

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
2019 Alternative Manure Management Program: Projects Selected for Award of Funds

#*	Organization Name	CDFA Funding Award**	Total Project Cost	Project Description (as submitted by applicant)	Primary Management Practice***	County	GHG Emission Reduction (MTCO _{2e})****
1	A&L Dairy	\$420,189	\$420,189	Installation of a new US Farm System vibrating slope screen separator with a secondary dewatering screw press. All flushed manure will be collected in the existing sand settling lane and be pumped through separation system instead of being directly discharged into the lagoon.	Solid Separation	Tulare	2,620
2	Alfred Soares Dairy	\$750,000	\$886,593	Installation of a VALMetal US Farms System curved and sloped screen mechanical separator with incline screw press and swing stacking conveyor, along with concrete processing pit for more efficient flushing activities and a concrete pad for manure composting, with cost sharing of certain project items.	Solid Separation	Madera	5,522
3	Alves Dairy	\$209,165	\$215,165	Alves Dairy will be taking part in solid separation and open solar drying manure management practices. Installation of a separator will reduce methane emissions, and the amount of solids that seep into the ponds and eventually onto crop land. Material (dirt and gravel) will be added to raise and compact the ground where the slab and separator will be constructed. A concrete slab will be implemented, at a slope, to create compost for bedding and a spreading service. Water runoff from the concrete slab and separator will eventually be used for irrigation. A new pump and agitator also will be installed, to replace a pontoon pump, and homogenize the slurry material before it enters the separator, without disrupting the settling basin. The old pontoon pump, which has a bigger motor, will only be used as a back-up. The Alves plan to add 70 acres to their irrigation plan with the waste water that is created.	Solid Separation	Glenn	4,526
4	Andrew Zylstra Dairy 2	\$444,491	\$469,491	Mechanical Separator for Andrew Zylstra Dairy 2.	Solid Separation	Stanislaus	3,470

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5	Antone L Gomes & Sons Dairy	\$665,119	\$665,119	Upgrade our outdated and inefficient mechanical separator to a Houle 2 Stage Mechanical separator with roller press, processing pit for more efficient flushing activities and optimum separation efficiency, concrete pad for composting activities along with composter and tractor for improved composting.	Solid Separation	Merced	3,860
6	Antonio Nunes Dairy	\$507,759	\$513,166	The Antonio Nunes Dairy is proposing to install a mechanical solid manure separator to an existing flush manure system.	Solid Separation	Merced	4,836
7	Azevedo Dairy 4	\$677,909	\$677,909	Install a Hansen Industries Mechanical Separator with concrete pad for open solar drying. Currently no separation system exists onsite and only one storage pond to catch all flushing shade housing manure generated by the herd. With proposed project 25% of solids will be removed from entering our storage pond. Separated manure will be moved to open solar pad for quicker drying.	Solid Separation	Merced	3,274
8	Badger Flat Dairy	\$710,618	\$710,618	Installation of a compost bedded pack barn over an existing corral to allow for transfer of milk cows in free stalls to the compost bedded pack barn where dry scraping will occur. This will reduce the manure generated by those animals from entering our storage system and causing solids accumulation from occurring and reducing our storage capacity volume. This will also reduce those solids from entering the anaerobic conditions and reduce greenhouse gases.	Compost Bedded Pack Barn	Merced	5,338

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9	Beretta Dairy	\$609,303	\$609,303	Beretta Dairy proposes to install automatic alleyway scrapers to reduce the need for diesel fueled manure collection. Manure will be scraped into a new cross gutter and reception pit where solids will then be separated and stored for bedding or soil amendment.	Solid Separation	Sonoma	1,468
10	Bivalve Dairy	\$365,157	\$619,722	Bivalve Dairy proposes to convert their flush barn to a scrape barn and compost solids with an in-vessel compost. Automatic alleyway scrapers will be installed, scraping manure into a culvert and reception pit. Manure will be pumped into a solids separator and the separated solids moved into an in-vessel compost. Compost will be used for bedding and as soil amendment. This project also proposes to extend out a concrete heavy use area and a concrete pad for the in-vessel compost. This project will preserve fresh water, currently used for flushing, and reduce greenhouse gas emissions from the manure lagoon.	Flush-to-Scrape	Marin	3,171
11	Blue Sky Dairy	\$749,906	\$768,694	A two-stage mechanical separation system that includes two inclined separators operated in series. Flushed waste water is pumped over the screens to separate a portion of the solids from the waste water. The remaining waste water then falls into a tub where a screw press squeezes a larger amount of waste water out. The remaining material then falls on a conveyor to be stacked on a stacking area. The Conveyor Swivels about 90 degrees to maximize the storage area. Also proposed is a concrete composting pad with side dump trailer to allow for composting in windrow activities.	Solid Separation	Merced	8,761
12	Borba Heifer Ranch	\$627,679	\$705,167	This project involves conversion from flush system to scrap system. Further, a compost bedded pack barn of 1200 ft x 136 ft for the area of 163,200 square feet and a concrete drying pad or platform of 100 ft x 136 ft (area 13,600) will be constructed in the project. The project will reduce the water consumption by 80-90% that will help in reducing greenhouse gases emissions. Electricity consumption will be reduced. Solar drying will be applied to dry manure used for compost bedded pack barn.	Flush-to-Scrape***	San Joaquin	21,329

