Flush to Scrape, Composting
10	Chowchilla RNG	The Chowchilla RNG facility represents an exciting opportunity to produce large volumes (700k MMBtu) of low CI RNG. Renowned for its livestock intensity, there are copious amounts of manures within a 20-30 km radius of the proposed site. This in itself enables a good opportunity for a centralized manure processing facility together with the opportunity to obtain feedstock diversity to prevent dependence on a single source of feedstock or supplier and balance the facility in times of shortages or to provide optimum diets. The centralized facility has the benefit of scale which leans towards other present and future benefits such as carbon capture, improved efficiencies, new technologies and nutrient management. This plant also allows for a highly skilled team of professionals to execute a management system and process control that's best in class for safety, performance and financial returns. Once the centralized facility is completed, it is planned to use this as and hub and spoke system where by remote farms further away are virtually transported to the centralized facility adding further streams.	Madera	916,666	$ 750,000.00	$ 24,250,000.00	Conversion from Flush to Scrape, Composting
11	Correia Dairy Solid Separation Project	Correia Dairy proposes to install a screw press solids separator and in-vessel composter to reduce anaerobic manure solids within the pond and provide an on-site bedding source.	Sonoma	2,170	$ 750,000.00	$ 86,500.00	Solid Separation, Composting
12	Cross Creek Dairy Compost Bedded Pack Barn	Cross Creek Dairy proposes to construct a compost bedded pack barn over existing corrals that flush and house high producing milk cows currently. The barn will house milk cows and have LED lights, and fans installed for animal comfort. Flushing lanes will no longer flush and will be dryscraped; manure scraped will be used for bedding and composting activities in the pack barn.	Tulare	14,302	$ 750,000.00	$ 986,807.00	Compost Bedded Pack Barn

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13	D&D Holsteins 2 Stage Albers Screen Mechanical Separator with Composting of Separated Solids	Installation of a 2 Screen Albers Primary separation mechanical separator with composting pad and manure management equipment. A reduction of 25% manure solids will be separated from the waste stream conveyed to the storage ponds which will reduce greenhouse gases, improve flushing activities, provide less solids from accumulating in our storage ponds, and provide employment to individuals in socially disadvantaged and low income communities.	Merced	10,180	$ 750,000.00	$ 30,347.00	Solid Separation, Composting
14	Del Arco Dairy	Installation of mechanical slope screen separator with partial vacuum/flush conversion and composting.	Tulare	9,413	$ 750,000.00	$ 50,653.00	Solid Separation, Composting
15	Diamond D Dairy Improved Manure Management System	The proposed project will be to replace a 20+ year old two stage curved sloped screen separator system, currently operating at approximately 30% efficiency, with four new 8'x12' curved sloped screen separators and four new 8' roller press system. In addition, an old undersized overflow liquid recovering basin will be replaced with two 225' x 13' sand separating lanes to further improve sand and solid separation. Thus, improving the efficiency of the system, allowing an estimated 80% efficiency in solids removal resulting in an estimated 50% reduction of solids to the storage lagoon. The GHG reduction will be 8,932 MTCO2e/year. Currently, the storage pond system is partially cleaned annually to keep up with the solids loading. After the project installation, cleaning of the storage ponds will be a 3-year rotation because of the reduction of solids into the ponds. The proposed project is 100% committed to be completed before the end of the grant contract period. There is also a commitment to the required maintenance and repair of the system to allow for the expected life of 10 years of operation. All appropriate schematics, figures, graphics and plans are attached to this grant proposal. The grant request is $749,961.0 with an 17% match commitment of $124,261 for a total estimated project budget of $874,222.	Kings	8,932	$ 749,961.00	$ 124,261.00	Solid Separation, Composting
16	Diamond M Dairy Compost Bedded Pack Barn Project	Diamond M Dairy proposes to construct a compost bedded pack barn for lactating cows.	Sonoma	625	$ 750,000.00	$ 606,578.00	Compost Bedded Pack Barn
17	Diamond M Valley Dairy Solid Separation Project	Diamond M Valley Dairy proposes to install a manure separator and composting pad, reducing the amount of manure entering the manure lagoon. The dairy also proposes to concrete animal pathways to improve pasture access during wet conditions.	Sonoma	1,701	$ 741,678.00	$ 10,000.00	Solid Separation, Composting
