

**CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
2019 Alternative Manure Management Program
Applications Submitted to CDFA**

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APPLICANT ORGANIZATION	DESCRIPTION	MANAGEMENT PRACTICE(S)	REQUESTED GRANT FUNDS	MATCHING FUNDS	COUNTY	TOTAL EMISSION REDUCTION OVER 5 YEARS (MTCO ₂ e)
1 A&L Dairy	The proposed manure management project at A&L Dairy consists of installing 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. By capturing a large portion of the of the organic matter and total suspended solids prior to entry into the lagoon system, the project will reduce the production of greenhouse gasses. The project has several co-benefits from ROG, NOx., PM2.5 and diesel PM decreases due to the reduced heavy equipment usage for cleaning out the separation pond. Additionally, 700 gallons less of diesel is projected to be used per year as a result of better manure management.	Solid Separation	\$420,189	\$0	Tulare	5,586
2 Adamscows Dairy	The proposed project is to build a bedded pack compost barn, approximately 80 ft wide and 300 ft 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 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. The reduction in 24,575 gallons of diesel over 5 years results in large ROG, NOx, PM2.5, and Diesel PM reductions.	Alternative Manure Treatment and Storage	\$530,261	\$34,000	Fresno	408
3 Alfred Soares Dairy	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	\$750,000	\$136,593	Madera	13,307
4 Alves Dairy	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 run off 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	\$209,165	\$6,000	Glenn	4,400
5 Andrew Zylstra Dairy 2	Mechanical Separator for Andrew Zylstra Dairy 2.	Solid Separation	\$444,491	\$25,000	Stanislaus	7,847

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6 Antone L Gomes & Sons Dairy	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 results	Solid Separation	\$665,119	\$0	Stanislaus	4,341
7 Antonio Nunes Dairy	The Antonio Nunes Dairy is proposing to install a mechanical solid manure separator to an existing flush manure system.	Solid Separation	\$507,759	\$5,407	Merced	4,836
8 Azevedo Dairy #2	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	\$749,999	\$12,832	Merced	3,083
9 Azevedo Dairy #4	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	\$677,909	\$0	Merced	3,274
10 B6 Dairy	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.	Alternative Manure Treatment and Storage	\$647,600	\$25,000	Merced	10,127

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11 Beretta Dairy	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	\$609,303	\$0	Sonoma	1,468
12 Bivalve Dairy	Bivalve Dairy proposes to convert their flush barn to a scrape barn and compost solids with an in-vessel composteur. 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 composteur. 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 composteur. This project will preserve fresh water, currently used for flushing, and reduce greenhouse gas emissions from the manure lagoon.	Conversion from Flush to Scrape	\$365,157	\$254,565	Marin	3,171
13 Blue Sky Dairy	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	\$749,906	\$18,788	Merced	12,431
14 Blue Sky Dairy #2	Two Bedded pack barns to eliminate the need for flushing, total coverage of production area, heifer housing, scrape only, easier manure management.	Conversion from Flush to Scrape	\$749,999	\$11,250	Merced	0
15 Borba Heifer Ranch	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.	Conversion from Flush to Scrape	\$627,679	\$77,488	San Joaquin	21,329

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16 Brinderio & Danbom Dairy Farms	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 ft ³) from the system entirely, further reducing the GHG production for the facility. The project has several co-benefits from ROG, NO _x , PM _{2.5} and diesel PM decreases, as well as 1123 dry tons of compost being produced that will be available to be exported.	Solid Separation	\$565,470	\$0	Stanislaus	10,855
17 Cahill Dairy	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.	Alternative Manure Treatment and Storage	\$746,418	\$362,453	Humboldt	3,177
18 California Cloverleaf Farms	California Cloverleaf Farms is applying for the AMMP for a conversion from flush to scrape. California Cloverleaf Farms is proposing to construct a compost bedded pack barn over existing feed lanes and open bedded pack areas where dairy cows are supplemented with feed. Feed lanes that currently deliver waste directly into the wastewater storage pond are proposed to instead be scraped to a proposed concrete stacking pad measuring 75' W x 200' L. A compost bedded pack barn is an essential component of this project in order to house the herd in a clean / dry environment. Without the benefit of this barn, manure within the pen would not be able to be maintained in a dry non-anaerobic state. The conversion from flush to scrape and construction of a compost bedded pack barn will lead to a decrease in the amount of manure directed into anaerobic storage ponds and thus reduce greenhouse gas emissions and reduce odor. With less manure being directed to storage ponds, manure and urine will instead be combined with dry bedding and incorporated frequently to create compost within the barn.	Conversion from Flush to Scrape	\$747,650	\$2,300	Merced	2,309
19 Cardoso and Sons Dairy	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	\$711,899	\$0	Merced	9,403
20 Carvalho Dairy	The Carvalho Dairy is proposing to build 2 compost bedded pack barns to reduce manure methane emissions.	Alternative Manure Treatment and Storage	\$301,358	\$25,000	Stanislaus	2,315