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13	Brinderio & Danbom Dairy Farms	\$565,470	\$565,470	The proposed project will greatly reduce the amount of manure based organic material entering the flush system by installing a Houle 2 stage slope screen and manure press to capture and remove organic material prior to introduction to the lagoon system and anaerobic conditions. All flushed manure will be collected in the existing sand settling lane and be pumped through separation system instead of being directly discharged into the settling lagoon. The proposed system will eliminate the need for biennial excavation, significantly reducing the need to run multiple pieces of heavy equipment, reducing the vehicle GHG production to manage manure. In addition, the conversion of the heifer pen and open lots to dry scrape will eliminate the produced manure (241 ft3) from the system entirely, further reducing the GHG production for the facility.	Solid Separation	Stanislaus	5,104
14	Cahill Dairy	\$746,418	\$1,108,871	The Cahill's Compost Bedded Pack Barn Project consists of upgrading manure management and handling practices by constructing two compost bedded pack barns and performing modifications to the existing manure ramps and upgrading the haul lanes that together will reduce the amount of manure slurry stored in the lagoon under anaerobic conditions. The project will reduce the amount of manure stored in anaerobic conditions by 95%, 1.1 million gallons/year. This project creates a sustainable manure management plan that will eliminate 400 gallons of diesel fuel use per year.	Compost Bedded Pack Barn	Humboldt	575
15	Cardoso & Sons Dairy	\$711,899	\$711,899	A Two-Stage liquid/solid manure separator with stacking pad will be installed to provide several benefits: reduction of greenhouse gases and odor, removal of excess nutrients from irrigation/application water, production of dry manure solids that can be readily dried, used as bedding or sold as fertilizer. This project will provide the dairy with a system built with durable, high quality materials that will perform for many years with minimal maintenance. The concrete stacking pad will help protect groundwater by preventing leaching of nutrients from drying manure solids. Included in this project is the conversion of the Dry Cow and Heifer Corrals to a covered compost bedded barn. The covered barn will decrease the amount of manure solids collected in effluent due to the rainy season. Gutters on the barn will redirect clean rainwater that would otherwise be deposited into the corrals increasing the need to pump the watery solids to the storage pond.	Solid Separation	Merced	9,404
16	Caton Farms	\$559,800	\$562,600	Caton Farms is proposing the construction of a compost bedded pack barn as an alternative manure treatment and storage practice through the AMMP Grant Program as a means to reduce methane emissions on the dairy facility. The conversion from freestall housing to a compost bedded pack barn will lead to a decrease in the amount of manure flushed into anaerobic storage ponds and thus reduce greenhouse gas emissions and reduce odor. With less manure being flushed to storage ponds, manure and urine will instead be combined with dry bedding and rotated frequently to create compost within the barn.	Compost Bedded Pack Barn	San Joaquin	7,748