18	Durrer Dairy Separator	The Durrer Dairy proposes to replace an aging, ineffective separator with a new modern efficient separator to remove more of the solid manure out of the flush water going into the lagoon and therefore reduce methane emissions from manure at the dairy.	Stanislaus	4,390	$ 591,265.00	$ 2,000.00	Solid Separation, Solid Storage

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19	East View Dairy Compost Bedded Pack Barn	East View Dairy proposes to construct a compost bedded pack barn over existing corrals that flush and house high producing milk cows currently. The barn will house milk cows and have LED lights, and fans installed for animal comfort. Flushing lanes will no longer flush and will be dryscraped; manure scraped will be used for bedding and composting activities in the pack barn.	Tulare	10,656	$ 750,000.00	$ 162,053.00	Compost Bedded Pack Barn
20	Fagundes Bros Dairy 2	The proposed project is to convert an open flushed dry lot corral to a compost bedded pack barn. The current corrals house heifers while we make improvements to the facility to convert back to Milking Cows. When complete, the new compost bedded pack barn will house milking Holsteins and will reduce the amount of manure going into the wastewater system, resulting in lower methane emissions. The material located in the compost bed pack barn will be rototilled daily and removed twice per year when new bedding is available.	Merced	1,428	$ 750,000.00	$ 590,400.00	Compost Bedded Pack Barn
21	Fagundes Bros Dairy 4	The proposed project is to convert an open flushed dry lot corral to a compost bedded pack barn. The new pack barn will house milking Holsteins moved from existing flushed open dry lots. Relocation of the cows into the proposed compost bed pack barn will reduce the amount of manure going into the wastewater system, resulting in lower methane emissions. The material located in the compost bed pack barn will be rototilled daily and removed twice per year when new bedding is available.	Merced	1,433	$ 750,000.00	$ 507,255.00	Compost Bedded Pack Barn
22	Fagundes Dairy Chowchilla 1	The proposed project is to convert an open flushed dry lot corral to a compost bedded pack barn. The new pack barn will house milking Holsteins moved from an existing open flushed dry lot corral. Relocation of the cows into the proposed compost bedded pack barn will reduce the amount of manure going into the wastewater system, resulting in lower methane emissions. The material located in the compost bedded pack barn will be rototilled daily and removed twice per year for beneficial application to surrounding fields and pastures.	Madera	1,632	$ 750,000.00	$ 532,945.00	Compost Bedded Pack Barn
23	Fagundes Dairy Chowchilla 2	The proposed project is to convert an open flushed dry lot corral to a compost bedded pack barn. The new pack barn will house milking Holsteins moved from existing flushed open dry lots. Relocation of the cows into the proposed compost bed pack barn will reduce the amount of manure going into the wastewater system, resulting in lower methane emissions. The material located in the compost bed pack barn will be rototilled daily and removed twice per year when new bedding is available.	Madera	1,793	$ 750,000.00	$ 652,850.00	Compost Bedded Pack Barn
24	Fiorini Dairy ValMetal/US Farms Mechanical Separator with composting manure pad	Victor Fiorini proposes to install a curved and sloped screen mechanical separator from ValMetal/US Farms systems, with swing stacking conveyor belt for maximum separation efficiency. As well as a processing pit for flushing and conveyance through the separator, and composting manure pad for composting of the separated solids. For nutrient management purposes the installation of a Seametrics AG3000 flow meter.	Merced	4,238	$ 750,000.00	$ 79,748.00	Solid Separation, Composting

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25	Fred Melo Heifer Ranch Compost Bedded Pack Barn and flushing to dry scrape conversion	Construction of a compost bedded pack barn over existing flushing lane corrals and feed lanes for support stock with conversion from flushing to dry scape.	Merced	3,669	$ 750,000.00	$ 177,606.00	Compost Bedded Pack Barn
26	Gabriel Machado and Sons Dairy Mechanical Separator and Open Solar Drying Manure Pad	Gabriel Machado and Sons Dairy proposes to install a curved and sloped screen mechanical separator from ValMetal/US Farms Systems, with swing stacking conveyer belt for maximum separation efficiency, as well as a processing pit for flushing and conveyance through the separator, and concrete manure pad for open solar drying of separated solids.	Merced	5,028	$ 750,000.00	$ 115,833.00	Solid Separation, Open Solar Drying
