

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
2024 Dairy Plus Program
Applications Submitted to CDFA

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** Total GHG emission reduction is estimated by the applicant and has not been verified. If the application is a new AMMP/DDRDP, the GHG emission reductions represent the Dairy Plus Program + AMMP/DDRDP GHG emission reductions combined.

#	Project Title	Application Category	Project Description*	County	GHG Emission Reduction Life of Project (MTCO ₂ e)**	Annual GHG Emission Reduction (MTCO ₂ e)**	Requested Grant Funds	Matching Funds	Primary Management Practice
1	Antonio Brasil Dairy LP Advanced Solid-Liquid Separation Assisted by Flocculants	Dairy Plus application only, for an operation with a past completed AMMP project	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) to improve separation efficiency to reduce Green House Gases.	Merced	16,807	3,361	\$ 852,842.25	\$ 750,000.00	Advanced solid-liquid separation assisted by flocculants and/or bead filters
2	Art Silva Dairy Vermifiltration Project	Dairy Plus application only, for an operation with a past completed AMMP project	The Art Silva Dairy is proposing a Dairy Plus project to install a vermifiltration treatment system at its facility in Stanislaus County to treat all the liquid manure produced daily. The dairy currently collects manure by flushing freestall barns, parlor, and feed lanes into the open lots. The dairy has a mechanical solid-liquid separation system and stores flushed manure in anaerobic lagoons, generating significant methane and ammonia emissions. The proposed vermifiltration system will treat all the dairy's daily liquid manure. The vermifilter unit operates simultaneously as a solids separator, a manure treatment system, and as a nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure, volatile solids, and nitrogen will be stored anaerobically. Therefore, vermifiltration will significantly reduce the dairy's greenhouse gas emissions generated by the current manure management system. Specifically, vermifiltration will greatly reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salt to the soils, as well as reduce the consequent risks of groundwater pollution. Additionally, the vermifiltration system will decrease odors at the dairy and will transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to cropland soils.	Stanislaus	22,545	4,509	\$ 1,249,995.00	\$ 3,450,950.00	Vermifiltration
3	Borba Dairy Farms LP Advanced Solid-Liquid Separation Assisted by Flocculants	New project in conjunction with a 2024 AMMP application	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) to improve separation efficiency to reduce Green House Gases.	Merced	24,157	4,831	\$ 1,250,000.00	\$ 334,874.38	Advanced solid-liquid separation assisted by flocculants and/or bead filters
4	Bosch Dairy Farms Advanced Solid Liquid Separation assisted w/flocculants	New project in conjunction with a 2024 AMMP application	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) to improve separation efficiency to reduce Green House Gases.	Tulare	14,502	2,900	\$ 916,500.00	\$ 58,106.00	Advanced solid-liquid separation assisted by flocculants and/or bead filters
5	C. David Vander Eyk Dairy #1 Vermifiltration Project	New project in conjunction with a 2024 AMMP application	David Vander Eyk proposes to install a vermifiltration treatment system to treat the liquid manure produced daily at two of his dairies in Tulare County. The dairies currently collect manure by flushing parlors and feed lanes in the open lots. Both dairies lack mechanical solid-liquid separation and store flushed manure in anaerobic lagoons, generating significant methane and ammonia emissions. The vermifiltration system acts simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure volatile solids and nitrogen will be stored anaerobically. Therefore, vermifiltration will significantly reduce the dairy's methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salt to soils and consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors. Finally, the vermifiltration treatment will transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Tulare	28,889	5,778	\$ 1,249,995.00	\$ 4,204,156.00	Vermifiltration
6	Correia Family Dairy LP Advanced Solid-Liquid Separation Assisted by Flocculants	Dairy Plus application only, for an operation with a past completed AMMP project	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) to improve separation efficiency to reduce Green House Gases.	Merced	16,662	3,332	\$ 907,494.75	\$ 750,000.00	Advanced solid-liquid separation assisted by flocculants and/or bead filters