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17	Creekside Dairy	\$611,642	\$611,642	Installation of a ValMetal US Farms Systems double curved/sloped screen stationary mechanical separator with incline screw press and swing stacking belt conveyor. As well as concrete pad for open solar drying and purchase of a John Deere tractor and Loewen Model 3750 HoneyVac. These practices will allow us to convey flush water from our mature animals (milking and dry cows) housing lanes, through our existing processing pit and then through the proposed separator system and reduce an estimated 59.7% solids from the waste stream. We also propose to terminate flushing activities in the support stock lanes and utilize the tractor and honey vac to scrape and vacuum the manure from those lanes and transport them to the open solar drying pad, reducing these solids by 100% from entering our storage system.	Solid Separation	Tulare	9,150
18	DaSilva Dairy Farms L.P.	\$469,989	\$496,511	The type of project to be implemented is Solid Separation with Open Solar Drying for reducing greenhouse gases emissions. In this project, a solid separating system and a concrete pad/platform will be constructed to separate solids from liquid manure and dry separated solids. The primary solids separator to be used is a sloped stationary screen separator combined with a screw press as secondary separator manufactured by US Farm Systems, Tulare, CA. The project will save diesel by 4500 gallons over the five years. The cost saving by the project will be 12,129. Further, it will improve the dairy environment by reducing odor, increasing wellbeing of cows and workers.	Solid Separation	San Joaquin	3,319
19	Deolinda & Carlos Lopes Trust Dairy	\$288,610	\$288,610	Improve separation efficiency by replacing our current low-functioning outdated system with a VALMETAL Us Farm Systems sloped vibrating screen mechanical separator with incline screw press. The project will allow for a significant increase of solids removal, currently conveyed in the waste stream to our storage ponds. The manure removed in the separation process will be stored on a concreted storage area for open solar drying until ready to be land applied or exported. The improved separation of solids from our waste stream will reduce accumulation in our storage ponds, currently affecting our storage capacity. It will also reduce storage pond cleaning activities, which will reduce usage of heavy equipment such as slurry tankers, currently being utilized. All practices are anticipated to reduce a significant amount of greenhouse gases.	Solid Separation	Merced	63
20	Diamond Point Dairy	\$749,933	\$979,773	The Diamond Point Dairy Project is designed as a comprehensive upgrade to the manure management system on the dairy, and it is categorized primarily as conversion from a system of using scraped manure handling methods to a system of mainly composting by developing two compost bedded pack barns. Barn #1 will be 24,192 sq.-ft. and Barn #2 will be 40,090 sq.-ft. Compost produced in the new pack barns will provide the dairy with a more stable product that can be applied to pastures as a soil amendment and will also serve to reduce the volume of solid manure stored in the concrete manure tank under anaerobic conditions. It is estimated that the Project will provide a 70% reduction of manure solids and wastewater handled in the concrete tank on the facility.	Compost Bedded Pack Barn	Humboldt	1,268

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21	Droogh Dairy	\$723,208	\$723,208	The planned project revises current manure management by further processing the effluent through a system for the collection and processing of fine manure solids whereby the waste is effectively and efficiently converted to non-toxic, commercially viable products, thus eliminating GHGs along with other animal waste nuisances, and facilitating the reclamation of water from the new manure treatment process to thus conserve such water resources and allow them to be utilized in farming operations. The Figure 8 Environmental system takes dairy effluent first processed by the screen separator to remove large fibrous organic matter and injects a blend of coagulating agents, biopolymers, and polymers that facilitate the coagulation/flocculation of the fine organic matter and particulate VOCs and TSS. An LWR First Wave 85 HF system can process an estimated 8,530,283.6 gallons of flush lane deposited waste per year, 100-120 million gallons of recycled flush water recirculated through the flush system, and storm water that traverses the manured areas of the facility (19,010,928 gallons) annually. The project also produces 3,077 dry tons of nutrient rich compost per year.	Solid Separation	Kings	22,913
22	DS Farms L.P.	\$499,994	\$537,503	This project involves building a compost bedded pack barn along with installation of a solid separator in DS Farm. The solid separator will separate solids from flushed manure, and manure will be sun dried. In addition, a manure processing pit and sand trap pit will be constructed in the project. As the cows will be housed in the compost bedded barn, the total manure production of 88 metric tons will be divided into two parts: a) 22 metric tons in the compost bedded pack barn, and b) 66 metric tons in free stalls which needs to be flushed. The primary solids separator used in this project will be a sloped stationary screen separator combined with a screw press as secondary separator manufactured by US Farm Systems, Tulare, CA. The separating system can handle about 1,500 gallons per day and it will run for 4 hours a day to handle 377,000 gallons of liquid manure. The project will save \$4,500 gallons of diesel over five years, and fuel cost saving will be \$12,129.	Solid Separation***	San Joaquin	18,578
23	Frank N. Rocha Dairy	\$645,600	\$695,600	The Frank Rocha Dairy proposes to construct a compost bedded pack barn to reduce the amount of manure being flushed to the anaerobic storage lagoon to reduce the amount of methane produced from manure at the dairy.	Compost Bedded Pack Barn	San Joaquin	10,358
24	Hillcrest Dairy L.P.	\$750,000	\$882,638	Installation of a double vibrating screen ValMetal US Farms Systems mechanical separator with double screw press, as an addition to our current separation system which consists of one mechanical separator capturing the solids flushed in the waste stream in our lactating cow free stall housing. Currently our heifer and dry cow housing lanes flush but are directed to a separate storage pond system. These lanes are not conveyed through our current separation system. We propose to purchase a 180 HP tractor along with a Nuhn Alley Vac to end flushing in our heifer/dry cow housing and scrape/vacuum the solids produced in those lanes. Those solids will then be transported to the proposed manure stacking pad for open solar drying. This will allow 100% of the solids captured in our support stock housing from entering the storage pond system. To reflect our commitment to this project, and reducing greenhouse gases currently being produced, we propose to cost share on the tractor and alley vac equipment.	Solid Separation	Merced	11,748