27	Ghidinelli Dairy's Albert's Dream	The Ghidinelli Dairy proposes to implement a compost bedded pack barn to convert an open shavings pack and scraped lane into a compost bedded pack housing for the milk cows, dry cows, and some of the heifers at the dairy. The project will reduce methane emissions from the lagoon at the dairy by minimizing the amount of manure going to lagoon storage.	Humboldt	106	$ 750,000.00	$ 99,475.00	Compost Bedded Pack Barn
28	Grand View Dairy Manure Separator Project	The project is the implementation of a solid manure separation system to remove solid manure from the flush stream prior to entering the anaerobic storage lagoon.	Merced	19,351	$ 750,000.00	$ 546,139.00	Solid Separation, Open Solar Drying
29	Installation of a solid separator at Lorinda Dairy	Lorinda Dairy plans to install a Houle separator system with expected 39.9% total solids removal, as well as a processing pit to allow for more efficient flushing activities and proper conveyance of solids through the separator system. The project will include electrical upgrades and the construction of a concrete manure storage pad for open solar drying.	Stanislaus County	4,515	$ 712,498.00	$ -	Solid Separation, Open Solar Drying
30	Joe O Rocha Dairy Compost Bedded Pack Barn	The proposed project at Joe O. Rocha Dairy is to convert a portion of the central corrals to compost bedded pack barns, capable of housing the milking cows currently located in the western flush corrals and the milking Holsteins that will be moved from the flushed free stall barn. Moving this portion of the herd into the proposed management system will reduce the amount of manure going to the settling pond and anaerobic conditions by 16%, reducing a total of 5,842 MTCO2e of emission over a 5-year period for the animals under the project scope. The producer is also projecting that settling pit clean out intervals will increase, offsetting the GHG production from tillage operations in the pack barn by reducing the need for heavy equipment needed to clean out the basin and move wetted manure for export and spreading.	Merced	5,842	$ 750,000.00	$ 30,153.00	Compost Bedded Pack Barn

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31	John Jongsma Separation Project	The proposed project planned at John Jongsma Dairy is to collect all manure from the three flush lanes located on the dairy, and process it through a sand settling lane, processing pit, dual slope screen separator, and screw press. A lift pump will be installed in the central collection point next to the current separating pond and will lift the manure effluent and discharge it into a 240' x 14' gravity sand settling lane. After processing over the sand settling lane, manure will be discharged into a new 32' wide, 16' deep cement octagon reception pit, agitated and processed through a customized US farm systems dual slope screen separator outfitted with .30mm screens, then further treated with a secondary direct feed screw press to further dewater the solid separated material. Wastewater will then be discharged into the current settling pond, and proceed through the manure handling system to storage. A radial stacker will be added the sloped screen separator after the screw press discharge and will be designed to discharge manure in a wide area to increase the speed of solar drying and reduce the amount of diesel used in spreading for drying purposes by the existing loader. A 1/2-acre slab will be poured adjacent to the separation system to the west for manure drying. The installation of the separation equipment and management improvements will save 7912 MtCO2e for the first 5 years.	Tulare	5,028	$ 749,842.00	$ 59,275.00	Solid Separation, Open Solar Drying
32	Koot Dairy	The goal of this project is to lessen methane emissions by utilizing the best available equipment and technology. The equipment requested will be used to convert the operation from a flush to scrape by using a tractor and pull-type alley vac. The manure will be collected six days a week for roughly five hours per day. The manure will then be dried in open solar.	Riverside	4,727	$ 349,350.00	$ -	Conversion from Flush to Scrape, Open Solar Drying
33	L and L Dairy Compost Bedded Pack Barn	L & L Dairy proposes to construct a compost bedded pack barn over existing corrals that flush and house milk cows currently. The barn will house the highest producing milk cows. Flushing lanes will no longer flush and will be dry scraped; manure scraped will be used for bedding and composting activities in the pack barn.	Fresno	4,482	$ 750,000.00	$ 939,600.00	Compost Bedded Pack Barn
34	Langworth Dairy Sloped Screen Separator System and Stacking Pad	A sloped screen manure separation system and stacking pad is proposed for this grant application. The installation of this system will provide several benefits: reduction of greenhouse gas emissions and odors, removal of excess nutrients from irrigation/application water, and production of dry manure solids which can be readily composted, dried or spread as fertilizer or reused as bedding in the free stall barns. The concrete stacking pad will provide a non-permeable area for solar drying and storing separated solids while diverting excess liquids to wastewater storage.	Stanislaus County	4,267	$ 372,368.00	$ -	Solid Separation, Open Solar Drying