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21 Caton Farms	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.	Alternative Manure Treatment and Storage	\$559,800	\$2,800	San Joaquin	7,748
22 Coppini Lane Jerseys	Our project is designed with the intent to significantly increase our milking strings time on pasture during the 8 month grazing season. We propose to build a new milking barn, that will replace the current structure built in 1948. The existing barn has become increasingly inefficient over the last 70 years. The current setup allows us to milk 12 cows at one time, and this process takes up to 6 hours two times per day. Our herd is on the concrete facility for 12 hours per day for milking, and manure produced during this time must be sent to the lagoon where it is stored under anaerobic conditions. By constructing a more efficient barn we will be able to decrease milking time, therefore increasing the herd's time on pasture. This will also decrease the amount of time and fuel necessary for our manure management program.	Pasture-Based Management	\$749,975	\$177,331	Humboldt	1,485
23 Correia Dairy	Correia Dairy proposes to construct a new reception pit to divert scraped manure to a screw press solid separator. Separated solids will be composted using an in-vessel composter and the compost stored for use as bedding material.	Solid Separation	\$750,000	\$0	Sonoma	1,726
24 Creekside Dairy (Mark & Gina VanderPoel)	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	\$611,642	\$0	Tulare	9,150
25 DaSilva Dairy Farms L.P., Dairy #2	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 well being of cows and workers.	Solid Separation	\$469,989	\$26,522	San Joaquin	19,078

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26 Davis Cattle Company	This project is to distribute manure from holding pens and spread manure on the fields to dry out the manure and then take a meadow drag and break up the manure across the fields. This would help get rid of green house gases and help produce more grass which in turn could keep the cattle out on the pastures for longer periods of time and less time in the holding pens.	Pasture-Based Management	\$135,420	\$0	Modoc	43
27 Del Arco Dairy	The proposed manure management system includes installing 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 for the eastern barn, and a newly constructed collection box, pump, and pipeline from the western corrals. A processing pit will be constructed between the western open lot corrals and Pond #3 and collect all flushed effluent for the dairy. The effluent will be processed through a US Farms Systems sloped screen separator with secondary dewatering screw press instead of being directly discharged into the two separating lagoons. The Gorzeman family is confident that by adding the slope screen separator combined with the screw press to rapidly dewater separated solids and then spreading the material for further drying, maximum GHG reductions can be achieved. The proposed system will eliminate the need for lagoon excavation, significantly reducing the need to run multiple pieces of heavy equipment, reducing the vehicle GHG production to manage manure. The project has several co-benefits from ROG, NOx., PM2.5 and diesel PM decreases.	Solid Separation	\$391,193	\$0	Tulare	8,853
28 Deolinda & Carlos Lopes Trust Dairy	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 green house gases.	Solid Separation	\$288,610	\$0	Merced	3,544
29 Diamond M Dairy	Diamond M Dairy proposes to construct a compost bedded pack barn for lactating cows.	Alternative Manure Treatment and Storage	\$743,017	\$0	Sonoma	604
30 Diamond M Valley Dairy	Diamond M Valley Dairy proposes to install a manure separator and in-vessel composter, reducing the amount of manure entering the manure lagoon. The dairy also proposes to concrete animal pathways to improve pasture access during wet conditions.	Solid Separation	\$729,054	\$0	Sonoma	1,341