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25	James Jongsma Dairy	\$727,508	\$727,508	Increase separation with the addition of a ValMetal US Farms Systems Double Curved and Sloped Screen Mechanical Separator with fixed stacking conveyor belt, which will work simultaneously with our existing separator that isn't sufficient to handle our herd size and operation. Also included is a concrete sand trap to remove sand from entering the separators and increase the life expectancy of the systems, a concrete pad for improved open solar drying and the purchase of two manure/fertilizer trucks to allow for in house manure management, open solar drying, and reduced bedding purchases. This will help reduce heavy equipment traffic, as the proposed activities will occur onsite without the need for contracted equipment traveling from outside sources.	Solid Separation	Tulare	2,719
26	Jesse & James Jongsma Dairy	\$750,000	\$816,117	Installing a ValMetal US Farms Systems double curved/inclined stationary separator with screw press, along with a processing pit for collection of our flush water and conveyance of the flush water through the new separator for maximum separation efficiency. Also, a concrete pad for composting activities and a manure/fertilizer truck to allow for quicker in-house manure transport and composting activities as opposed to contracting out these activities. All practices are anticipated to reduce a significant amount of greenhouse gases.	Solid Separation	Tulare	7,193
27	Jordao Dairy	\$750,000	\$791,951	Installation of a Houle 2 Stage Manure Separator with roller press, processing pit, concrete pad for composting activities, and upgrading sand pit with the purchase of a side dump trailer to facilitate the composting activities. The processing pit will serve as the location from which flushing activities occur, resulting in a more efficient flushing times (reducing energy usage), allowing for cleaner flush lanes that dry faster. The sand pit will remove excess sand lengthening the life span of the separator and processing pit components. Separated manure will be transported for composting with the side dump trailer allowing for quicker composting, resulting in a premium bedding product. All reducing greenhouse gases from separated solids not entering the storage ponds and heavy equipment usage from cleaning activities.	Solid Separation	Stanislaus	4,707
28	KB Dairy	\$613,156	\$678,156	This project includes the installation of a mechanical separation system along with a stacking pad. The system will separate liquid from scraped solids at a 50-60% efficiency rate. Solids will be separated from the waste water with moisture further removed using a screw press in the separation process. A small stacking pad will be located next to the separator. Manure solids will be shuttled every few days from that pad to a larger manure stacking/storage/drying pad located west of the separator on the other side of the wastewater lagoon. The wastewater collected by the mechanical separator will be directed back to a lagoon where it will be held until used as a crop nutrient source on fields located in the land application area.	Solid Separation	Stanislaus	15,732