35	Lima Farms Project on Solid Separation with Open Solar Drying	The proposed AMMP project will be implemented at the Lima Farms. The manure collection method utilized at this facility is flushing using pressurized water twice a day, in the morning and evening, and summer corrals are scraped two times per year. The AMMP project proposed for this dairy includes installation of solid separator to separate the solids from the manure and construction of concrete platform to dry the separated solids using natural solar drying system. The installation of the solids separator will enable the Lima Farms to save 11,509 MT of CO2 in the next five years. In addition, the use of solids separator will enable the Lima farms to collect the solids, which can be utilized by applying to the fields and as a bedding for the compost bedded pack barns.	Merced	11,509	$ 515,474.00	$ 21,868.00	Solid Separation, Open Solar Drying
36	M&N Miranda Dairy Compost Bedded Pack Barn	This project consists of the construction of a new 75' x 200' compost bedded pack barn replacing an existing dry lot. This project also involves the purchase of new equipment needed for accommodating the incorporation of a direct haul system as well as composting equipment used to manage the bedded pack and manage the rows of aerobic compost. The implementation of this project will decrease the amount of manure that is currently reaching the manure lagoon and encountering water in the dry lot resulting in ponding due to coastal weather patterns.	Humboldt	297	$ 735,692.00	$ -	Compost Bedded Pack Barn

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37	Manuel Cardoso & Sons Dairy Mechanical Separator and Open Solar Manure Drying	Manuel Cardoso & Sons Dairy proposes to install a GEA HOULE 2 Stage Mechanical Screen Separator with Roller Press, processing pit and open solar drying of separated solids, providing a 40% separation of solids from entering existing storage ponds which produces greenhouse gases, loss of storage capacity, dirty flush lanes, and excessive solids accumulation during irrigation events. The project will improve all of those conditions as well as provide socio-economic benefits to the communities in and near the project area.	Merced	8,495	$ 390,700.00	$ 9,000.00	Solid Separation, Open Solar Drying
38	Manuel Martins Dairy L.P. Mechanical Separator Project	Manuel Martins Dairy is proposing to install a mechanical separator through the AMMP Grant Program as a means to reducing methane emissions on the dairy facility. The dairy is proposing to install a Valmetal dual screen separator with a goal of removing 55% of the solids from the waste stream. A manure stacking pad is also proposed as part of the project.	Stanislaus	9,932	$ 737,065.00	$ 11,100.00	Solid Separation, Composting
39	Mechanical Separation System for TH Mello & Sons Dairy #1	A Liquid-Solid Separation System is planned for the Alternative Manure Management Program project. This project will provide a reduction of greenhouse gases and odor. The separated solids will be solar dried for use as fertilizer and quality bedding for cows in animal housing. Excess solids will be exported as marketable fertilizer. The exports will also help this facility maintain its 1.4 balance for N required by the California Regional Water Quality Control board. Installation of the separator will replace an existing small and inefficient system that is in place. The new system will reduce problems with flush wastewater storage in the receiving basin. More solids will be removed from the effluent making it a usable source of nutrients for the existing cropland.	Sacramento	-3401	$ 750,000.00	$ 230,125.00	Solid Separation, Open Solar Drying
40	Michael Barcellos DBA Monster Dairy Manure Separator with Composting	Monster Dairy's Installation of a Houle 2 Stage Manure Separator with Roller Press, processing pit with agitator pump, concrete for temporary manure storage and the purchase of a 28' high cube side dump trailer and 12' composter to allow composting activities on my existing composting pad.	Stanislaus	5,042	$ 750,000.00	$ 24,393.00	Solid Separation, Composting
41	Moreda Valley Dairy Flush Conversion Project	Moreda Valley Dairy proposes to eliminate flushing of cow alleyways and scrape lanes with a skip loader. They also propose to construct a roof over an existing freestall area, diverting over 1.2 million gallons of freshwater from the manure pond.	Sonoma	17,204	$ 750,000.00	$ -	Conversion from Flush to Scrape, Solid Storage