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31 Diamond Point Dairy (Diamond R Ranch)	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.	Alternative Manure Treatment and Storage	\$749,933	\$229,840	Humboldt	1,268
32 Droogh Dairy	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. Research has indicated up to 95% of total suspended solids can be removed through a properly sized system and injection rates. 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	\$723,208	\$0	Kings	22,913
33 DS Farms LP	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	\$499,994	\$37,509	San Joaquin	24,426
34 Ed Souza & Son	The project is the implementation and replacement of a solid manure separation system to remove solid manure from the flush stream prior to entering the storage lagoon.	Solid Separation	\$300,819	\$0	Tulare	2,041
35 Fernjo Farms	This proposed project for Fernjo Farms, combines the use of a solid mechanical manure separator on existing flushed freestall barns, and the conversion of several flushed / scraped wet manure handling housing/ lanes to vacuum of manure solids with solar drying. The manure solids from the proposed solid mechanical separator will be further dried and stored on large proposed concrete slab. Some of which will be reused as bedding, with the balance being exported to a neighboring composting facility. All dry cows, heifers, and balance of milk cows housed in open corals and loose housing will be converted from flush/scrape to scrape when dry and proposed vacuum when wet/semi-wet. The wet and semi wet manure solids will then be transported to existing and (large proposed in this project), concrete drying pads. All of these solids will as well be exported to neighboring composting facility. The proposed vacuum truck will also give us the ability to periodically vacuum flushed freestall barns during the summer months when we have more drying time. The total project should result in a significant reduction of wet solids in our lagoons.	Solid Separation	\$726,922	\$30,000	Tulare	45,741

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36 Frank and Carol Borba Dairy	Installation of a 2 Stage Houle Mechanical Separator with roller press, processing pit and concrete pad for composting activities. The mechanical separator will reduce the manure generated in our flushing freestall housing and flush lanes from entering our storage ponds by 40%. The processing pit will allow for cleaner and more efficient flushing activities, and also conveyance of the flush water through the separator at the proper velocity for maximum separation efficiency. The concrete pad for composting will allow for a larger area of composting, than what currently exists.	Solid Separation	\$673,284	\$0	San Joaquin	10,364
37 Frank N. Rocha Dairy	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.	Alternative Manure Treatment and Storage	\$645,600	\$50,000	San Joaquin	10,358
38 Gawne Organic Dairy	A Two-Stage mechanical manure separator with a roller press along with manure stacking areas will be installed to provide several benefits: reduction of greenhouse gases and odor, removal of excess nutrients from irrigation/application water, production of manure solids that can be readily dried, spread, exported or used as bedding. This project will also help increase wastewater storage capacity in the existing lagoon and return basin by decreasing the solids scraped into storage. The concrete storage slabs will also help keep wastewater from leaching into the groundwater. Flush water will be directed to a processing pit prior to mechanical separation. The separation system uses a 1.5 HP motor for lower power consumption. Along with the mechanical separator and stacking pads, a manure spreader is being included to complete the manure management from Production Area to cropland.	Solid Separation	\$474,462	\$0	San Joaquin	1,141
39 Gentle Breeze Dairy	Installation of a ValMetal Us Farms Systems Mechanical separator and concrete composting pad. All manure generated and conveyed through our flushing lanes will be directed to the new separation system, with an anticipated reduction of solids from entering our storage ponds. The removed solids will be stored on the concrete pad for composting activities, preventing solids accumulation from occurring in our storage ponds causing greenhouse gases. Composting activities will dry the separated solids quicker and more efficiently, also reducing the production of greenhouse gases.	Solid Separation	\$384,591	\$0	Stanislaus	8,969
40 Ghidinelli Dairy	Ghidinelli Dairy's Albert's Dream Project is designed as a comprehensive upgrade to the dairy's manure management system and is characterized as a conversion from a scraped manure handling system to a compost bedded pack barn, daily manure hauling option, and composting in a passive windrow system. The Project includes construction of a 130 ft x 238 ft roof structure and concrete that will cover the existing uncovered loafing area, a significant portion of the feed alley, and 3/4 of the existing lagoon, and acquiring a 2018 Kuhn SL 124T-D0140 Manure Spreader to facilitate daily manure hauling.	Alternative Manure Treatment and Storage	\$646,387	\$7,500	Humboldt	400