7	Countyline LLC Vermifiltration Project	New project in conjunction with a 2024 AMMP application	The project proposes to install a vermifiltration treatment system at the dairy Countyline LLC in Tulare County to treat all the dairy's liquid manure produced daily. The manure produced by the cows is flushed from the freestalls, feeding lanes of the open lots, and milking parlor. The dairy has an old and inefficient mechanical solid-liquid separation system, and flushed manure is stored in anaerobic lagoons generating significant methane and ammonia emissions. The vermifilter unit would operate simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure volatile solids and nitrogen will be stored anaerobically. Therefore, vermifiltration will reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salts to soils and the consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors and transform the manure into nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to cropland soils.	Stanislaus	37,485	7,497	\$ 1,249,995.00	\$ 2,094,387.00	Vermifiltration
8	Cross A Dairy Plus Enhancement Project	New project in conjunction with a 2024 AMMP application	The planned project revises the current manure management handling at Cross A Dairy by processing the effluent through a new system for the collection and separation of manure solids with the aid of flocculants. The process will pick up after the AMMP funded separation system enhancement, with effluent pumped to a new equalization pit to the west of the main holding lagoon. The EQ pit will be connected so that treated water can be transferred between the flush pit and the EQ pit and allow for recycling of the polymer treated water into the flush water to ensure that it is fully utilized prior to discharge to the lagoon system. The current flush system will remain in place, and cycle LWR treated water, and flush water prior to being run through the primary separation system. In addition the main lagoon will be piped into the system and will allow for lagoon water to be pumped into the treatment system to reduce the nutrient load in the lagoon water that previous treatment missed.	Stanislaus	14,178	2,836	\$ 1,250,000.00	\$ 70,127.91	Advanced solid-liquid separation assisted by flocculants and/or bead filters
9	Diamond L Milk and Trinity C Vermifiltration Project	New project in conjunction with a 2024 AMMP application	Diamond L Milk Company proposes installing a vermifiltration treatment system to process the daily liquid manure collected from their dairy and the adjoining Trinity Cattle Company. Currently, both dairies flush manure from freestalls, the feeding lanes of the open lots, and the milking parlor. Both lack mechanical solid-liquid separation and store manure water in anaerobic lagoons, generating significant methane and ammonia emissions. The vermifilter would operate simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the volatile solids and nitrogen collected daily in liquid manure will enter the long-term storage lagoon. Therefore, vermifiltration will significantly reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. The vermifiltration-treated water will be used for irrigation, decreasing the application of nitrogen to surrounding crop fields and consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors and will transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Tulare	14,080	2,816	\$ 1,249,995.00	\$ 958,729.00	Vermifiltration
10	Advanced Solid-Liquid Separation with Flocculation for Manure Management	New project in conjunction with a 2024 AMMP application	The manure collection method currently utilized at this facility is flushing using pressurized water twice a day, in the morning and evening, and summer corrals are scraped two times per year. The average wet manure production. The AMMP project proposed for this dairy includes construction of compost bedded pack barn which will reduce the manure water discharge and methane emission. To further enhance the environmental benefits, we are proposing to USDA Dairy plus program to install Advanced Solid-liquid separator with flocculation and we are keen to implement the nutrient and water management plan at the facility. The new program will enable the DK Dairy farm to save Greenhouse Gas emission. In addition, the use of LWR system will enable the dairy to collect the solids, produce clean water which can be recycled. The solids will be utilized by applying to the fields following the Nutrient Management plan to improve the water and soil quality, prevent ground water pollution and air pollution,	San Joaquin	5,064	1,013	\$ 1,249,652.00	\$ 448,397.68	Advanced solid-liquid separation assisted by flocculants and/or bead filters

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11	Double B Dairy Vermifiltration Project	Dairy Plus application only, for an operation with a past completed AMMP project	The Double B Dairy proposes to install a vermifiltration treatment system to treat all the liquid manure produced daily at the dairy. The dairy's cows are housed in freestall barns with exercise pens, and manure is flushed from the feeding and walking lanes and milking parlor. The dairy has an AMMP-funded mechanical solid-liquid separation system and stores liquid manure in anaerobic lagoons, generating significant methane and ammonia emissions. The vermifiltration system would operate simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure, volatile solids, and nitrogen will be stored anaerobically. Therefore, vermifiltration will reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salts to soils and the consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors and transform the manure into nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Merced	21,434	4,287	\$ 1,034,995.00	\$ 1,590,073.00	Vermifiltration