42	North Dairy LP Compost Production & Application Program	At North Dairy LP we are seeking to improve our manure management practices in order to maximize the efficiency of the natural resources available to us, and to reduce greenhouse gas emissions to combat the effects of global warming and for the health and safety of our local region. To that end, we plan to implement a compost production & application program which will focus on greenhouse gas reduction by limiting anaerobic digestion in our lagoons. Additionally, this will reduce our reliance on synthetic commercial fertilizers, by turning the raw manure into a nutrient rich compost for application with permanent crops. Finally, we will also be able to recycle the manure as compost to be used as a clean and comfortable bedding product for our cows.	Kings	18,772	$ 605,063.00	$ 40,000.00	Solid Separation, Composting

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43	Nunes and Sons, Inc. Compost Bedded Pack Barn	Nunes and Sons Inc proposes to construct a compost bedded pack barn over existing corrals that flush and house heifers currently. The barn will house heifers and have LED lights, a soaker system, ventilation installed for animal comfort. Flushing lanes will no longer flush and will be dry scraped; manure scraped will be used for bedding and composting activities in the pack barn.	Tulare	1,932	$ 750,000.00	$ 413,825.00	Compost Bedded Pack Barn
44	Oakview Dairy	The project includes mechanical separator upgrade with the addition of vacuuming flush lanes.	Tulare	9,951	$ 727,655.00	$ -	Solid Separation, Composting
45	Pedretti Ranches Manure Separator for Methane Reductions	Pedretti Ranches is looking to add a US Farm Systems Curved and Sloped Screen Separator to our operation. The system will include a curved and sloped screen separator, incline screw press to help reduce the amount of water in the manure, a 24" by 38' fixed stacking belt conveyor and two belt driven stationary agitator pumps. The agitator pumps will stir the processing pit and pump the flush water into the separator. To support the separator system a concrete pedestal will be built along with electrical upgrades. Pedretti Ranches will be windrow composting the manure after its gone through the separator and is applying for a HCL windrow compost turner to improve the efficiency of the composting of the manure. We will still be using the same flush lanes and processing pit that was built with our existing separator system. A map has been provide of our flush system. Pedretti Ranches is hoping to improve the sustainability of our family's operation.	Merced	2,925	$ 509,139.00	$ 32,294.00	Solid Separation, Composting
46	Phoenix Dairy - Bedded Pack Barn	Construction of a compost bedded pack barn over existing corrals to reduce methane and manure that enters the lagoon. Also provides increased cow comfort.	Kings	1,441	$ 750,000.00	$ 502,750.00	Compost Bedded Pack Barn
47	R & S Dairy Mechanical Separator Project	R & S Dairy is proposing to install a mechanical manure separator through the AMMP Grant Program as a means to reducing methane emissions on the dairy facility. The dairy is proposing to install a Valmetal dual screen separator with a goal of removing 55% of the solids from the waste stream. A manure stacking pad is also proposed as part of the project.	San Joaquin	9,297	$ 747,232.00	$ 340,000.00	Solid Separation, Composting
48	Raymond Lopes Family Trust DBA Lopes Family Dairy Compost Bedded Pack Barn	Lopes Family Dairy proposes to construct a compost bedded pack barn over existing corrals that flush and house milk cows currently. The barn will house the highest producing milk cows and have LED lights and fans installed for animal comfort. Flushing lanes will no longer flush and will be dryscraped; manure scraped will be used for bedding and composting activities in the pack barn.	Stanislaus	11,875	$ 750,000.00	$ 196,849.00	Compost Bedded Pack Barn

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49	Roestar Dairy Compost Bedded Pack Barn	The Roestar Dairy proposes to build two compost bedded pack barns to house milk cows that are currently housed in freestall barns reducing manure methane emissions.	Stanislaus	7,082	$ 748,612.00	$ -	Compost Bedded Pack Barn
50	Sam Kooistra Dairy Houle Two Stage Separator with Processing Pit and Compost Manure Storage Area	Sam Kooistra Dairy proposes to install a Houle Two Stage Mechanical Separator with processing pit and compost manure storage area for composting of separated solids. The project will reduce Greenhouse gases as well as other environmental benefits. It will also provide jobs to employees in socially disadvantaged areas and low income areas and help support local small businesses.	Stanislaus	6,293	$ 750,000.00	$ 83,852.00	Solid Separation, Composting