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41 Gillian's Dairy	The Gillian's Dairy Compost Bedded Pack Barn Project in Sonoma County is designed as a final stage upgrade to the manure management system on the dairy, and it is categorized primarily as a conversion from a scrape manure handling system to a Compost Bedded Pack (CBP) barn. This project is well-aligned with other recent improvements including the construction of a 40-cow Deep Bedded Pack (DBP) barn in 2016 and the conversion of a 60-cow DBP barn in 2017 to a CBP with forced aeration system. By decommissioning the freestall barn and converting all remaining barn housing to compost bedded pack the dairy will significantly improve manure management and storage practices by providing the infrastructure needed to reduce volumes of manure solids to a more readily composted, stable nutrient product that can be applied to pastures. Gillian's Dairy is committed to the full installation of all project features. This project will position Gillian's Dairy to remain sustainable, help contribute to the effort to reduce GHG emissions in California, and continue to contribute to the economic strength of the dairy industry in California.	Alternative Manure Treatment and Storage	\$564,733	\$2,000	Sonoma	64
42 Godinho Heifer Ranch	We are proposing a combination of a solid separation and manure composting management practice at our heifer facility. The project will consist of a manure separator as the primary method to treat manure, the resulting manure will then be composted. The separator will reduce the amount of volatile solids entering the anaerobic lagoon and the resulting compost will be used in bedding to aid in cow comfort and/or exporting.	Solid Separation	\$629,214	\$10,023	Merced	2,741
43 Haringa Dairy	Project would include a new solid conveyer separator to replace the existing separator and a mixing pit to provide more consistent waste water going to the separator and to make it work more efficiently. Remove more solids before entering settling pond, reduce methane production, produce a dryer product for use as bedding material and compost material. Reduce time, cost and frequency of dredging and pumping sludge. Save diesel fuel, having to daily move separator solids to pile, extra drying.	Solid Separation	\$490,384	\$0	Stanislaus	8,567
44 Hath Dairy	Hath Dairy proposes to construct a compost bedded pack barn to manage manure through composting in the barn and scraping of the lanes instead of flushing to an anaerobic storage pond to reduce methane emissions from manure at the dairy.	Alternative Manure Treatment and Storage	\$722,420	\$23,598	Merced	4,812
45 Hillcrest Dairy LP	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 an 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 green house gases currently being produced, we propose to cost share on the tractor and alley vac equipment.	Solid Separation	\$750,000	\$132,638	Merced	27,648

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46 James Jongsma Dairy	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	\$727,508	\$0	Tulare	2,719
47 Jesse & James Jongsma Dairy	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	\$750,000	\$66,117	Tulare	16,795
48 John Mendonca & Son Dairy	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.	Solid Separation	\$536,048	\$0	Tulare	3,926
49 Jordao Dairy	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	\$750,000	\$41,951	Stanislaus	10,459
50 KB Dairy	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	\$613,156	\$65,000	Stanislaus	19,693

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51 Langworth Dairy	A Two-Stage liquid/solid manure separator with solar drying in windrows on a concrete pad, will be installed to provide several benefits: reduction of greenhouse gases and odor, removal of excess nutrients from irrigation/application water and production of dry manure solids which will be readily dried, exported as a fertilizer source or reused as bedding. This project will provide a system built with durable, high quality materials that will perform for many years with minimal maintenance. The Stacking pad will provide a non-permeable area for the separated solids to dry as the excess liquids are diverted to the storage lagoons rather than leached into the surrounding ground.	Solid Separation	\$331,416	\$0	Stanislaus	4,246
52 Lemstra Cattle Company	The proposed project at Lemstra Dairy is to convert a portion of the western corrals to compost bedded pack barns. The project has several co-benefits from ROG, NOx., PM2.5, 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.	Alternative Manure Treatment and Storage	\$729,761	\$10,000	Kings	14,024
53 Leonardi Dairy	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	\$159,267	\$0	Humboldt	1,447
54 Lima Ranch	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. Research has indicated up to 95% of total suspended solids can be removed through a properly sized system and injection rates. 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	\$744,350	\$370,346	San Joaquin	33,726
55 LMT Investments	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.	Alternative Manure Treatment and Storage	\$750,000	\$51,000	Stanislaus	3,415

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56 Machado Farms	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 ft ³ (12,064 gallons) will be eliminated from the lagoon waste stream. By removing 27% of the potential methane producing manure from the lagoon system, the project will also have several co-benefits from ROG, NOx., PM2.5 and diesel PM decreases, as well as 2140 dry tons of compost being produced under covers and not potentially rewetted by rainfall.	Alternative Manure Treatment and Storage	\$749,829	\$331,195	Madera	12,315
57 Mancebo Holsteins #3	Changing operation from a daily flush system to a vacuum and scrape style of manure management.	Conversion from Flush to Scrape	\$210,026	\$0	Tulare	2,453
58 Manuel Morris Dairy	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	\$339,212	\$0	Stanislaus	22,234
59 Martins View Jersey Dairy	Install a Houle 2 Stage Mechanical Separator with roller press with anticipation of 40% reduction of solids. Installation of processing pit for flushing activities to provide cleaner and quicker flushing activities. Installation of a concrete pad, purchase of a New Holland tractor with 12 foot composter to begin composting activities. All with the intention of significant reduction in Green House Gases currently produced.	Solid Separation	\$750,000	\$39,625	Merced	7,655
60 Mclsaac Dairy	We would construct a 12' high x 18' diameter octagon shaped reception pit. The engineered reception pit will be constructed of cement reinforced by rebar. The manure will then be pumped out of the reception pit into a new piece of equipment called a BRU400. The BRU400 will come completely ready to be plugged in and contained within a container. The BRU will turn our liquid manure into dry compost each day. The excess water will then return back to the existing manure pit to later be applied to our fields. The dry manure will be stored in a newly construct a 100 x 200 free span barn to keep the manure dry. This barn will have a curb and cement base to contain any run off and improve our manure handling. We are also requesting funds for a compost turner that will be utilized to compost the manure coming from all of our dry and young stock animals.	Solid Separation	\$749,745	\$5,200	Sonoma	1,793