12	Dragt Dairy Farms Vermifiltration Project	New project in conjunction with a 2024 AMMP application	The Dragt Dairy Farms DBA Milk Maid Dairy proposes a Dairy Plus project of installing a vermifiltration treatment system at the dairy in Tulare County to treat all the liquid manure produced daily. All the dairy's cows are housed in open lot barns, and manure is flushed from the feeding lanes and milking parlor. The dairy lacks mechanical solid-liquid separation, and flushed manure is stored in anaerobic lagoons, generating significant methane and ammonia emissions. The proposed vermifiltration system will treat all the liquid manure produced daily at the dairy. The vermifilter unit operates simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure volatile solids and nitrogen will be stored anaerobically. Therefore, vermifiltration will significantly reduce Dragt Dairy Farms greenhouse gas emissions generated by the current manure management system. Specifically, vermifiltration will greatly reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salt to soils and consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors. Finally, the vermifiltration treatment will transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Tulare	13,981	2,796	\$ 1,249,995.00	\$ 909,306.00	Vermifiltration
13	Advanced Solid-Liquid Separation with Flocculation for Manure Management	New project in conjunction with a 2024 AMMP application	The manure collection method currently utilized at this facility is flushing using pressurized water twice a day, in the morning and evening, and summer corrals are scraped two times per year. The average wet manure production. The AMMP project proposed for this dairy includes construction of compost bedded pack barn which will reduce the manure water discharge and methane emission. To further enhance the environmental benefits, we are proposing to USDA Dairy plus program to install Advanced Solid-liquid separator with flocculation and we are keen to implement the nutrient and water management plan at the facility. The new program will enable the F and C Borba Dairy farm to save Greenhouse Gas emission. In addition, the use of LWR system will enable the dairy to collect the solids, produce clean water which can be recycled. The solids will be utilized by applying to the fields following the Nutrient Management plan to improve the water and soil quality, prevent ground water pollution and air pollution.	San Joaquin	16,532	3,306	\$ 1,247,484.00	\$ 790,661.00	Advanced solid-liquid separation assisted by flocculants and/or bead filters
14	Fanelli Dairy Advanced Liquid Solid Separation assisted w/flocculants	New project in conjunction with a 2024 AMMP application	Fanelli Dairy proposes to construct a Livestock Water Recycling system from Figure 8 Environmental for advanced separation beyond the proposed AMMP project	Merced	15,898	3,180	\$ 1,246,663.00	\$ -	Advanced solid-liquid separation assisted by flocculants and/or bead filters
15	Fernjo Farms #1 Vermifiltration Project	New project in conjunction with a 2024 AMMP application	The Fernjo Farms #1 proposes a Dairy Plus project to install a vermifiltration treatment system at the dairy in Tulare County to treat all the liquid manure produced daily at the dairy. The dairy currently collects manure by flushing freestall barns, parlor, and feed lanes in the open lots. The dairy lacks mechanical solid-liquid separation and stores flushed manure in anaerobic lagoons, generating significant methane and ammonia emissions. The proposed vermifiltration system will treat all the liquid manure produced daily at the dairy. The vermifilter unit operates simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure volatile solids and nitrogen will be stored anaerobically. Therefore, vermifiltration will significantly reduce the dairy's greenhouse gas emissions generated by the current manure management system. Specifically, vermifiltration will greatly reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salts to soils and consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors. Finally, the vermifiltration treatment will transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Tulare	19,363	3,873	\$ 1,249,995.00	\$ 681,637.00	Vermifiltration