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29	Lemstra Cattle Company	\$729,761	\$739,761	The proposed project is to convert a portion of the western corrals to compost bedded pack barns. This will reduce the amount of manure going to the weeping wall and storage lagoon and anaerobic conditions by 25%, reducing a total of 14,024 MTCO _{2e} over a 5-year period for the 1,100 animals under the project scope. This GHG reduction should continue for several more decades, as a properly managed pack barn should remain functional for 20+ years. The project has several co-benefits from ROG, NO _x , PM _{2.5} , and diesel PM decreases. Currently the producer utilizes 500 gallons of diesel for manure management and is projecting usage to drop by 20% due to cell cleanout intervals increasing. This will further reduce GHG emissions. By utilizing the existing flush lanes, stanchions, and structures, the producer will also be limiting the GHG production from concrete production and transport, steel production and transport, and reducing other air quality impacts and GHG production from demoing and pouring virgin materials.	Compost Bedded Pack Barn	Kings	14,204
30	Leonardi Dairy	\$159,267	\$159,267	The Leonardi Separator Project is designed as a comprehensive upgrade to the manure management system on the dairy. It is categorized primarily as a scraped manure handling system that currently is directed into the main lagoon to a system of solid separation and composting in passive windrows and increased pasture time by a minimum of 2 weeks/year. The Project will install energy efficient solid manure separation and handling equipment including: a Cri-Man screw press separator, a Cri-Man pump outfitted with soft start motors to reduce the heavy initial draw of electricity at motor startup, a Frontier Windrow Turner, a Doda self-priming PTO pump, an extension of approximately 600 feet of underground pipe, and approximately 50 cubic yards of gravel for a pad for pump placement. It is estimated that the new separation system will provide approximately a 70% reduction of manure wastes stored in anaerobic conditions that will instead be handled in aerobic conditions in compost windrows. Applying compost to pastures in the rotational grazing system would allow for increased time on pastures for cows due to expected increased forage production.	Solid Separation	Humboldt	1,447
31	Lima Ranch	\$744,350	\$1,114,696	The planned project revises current manure management by further processing the effluent through a system for the collection and processing of fine manure solids whereby the waste is effectively and efficiently converted to non-toxic, commercially viable products, thus eliminating GHGs along with other animal waste nuisances, and facilitating the reclamation of water from the new manure treatment process to thus conserve such water resources and allow them to be utilized in farming operations. The Figure 8 Environmental system takes dairy effluent first processed by the screen separator to remove large fibrous organic matter and injects a blend of coagulating agents, biopolymers, and polymers that facilitate the coagulation/flocculation of the fine organic matter and particulate VOCs and TSS. An LWR First Wave 85 HF system can process an estimated 9,765,020 gallons of flush lane deposited waste per year, 100-120 million gallons of recycled flush water recirculated through the flush system, and storm water that traverses the manured areas of the facility (24,766,536 gallons) annually. The project also produces 3,490 dry tons of nutrient rich compost per year.	Solid Separation	San Joaquin	16,287
32	LMT Investments	\$750,000	\$801,000	LMT Investments is proposing the construction of a compost bedded pack barn as an alternative manure treatment and storage practice through the AMMP Grant Program as a means to reduce methane emissions on the dairy facility. The conversion from freestall housing to a compost bedded pack barn will lead to a decrease in the amount of manure flushed into anaerobic storage ponds and thus reduce greenhouse gas emissions and reduce odor. With less manure being flushed to storage ponds, manure and urine will instead be combined with dry bedding and rotated frequently to create compost within the barn.	Compost Bedded Pack Barn	San Joaquin	3,415

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33	Machado Farms	\$749,829	\$1,081,024	The proposed project at Machado Farms is the construction of two compost bedded pack barns. The operator also wishes to have two barns so that a variety of housing densities studies can be completed on site; this allows the producer to determine what is the optimum density to house his animals, and the plan the construction of the barns for his remaining herd. Due to most of the studies regarding cow comfort, production, housing density, and barn management being conducted in the US Midwest, the producer is concerned that the climate differences may alter barn and herd performance. By relocating the milking animals to the pack barn, the manure formally going to the flush system, 1612.8 ft3 (12,064 gallons) will be eliminated from the lagoon waste stream.	Compost Bedded Pack Barn	Madera	12,315
34	Manuel Morris Dairy	\$339,212	\$339,212	The installation of a sloped screen separator system and stacking pad will be constructed adjacent to the two wastewater lagoons. This project will provide several benefits: reduction of greenhouse gases and odor, removal of excess nutrients from irrigation water, production of dry manure solids that can be readily composted, dried or spread as fertilizer or reused as bedding for cows. It will provide a system built with durable, high quality materials that will perform for many years with minimal maintenance. Groundwater will be protected from effluent coming from manure storage with a concrete stacking pad. All wastewater still draining from the separated solids will be diverted to the wastewater lagoon for storage. Storage capacity will be available for wastewater rather than manure solids.	Solid Separation	Stanislaus	8,239
35	Miranda Dairy	\$749,532	\$1,018,132	The Miranda Family Organic Dairy Methane and Fossil Fuel Emissions Reduction Project (Project) is a comprehensive upgrade to the manure management system on the dairy, and it is categorized primarily as conversion from uncovered holding, feeding, and loafing area to covered, secondary conversion from unseparated solids to a screw press separator system with in vessel composting, and third convert the milking and holding corral from a flush system to a scrape system. This project creates a sustainable manure management plan that will eliminate 2,550 gallons of diesel fuel use.	Flush-to-Scrape***	Humboldt	719
36	Mt. Whitney Dairy	\$671,193	\$711,028	Mt. Whitney Dairy seeks grant funding to convert a majority of its manure management from flush to scrape and reduce GHG emissions by diverting manure from entering the gravity separation system of lagoons and instead bringing it directly to a concrete slab for open solar drying utilizing a manure turner. The purpose of a concrete slab as opposed to an earthen area is to prevent potential ground water contamination. After being dried on the slab, the manure can be applied to the fields as nutrients for the crops that are grown to feed the operation's dairy cattle or be exported.	Flush-to-Scrape	Fresno	14,910