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61 Medeiros Dairy Inc	We would like funding for a 4000 Gallon Ally Vac Liquid manure spreader which would improve the manure management at our dairy along with a manure drying slab to keep us compliant with the Water Board.	Conversion from Flush to Scrape	\$297,380	\$0	Fresno	23,242
62 Mel-Tina Dairy	We would like to change to scrape freestalls instead of flush but need a Ally Vac Liquid Manure Spreader to make that possible.	Conversion from Flush to Scrape	\$99,500	\$0	Fresno	10,346
63 Miranda Dairy	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.	Conversion from Flush to Scrape	\$749,532	\$268,600	Humboldt	719
64 Mt. Whitney Dairy	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.	Conversion from Flush to Scrape	\$671,193	\$39,835	Fresno	14,910
65 Nissen Dairy	Installation of a processing pit and single sloped screen separator with screw press. This project will help minimize the dairy's environmental impact by removing a significant amount of volatile solids before entering the anaerobic environment of settling basins and lagoons.	Solid Separation	\$385,082	\$0	San Joaquin	2,707

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66 O & S Holsteins	O & S Holsteins will install a dairy manure solid separation and treatment system on its dairy close to the lagoon/manure collection pit. This system will have the ability to treat all manure created by lactating cows. The result of installation of this system at other dairies has demonstrated reduction of methane production.	Solid Separation	\$708,574	\$52,085	Riverside	5,206
67 Pareira Dairy	Pareira Dairy proposes to install a mechanical solid manure separator to remove some of the solid manure from the flush water before it enters the anaerobic storage lagoon to reduce the amount of manure methane produced at the dairy.	Solid Separation	\$700,547	\$8,000	Merced	3,735
68 Pedretti Ranches	Pedretti Ranches is looking to add a US Farm System Curved and Slope Screen Separator to their 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 a belt driven stationary agitator pump to stir the processing pit and pump the flush water into the separator. To support the separator system a concrete pedestal will need to be built along with electrical upgrades. We will be solar drying the manure after its gone through the manure separator and are applying for a HCL windrow compost turner to improve the efficiency. Pedretti Ranches is hoping to improve the sustainability of our dairy operation.	Solid Separation	\$339,006	\$27,765	Merced	2,885
69 Rainimade Dairy	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 anerobic conditions by 78%. The producer is also projecting that separator manure transfer equipment reduction will reduce the amount of diesel used by 10%. The reduced diesel usage and improved manure management will reduce ROG, NOx, PM2.5 and Diesel PM emissions from the dairy. 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 demoino 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.	Alternative Manure Treatment and Storage	\$749,820	\$439,063	Tulare	8,930
70 Renati Dairy	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.	Solid Separation	\$750,000	\$0	Sonoma	2,548

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71 Robert Giacomini Dairy	Robert Giacomini Dairy proposes to install secondary separation and an in-vessel composters. This project will reduce diesel usage on the farm from composting manure solids.	Alternative Manure Treatment and Storage	\$523,714	\$0	Marin	190
72 Sarvinski Dairy	The Sarvinski Dairy Methane and Fossil Fuel Emissions Reduction Project is a comprehensive upgrade to the manure management system on the dairy, and it is categorized primarily as conversion from a scraped and flushed manure handling system to an increased pasture time and solid manure separation and composting system. This project creates a sustainable manure management plan that will eliminate 21,590 gallons of diesel fuel use, reduce manure stored in anerobic conditions by approximately 80%.	Alternative Manure Treatment and Storage	\$749,982	\$199,391	Humboldt	934
73 SB Farms, aka Silva Brothers Dairy	A Liquid-Solid System with a concrete stacking pad is planned for the Alternative Manure Management Program project. Installation of the mechanical separation system and stacking pad will increase the marketability of the separated solids as an exportable commodity to be used in nutrient application to fields. Solids leaving the separator system have an even consistency and nutrient load compared to the stacked manure without processing. The separation process will also take out more solids from the effluent making it a more usable source of nutrients for the existing cropland. This project will also provide several other benefits: reduction of greenhouse gasses and odor, production of manure solids that can be readily dried, spread as fertilizer or used as quality bedding for the cows.	Solid Separation	\$750,000	\$36,583	Sacramento	10,966
74 Seifert Dairy	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	\$743,994	\$40,000	San Joaquin	14,671
75 Sierra Vista Dairy	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	\$732,776	\$5,000	Merced	10,517