16	Flatland Dairy Vermifiltration Project	New project in conjunction with a 2024 AMMP application	The Flatland Dairy is applying to Dairy Plus to install a vermifiltration treatment system at the Kings County dairy to treat all the liquid manure produced daily. This proposed vermifiltration will significantly reduce the dairy's greenhouse gas emissions generated by the dairy's current manure management system. Flatland Dairy currently collects manure by flushing freestall barns, parlor, and feed lanes in the open lots. The dairy lacks mechanical solid-liquid separation and stores flushed manure in anaerobic lagoons, generating significant methane and ammonia emissions. The vermifiltration system would act simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure volatile solids and nitrogen would be stored anaerobically. Therefore, vermifiltration would greatly reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation would decrease the application of nitrogen and salt to soils and consequent risks of groundwater pollution. Additionally, the use of a vermifilter would decrease odors and transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Kings	16,826	3,365	\$ 1,249,995.00	\$ 648,319.00	Vermifiltration
17	Fred A Douma Dairy Separation Enhancement Project	New project in conjunction with a 2024 AMMP application	The planned project revises the current manure management handling at Fred A Douma by further processing the effluent through an updated system for the collection and processing of fine manure solids with the aid of flocculants. The system will be comprised of three stages: a mechanical sand separation stage, large fiber separation and drying, and flocculant separation. The collection system will be altered from the current system, all liquid will be collected in a new processing pit, which will also be used as the flush pit. Once the flush cycle is completed, the flush water collected in the pit will be sent through a Seditank AD 150 for the removal of sand and processed over 90135ss MK IV Separator Screens with 10 mesh (2mm). Each screen will discharge into a Model KP -16 screw press for further dewatering of the large fiber solids, which will be transported to a natural gas forced drying system to completely dry the manure for use in the freestall barn as bedding or go to be windrow composted for use as crop nutrients. After processing over the secondary slope screens, the remaining liquid will be discharged into an equalization tank to reduce the amount of polymer needed for effective flocculation and processed through the LWR First Wave 85HF polymer enhanced separation system. Water is separated from the manure solids by passing the coagulated/flocculated manure sludge over a progressive sloped screen where the solid-free water falls through and contains no more coagulated/flocculated particles. Processed wastewater is then recycled back to the flush pit for use in the next flush cycle, or into the lagoon system once the flush pit is full. The flocculated solid materials are then dewatered through a fan press, with the water being reprocessed through the system and discharged. The resulting nutrient "cake" is then a marketable crop nutrient product and can be exported and sold to surrounding farms to reduce nutrient loading on the dairy farm ground. The new separators, screw presses, fan press, and composting is projected to remove 15,077 mtCO ₂ e in comparison to the existing system. With the inclusion of the flocculant system being applied for in the Dairy Plus program, the combined systems will remove 40,579 mtCO ₂ e.	San Joaquin	24,795	4,959	\$ 1,250,000.00	\$ 273,121.94	Advanced solid-liquid separation assisted by flocculants and/or bead filters
18	Godinho Dairy LP Advanced liquid solids separation assisted with beads/flocculants	Dairy Plus application only, for an operation with a past completed AMMP project	Godinho Dairy LP installation and implementation of an advanced solid liquid separation system assisted with flocculants/beads filters known as the AST system and Trident system to improve separation efficiency and reduce greenhouse gases beyond its implemented AMMP project	Merced	43,176	8,635	\$ 1,250,000.00	\$ 913,710.35	Advanced solid-liquid separation assisted by flocculants and/or bead filters

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19	Goncalves Dairy Advanced Solid-Liquid Separation Assisted by Flocculants	New project in conjunction with a 2024 AMMP application	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) to improve separation efficiency to reduce Green House Gases.	Merced	4,872	974	\$ 947,250.00	\$ 299,197.97	Advanced solid-liquid separation assisted by flocculants and/or bead filters
20	J and A Dairy LLC Dairy Manure Management using Flocculant Polymers	New project in conjunction with a 2024 AMMP application	The planned project revises the current manure management handling at J and A Dairy LLC by processing the effluent through a new system for the collection and separation of manure solids with the aid of flocculants. The process will pick up after the AMMP funded separation system enhancement, with effluent pumped to a new equalization pit equalization pit to the west of the main holding lagoon. The EQ pit will be connected so that treated water can be transferred between the flush pit and the EQ pit and allow for recycling of the polymer treated water into the flush water to ensure that it is fully utilized prior to discharge to the lagoon system. The current flush system will remain in place, and cycle LWR treated water, and flush water prior to being run through the primary separation system. In addition the main lagoon will be piped into the system and will allow for lagoon water to be pumped into the treatment system to reduce the nutrient load in the lagoon water that previous treatment missed.	Kings	5,883	1,177	\$ 656,249.97	\$ 555,283.00	Advanced solid-liquid separation assisted by flocculants and/or bead filters