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37	Rainimade Dairy	\$749,820	\$1,188,883	The proposed project at Rainimade Dairy is to convert the full length of the central corrals to compost bedded pack barns. 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 78%. By utilizing the existing flush lanes, stanchions, and structures, the producer will also be limiting the GHG production from concrete production and transport, steel production and transport, and reducing other air quality impacts and GHG production from demoing and pouring virgin materials. In addition, 3.7 acres of manured areas on the facility will now be under roofs with drains that will divert storm water from the lagoon system. An additional 10% of the facilities area runoff will be diverted from the lagoon system, approximately 1 million gallons of water annually. 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.	Compost Bedded Pack Barn	Tulare	8,930
38	Renati Dairy	\$750,000	\$750,000	Renati Dairy proposes to connect three scraped freestall barns to an existing solid separator. The scrape lane will be extended and a cross gutter, with gutter scrapper, installed to move manure to the separator.	Flush-to-Scrape	Sonoma	2,548
39	Seifert Dairy	\$743,994	\$783,994	Installing a U.S. Farm Systems sloped screen separator system. Digging and cementing an octagon shaped agitation pit, this includes all necessary transfer pipelines to move the waste water to and from the separators. Forming and pouring concrete pads around the separator and for adjacent separated manure storage.	Solid Separation	San Joaquin	14,671
40	Sierra Vista Dairy	\$732,776	\$737,776	Replace existing low functioning mechanical separator with a ValMetal US Farms double curved/sloped screen separator with incline screw press and swing stacking conveyor belt. As well as a processing pit upgrade to allow for more efficient flushing activities, provide for cleaner lanes that dry faster and also convey the flush water at the proper velocity through the separator for maximum removal rates. Install a sand pit to add the additional feature of sand removal and lengthen the life span of the separator	Solid Separation	Stanislaus	10,517

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#*	Organization Name	CDFA Funding Award**	Total Project Cost	Project Description (as submitted by applicant)	Primary Management Practice***	County	GHG Emission Reduction (MTCO _{2e})****
41	Silva Brothers Dairy	\$746,801	\$776,801	Silva Brothers 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 US Farms Systems dual screen separator with a goal of removing 55%of the solids from the waste stream. A concrete sand trap and processing pit is also proposed as part of the project.	Solid Separation	San Joaquin	5,002
42	Silva Dairy Farms	\$750,000	\$814,240	Installation of a Houle 2 Stage Manure separator with roller press and concrete pad for composting activities, as well as cost sharing on site preparation activities and a John Deere tractor	Solid Separation	Merced	1,463
43	Silva Holstein Dairy	\$667,576	\$667,576	The Silva Holstein Dairy proposes to install a double curved/sloped screen separator system from ValMetal US Farms Systems and processing pit as an upgrade to the existing system which has reached the end of its lifespan. Also proposed, is a concrete manure pad for open solar drying and a Nuhn Alley Vac and scraper to skid steer attachment to allow for flush to scrape conversion of support stock flushing lanes. This will collect 100% of the manure generated in those areas and allow for open solar drying to eventual composting.	Solid Separation	Stanislaus	14,880
44	Toledo Dairy	\$509,141	\$516,141	Application for a grant for a solid separation system at Toledo Dairy Farm in Galt, California. Toledo Dairy is requesting to construct a solid manure separator to help California reach its stated future goal of methane reduction. Toledo Dairy is a family operation that has been operating since 1980 when it was started by John Toledo. Toledo Dairy is 100% committed in seeing this project through with partners such as US Farm Systems. We will work our hardest to ensure this project is completed efficiently and to the highest of environmental standards. We would like to thank the State of California for providing this opportunity to help the Dairy Industry Progress and look forward to possibly working together in the future.	Solid Separation	San Joaquin	2,546