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76 Silva Brothers Dairy	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	\$746,801	\$30,000	San Joaquin	11,195
77 Silva Dairy Farms Heifer Facility	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	\$750,000	\$64,240	Merced	4,076
78 Silva Holstein Dairy	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 it's 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	\$667,576	\$0	Stanislaus	14,880
79 Soares Dairy Farms Inc - Badger Flat Dairy	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.	Alternative Manure Treatment and Storage	\$710,618	\$0	Merced	5,338
80 Soares Dairy Farms Inc-Merced Springs Dairy	Installation of two compost bedded pack barns over an existing corral to allow for transfer of milk cows in open lots to the compost bedded pack barn where dry scraping will occur.	Alternative Manure Treatment and Storage	\$628,936	\$0	Merced	567

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81 Toledo Dairy	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	\$509,141	\$7,000	San Joaquin	2,546
82 Tony & Julie Jorge Dairy	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.	Conversion from Flush to Scrape	\$271,549	\$0	Tulare	8,558
83 Tri Palm Dairy	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. The reduced diesel usage and improved manure management will reduce ROG, NO _x , PM _{2.5} and Diesel PM emissions from the dairy. 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	Alternative Manure Treatment and Storage	\$749,894	\$0	Tulare	4,545
84 Triple C Dairy	Triple C Dairy proposes to construct a new compost bedded pack barn to house a portion of the herd. Further, a 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	\$748,202	\$142,069	Sonoma	2,140
85 Vanden Berge Dairy	Add a mechanical separator and screw press to an existing open lot dairy. This new equipment will keep solid manure from entering the existing lagoon.	Solid Separation	\$585,695	\$0	Kern	15,370

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86 Vaz Dairy Compost	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.	Alternative Manure Treatment and Storage	\$740,053	\$10,352	Merced	5,407
87 Vevoda Dairy	The Humboldt Manure Injection Project is designed as a comprehensive upgrade to the manure management system on the dairy and includes a new solid separation system that will achieve a significantly higher separation efficiency than the old existing solid separator system. The proposed installation of the sloped screen separator system 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; and provide a system built with durable, high quality materials that will perform for many years with minimal maintenance. The project also proposes to increase pasture time by installing an improved manure handling system.	Solid Separation	\$749,865	\$1,000	Humboldt	1,921
88 Volpi Ranch	Volpi Ranch proposes to construct perimeter fencing, allowing for pasture access to lactating goats. They will also construct a composting facility to intensively compost bedding/manure material.	Pasture-Based Management	\$749,999	\$21,089	Marin	507
89 Wagner Dairy	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 formerly going to the flush system (1536 ft ³ or 11490.08 gallons) will be eliminated from the lagoon waste stream. The project has several co-benefits from ROG, NO _x , and PM _{2.5} decreases, as well as 2,675 dry tons of compost being produced under covers and not potentially rewetted by rainfall.	Alternative Manure Treatment and Storage	\$749,764	\$502,869	San Joaquin	19,016
90 Westwood Farms	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. The reduced diesel usage and improved manure management will reduce ROG, NO _x , PM _{2.5} and Diesel PM emissions from the dairy. 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.	Alternative Manure Treatment and Storage	\$749,698	\$308,503	Tulare	20,422

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91	York Ranch	This project is to distribute manure from holding pens and spread manure on the fields to dry out the manure and then take a meadow drag and break up the manure across the fields. This would help get rid of green house gases and help produce more grass which in turn could keep the cattle out on the pastures for longer periods of time and less time in the holding pens. This also aids in reduction of soil breakdown and erosion.	Pasture-Based Management	\$444,435	\$0	Modoc	643

\$54,581,626 \$4,910,315