21	John Silveira Dairy Inc. Advanced Solid-Liquid Separation Assisted by Flocculants	Dairy Plus application only, for an operation with a past completed AMMP project	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) as well as a mechanical separator to work in conjunction with the already implemented AMMP weeping wall project to reduce green house gases.	Merced	25,653	5,131	\$ 907,494.75	\$ 750,000.00	Advanced solid-liquid separation assisted by flocculants and/or bead filters
22	Lawrence Family Farm Vermifiltration Project	Dairy Plus application only, for an operation with a past completed AMMP project	The Lawrence Family Farm project proposes to install a vermifiltration treatment system to treat all the liquid manure produced daily at the dairy. The dairy's cows are housed in open lot barns, and manure is flushed from the feeding lanes and milking parlor. The dairy has an AMMP-funded mechanical solid-liquid separation system and stores liquid manure in anaerobic lagoons, generating significant methane and ammonia emissions. The vermifiltration system would operate simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure, volatile solids, and nitrogen will be stored anaerobically. Therefore, vermifiltration will reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salts to soils and the consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors and transform the manure into nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Tulare	9,710	1,942	\$ 1,249,995.00	\$ 947,304.00	Vermifiltration
23	Maddox Dairy Vermifiltration Project	New project in conjunction with a 2024 AMMP application	The project proposes to install a vermifiltration treatment system at the Maddox Dairy in Fresno County to treat all the liquid manure produced daily at the dairy. The dairy currently collects most of the manure by flushing freestall barns housing most of the animals as well as flushing the parlor. The dairy has an old mechanical solid-liquid separation system running at 20% capacity, and stores flushed manure in an anaerobic lagoon, generating significant methane and ammonia emissions. The vermifiltration system operates simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure volatile solids and nitrogen will be stored anaerobically. Therefore, vermifiltration will reduce significantly the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salt to soils and consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors at the dairy and will transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Fresno	52,112	10,422	\$ 1,249,995.00	\$ 4,022,943.00	Vermifiltration
24	Mancebo Holstein Dairy Vermifiltration Project	New project in conjunction with a 2024 AMMP application	The Mancebo Holstein Dairy LP proposes to install a vermifiltration treatment system to treat all the liquid manure produced daily. All the dairy's cows are housed in open lot barns, and manure is flushed from the feeding lanes and milking parlor. The dairy lacks mechanical solid-liquid separation, and flushed manure is stored in anaerobic lagoons generating significant methane and ammonia emissions. The vermifilter unit operates simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure volatile solids and nitrogen will be stored anaerobically. Therefore, vermifiltration will greatly reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salts to soils and consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors. Finally, the vermifiltration treatment will transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Tulare	10,053	2,011	\$ 1,249,995.00	\$ 480,903.00	Vermifiltration
25	Medeiros Dairy Inc. Advanced Solids Liquid Separation assisted w/flocculants	New project in conjunction with a 2024 AMMP application	Medeiros Dairy Inc. proposed to install a Livestock Water Recycling system from Figure 8 Environmental to further reduce greenhouse gases and solids from conveying to the storage ponds, beyond an AMMP mechanical separator project	Fresno	9,116	1,823	\$ 1,250,000.00	\$ 307,521.00	Advanced solid-liquid separation assisted by flocculants and/or bead filters