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**Subject to change based upon budget evaluation by CDFA

***Indicated projected have proposed more than one practice

****Estimated greenhouse gas (GHG) reductions over 5-years have been revised during technical review of proposals using the [CARB Quantification Methodology tool](#). Actual GHG reductions may differ.

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45	Tony & Julie Jorge Dairy	\$271,549	\$271,549	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 an adjustable Mensch manure scraper twice per day. The collected manure will be transported to a 2500 ft ³ cement bunker style processing pit located at the termination point of the corrals on the southwest side of the feed lane. The screw press will be located on a raised stacking wall and 4000 ft ² stacking pad poured to initially collect dewatered solids. Solids will be moved to manure drying areas adjacent to the waste water storage pond and adjacent to the eastern corrals. After drying, the manure will be stockpiled for use as crop nutrients, spread on owned fields or exported to other producers. The project has several co-benefits from ROG, NO _x , PM _{2.5} and diesel PM decreases.	Flush-to-Scrape***	Kings	8,558
46	Tri Palm Dairy	\$749,894	\$749,894	The proposed project at Tri Palm Dairy is to convert a portion of the western corrals to compost bedded pack barns. The producer is also projecting that settling pit cleanout intervals will increase to every two years from once a year, 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. Extending the settling pond clean out intervals is projected to save 860 gallons of diesel annually from the increased interval based on the 5-day cleanout time, 8 hours a day, with 4 equipment pieces using 3 gallons per hour and the excavator using 9.5 gallons per hour. T By utilizing the existing flush lanes, stanchions, and structures, the producer will also be limiting the GHG production from concrete production and transport, steel production and transport, and reducing other air quality impacts and GHG production from demoing and pouring virgin materials	Compost Bedded Pack Barn	Tulare	4,545
47	Triple C Dairy	\$748,202	\$890,271	Triple C Dairy proposes to construct a new compost bedded pack barn to house a portion of the herd. Further, the compost barn and an existing freestall barn will be equipped with automatic scrapers, reducing the need for diesel-fueled manure handling. Manure from both barns will be processed by a new two-stage separator and intensively windrow composted.	Solid Separation***	Sonoma	2,140
48	Vaz Dairy	\$740,053	\$750,405	Vaz Dairy proposes to construct a compost bedded pack barn and switch some lanes from flush to scrape to reduce the amount of manure sent to the anaerobic manure storage lagoon, thereby reducing the Dairy's overall methane production from manure.	Compost Bedded Pack Barn***	Merced	5,407

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49	Wagner Dairy	\$749,764	\$1,252,633	The proposed project at Wagner Dairy is the construction of three compost bedded pack barns. By relocating the milking animals to the pack barn, the manure formally going to the flush system (1536 ft3 or 11490.08 gallons) will be eliminated from the lagoon waste stream. The project has several co-benefits from ROG, NOx., and PM2.5 decreases, as well as 2,675 dry tons of compost being produced under covers and not potentially rewetted by rainfall.	Compost Bedded Pack Barn	San Joaquin	19,016
50	Westwood Farms	\$749,698	\$1,058,201	The proposed project at Westwood Farms is to convert a portion of the western corrals to compost bedded pack barns. The producer is also projecting that settling pit clean out intervals will increase to 120 days from the current 60-day schedule, 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. Extending the settling pond clean out is projected to save 2,100 gallons of diesel use annually from the increased interval based on the 4-day clean out time, 8 hours a day, with 4 equipment pieces using 3 gallons per hour and the excavator using 9.5 gallons per hour. By utilizing the existing flush lanes, stanchions, and structures, the producer will also be limiting the GHG production from concrete production and transport, steel production and transport, and reducing other air quality impacts and GHG production from demoing and pouring virgin materials.	Compost Bedded Pack Barn	Tulare	20,422
Total		\$31,452,934	\$35,611,677				390,935

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