51	Schoch Dairy	The project involves converting an existing anaerobic dairy lagoon back into pasture for rotational grazing purposes. Additionally, a Variable Frequency Drive (VFD) will be installed to greatly improve motor and pump control associated with the application of the remaining diluted dairy solids and nutrients to both existing and newly improved pastures. The intent of the project is to create the conditions that allow for more of the dairy cattle to have greater access to pastures for longer, and reduce the accumulation of manure associated with corrals and the freestall barn housing.	Monterey	914	$ 59,224.00	$ 5,680.00	Pasture-Based Management
52	South Corner Dairy Compost Bedded Pack Barn	South Corner Dairy proposes to construct a compost bedded pack barn over existing corrals that flush and house milk cows currently. The barn will house the highest producing milk cows. Flushing lanes will no longer flush and will be dry scraped; manure scraped will be used for bedding and composting activities in the pack barn.	Tulare	17,151	$ 750,000.00	$ 217,501.00	Compost Bedded Pack Barn
53	Terrilinda Dairy Solid Separation Project	Terrilinda dairy proposes to construct a solid separation with in-vessel composting project.	Sonoma	2,066	$ 750,000.00	$ 77,360.00	Solid Separation, Composting
54	The D&V Dairy Vermifiltration Project	The project proposes to install a vermifiltration treatment system at the D&V Dairy in Tulare County. The entire dairy cow population is hosted in open lot barns, and the manure is currently flushed from the barn feeding areas and the parlor and is stored in anaerobic lagoons. The vermifiltration system will treat all the liquid manure collected at the dairy, minimizing the need for long-term storage of liquid manure and the resultant methane emissions. The treatment system will include a primary solid separator and a vermifilter and will remove >90% of volatile solids and 80% of the nitrogen from the liquid manure. The treated water will be used to drip-irrigate the almond orchard adjacent to the barn, decreasing the demand for inorganic fertilizers and optimizing freshwater use at the farm. The vermifiltration project will reduce the dairy methane emission due to anaerobic long-term manure storage by >70% (or circa 8,000-9,000 tons CO2eq per year and 39,000- 47,000 over five years). Additionally, it will decrease odors, reduce ammonia emissions, and reduce the risks of adding excess nitrogen and salts when land applying lagoon water. Vermifiltration will transform the treated manure into nutrient-rich vermicompost that can be used as a soil amendment to increase soil health and carbon input to soils.	Tulare	46,874	$ 749,985.00	$ 4,913,644.00	Solid Separation, Composting

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
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#	Project Title	Description*	County	GHG Emission Reduction Over 5 Years ($MTCO_2e$)**	Requested Grant Funds	Matching Funds	Primary Management Practice
55	Tony & Julie Jorge Dairy's updated separation project	The proposed project planned at Tony & Julie Jorge Dairy is to scrape all manure from the flush lanes utilizing a small skid steer unit with a manure scraper twice per day. The collected manure will be transported to a 2500 ft3 cement bunker style processing pit located at the termination point of the corrals on the southwest side of the feed lane. The east flush lane will have a smaller collection pit with a gravity drain to the western processing pit. From the holding pit, it will be agitated and pumped into a Daritech DT360 Roller Drum separator combined with a DT Roller press for second stage dewatering. By removing the separated portion of the potential methane producing manure from the lagoon system, a reduction of 8,516 mtCO2e is projected for the first 5 years of the project lifespan.	Tulare	8,516	$ 600,187.00	$ -	Conversion from Flush to Scrape, Open Solar Drying
56	Tri Bak Pack Barn Addition	The proposed project at Tri-BAK Dairy is to convert a portion of the eastern corrals to two compost bedded pack barns, capable of housing milking Holsteins. Moving this portion of the herd into the proposed management system will reduce the amount of manure going to the settling pond and anaerobic conditions by a total of 3578 MTCO2e over a 5-year period for the animals under the project scope. The producer is also projecting that the reduction in settling pond cleanout activities will reduce the amount of diesel used by 23%. The reduced diesel usage and improved manure management will reduce ROG, NOx, PM2.5 and Diesel PM emissions from the dairy. In addition, 2 acres of manured areas on the facility will now be under roofs with drains that will divert storm water from the lagoon system. This will decrease risks to water quality and groundwater in the area, as well as the compost being produced in the barns footprint not being rewetted by rainfall.	Tulare	3,578	$ 750,000.00	$ 278,810.00	Compost Bedded Pack Barn
57	Ulys Dairy Mechanical Separator Project	Ulys Dairy is proposing to install a mechanical separator through the AMMP Grant Program as a means to reducing methane emissions on the dairy facility. The dairy is proposing to install a Valmetal US Farms Systems dual screen separator with a goal of removing 55% of the solids from the waste stream. A manure stacking pad is also proposed as part of the project.	Solano	12,735	$ 735,219.00	$ 115,781.00	Solid Separation, Composting
58	Van Foeken Dairy #2 Albers Mechanical Separator and Compost Drying Pad	Van Foeken Dairy # 2 proposes to install an Albers Primary Mechanical Separator and compost drying pad.	Merced	7,510	$ 750,000.00	$ 5,000.00	Solid Separation, Composting
59	Vitoria Farms Mechanical Separator and Concrete Stacking Pad	This project includes the installation of a mechanical separation system with a manure stacking pad. It will be used to reduce Greenhouse Gas Emissions and the amount of manure solids stored in the dairy's wastewater lagoons. The separated solids will be exported for use as fertilizer on crop land. Exports are necessary at this dairy to meet compliance with the 1.4 balance for Nitrogen needed to meet Water Board Regulations. The separation process will minimize moisture in the manure solids which will decrease the time it takes to solar dry the manure prior to export. Solar drying will occur on the stacking pad. The separation process will also provide manure solids that have more consistent nutrient value throughout. The solids will be easier to apply evenly on the fields and decrease the possibility of nutrient overload that may leach down into the groundwater.	Madera	1,857	$ 750,000.00	$ 115,607.00	Solid Separation, Open Solar Drying
60	Vitorino Dairy Compost Bedded Pack Barn Project	The proposed AMMP project is to build two compost bedded pack barns at Vitorino Dairy in Turlock, CA. The compost bedded pack barns will enable the dairy operation to reduce its greenhouse gas emissions and provide additional environmental benefits. The Holsteins Crosses and Jersey cows will be moved from the free-stall barns and open corrals to the compost bedded pack barns, where the cows will have ample square footage of pack barn space to ensure optimal compost pack barn conditions. Each day, the pack barn will be rototilled as part of the planned daily aeration till. The compost pack barn will be cleaned out at least twice per year or as appropriate based on compost conditions. Vitorino Dairy will add organic matter to the barn in order to facilitate the best composting formula for cow health and compost management.	Stanislaus County	822	$ 750,000.00	$ 72,857.00	Compost Bedded Pack Barn

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#	Project Title	Description*	County	GHG Emission Reduction Over 5 Years ($MTCO_2e$)**	Requested Grant Funds	Matching Funds	Primary Management Practice
61	Western Pacific Pack Barn	The proposed project at Western Pacific Dairy is to remove and regrade the existing three problematic corrals north of the milk barn as well as the relocating a hay barn and constructing a 120' single walk lane compost bedded pack barn, capable of housing milking Holsteins and close-up heifers. Cows are projected to have 160 ft2 of pack space each (80' of pack space depth.) Manure in the flush lane will be scraped into the pack daily and rototilled in during the daily aeration till. The compost barn will be cleaned out twice per year, consisting with corral cleanout and compost removal, 412.3 dry tons (Co-benefits Summary of CARB Benefits Calculator Tool for AMMP) should be adequate to treat 17.7 acres annually. Moving this portion of the herd into the proposed management system will reduce the amount of manure going to the settling pond and anaerobic conditions for a total of 4,252 MTCO2e over a 5-year period for the animals under the project scope.	Tulare	4,252	$ 750,000.00	$ 250,500.00	Compost Bedded Pack Barn
62	William Jongsma Dairy Lagoon Treatment	The proposed project planned at William and John Jongsma Dairy is to collect all manure from the four flush lanes located on the dairy and process it through a processing pit, dual slope screen separator and screw press. The current pipeline connection to the settling ponds will be modified with a 15" bypass pipeline with a reverse slope to the new cement octagon reception pit to be installed in the south settling basin. The liquid manure will be discharged in the 42' diameter by 20' deep octagon processing pit, where it will be agitated and processed through a customized US farm systems dual slope screen separator, then further treated with a secondary direct feed screw press to further dewater the solid separated material. The solids will then be deposited on a 1 acre drying slab that will be poured adjacent to the separation system to the south for manure drying. These improvements will reduce GHG produced on the facility by 11,263 MtCO2e in a 5 year period.	Tulare	11,263	$ 750,000.00	$ 469,911.00	Solid Separation, Open Solar Drying
			Total	1,330,284	$ 42,065,450	$ 39,780,147	