26	Nunes Dairy Plus Weeping Wall 2024 (AMMP2019)	Dairy Plus application only, for an operation with a past completed AMMP project	Nunes Dairy, LP Dairy Plus Weeping Wall 2024 (AMMP2019) project will result in a total GHG reduction of 21,285 MTCO ₂ e after the implementation of an advanced automated weeping wall technology and implementing intensive composting windrows. The benefits beyond this technology include, but are not limited to, reduction in an estimated 83,510 gallons of diesel fuel, reduced nitrogen and salt on cropland and ground water around the dairy and the local disadvantaged community. The technology dramatically improves our nitrogen utilization capabilities, is simple and can be implemented on many small and mid-size dairies across the valley to further the goals of the CV-SALTS program and the Climate Smart goals of California to reduce GHGs.	Merced	21,285	4,257	\$ 1,249,506.38	\$ 868,251.24	Weeping wall (minimum of 2 cells)
27	Pacific Sun Dairy Vermifiltration Project	New project in conjunction with a 2024 AMMP application	The Pacific Sun Dairy proposes a Dairy Plus project of installing a vermifiltration treatment system at the dairy in Tulare County to treat all the liquid manure produced daily. The dairy currently flushes the parlor and feed lanes in the open lots. The dairy lacks mechanical solid-liquid separation and stores flushed manure in anaerobic lagoons, generating significant methane and ammonia emissions. The proposed vermifiltration system will treat all the liquid manure produced daily at the dairy. The vermifilter unit operates simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure volatile solids and nitrogen will be stored anaerobically. Therefore, vermifiltration will significantly reduce the dairy's greenhouse gas emissions generated by the current manure management system. Specifically, vermifiltration will greatly reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salt to soils and consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors. Finally, the vermifiltration treatment will transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Tulare	9,108	1,822	\$ 1,249,995.00	\$ 715,308.00	Vermifiltration
28	Rainimade Dairy #1 Vermifiltration Project	Dairy Plus application only, for an operation with a past completed AMMP project	Rainimade Dairy #1, established in 2012, is a family-owned farm operated by Brian and Katrina Rainey. The dairy is dedicated to producing high-quality dairy products with a strong focus on sustainability. Through environmentally conscious practices, the Raineys strive to offer fresh, locally sourced products for their community. The business employs a small team of 12 staff members and manages two operations: Rainimade Dairy #1 (Dairy #1) and its nearby counterpart, Rainimade Dairy #2 (Dairy #2), located just 0.6 miles away (Figure 1). Both dairies would be a part of this Dairy Plus project, with the Raineys serving as applicants. This project aims to enhance sustainability and nutrient management across both facilities.	Tulare	49,131	9,826	\$ 1,249,995.00	\$ 2,913,268.00	Vermifiltration
29	River Oak Dairy Plus Enhancement Project	New project in conjunction with a 2024 AMMP application	The planned project revises the proposed AMMP manure management handling at River Oaks Dairy by processing the effluent through a LWR First Wave PAM Separation System with the separation of manure solids. The collection and processing of manure solids with the aid of flocculants. The process will pick up after the AMMP funded separation system, with effluent discharged into a new 36"x36"x10" equalization pit. The two pits will be connected so that treated water can be transferred between the two and allow for recycling of the polymer treated water into the flush water to ensure that it is fully utilized prior to discharge to the lagoon system. The current flush system from lagoon 1 will remain in place, but not used as the primary supply of flush water. This will allow for lagoon water to be pumped into the treatment system to reduce the nutrient load in the lagoon water that previous treatment missed.	San Joaquin	24,332	4,866	\$ 1,250,000.00	\$ 179,195.16	Advanced solid-liquid separation assisted by flocculants and/or bead filters

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#	Project Title	Application Category	Project Description*	County	GHG Emission Reduction Life of Project (MTCO ₂ e)**	Annual GHG Emission Reduction (MTCO ₂ e)**	Requested Grant Funds	Matching Funds	Primary Management Practice
30	Rui & Jennifer Brasil Dairy Advanced Solid-Liquid Separation Assisted by Flocculants	New project in conjunction with a 2024 AMMP application	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) as well as two AgPro 12' mechanical separators with double roller presses to reduce Green House Gases.	Tulare	8,504	1,701	\$ 1,250,000.00	\$ 229,256.78	Advanced solid-liquid separation assisted by flocculants and/or bead filters
31	Silva Dairy Farms Advanced Solid-Liquid Separation Assisted by Flocculants	Dairy Plus application only, for an operation with a past completed AMMP project	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) to reduce Green House Gases beyond the already implemented AMMP mechanical separator project.	Merced	16,030	3,206	\$ 1,250,000.00	\$ 1,030,919.22	Advanced solid-liquid separation assisted by flocculants and/or bead filters
32	Silva's Holsteins Dairy #1 Advanced Solid-Liquid Separation Assisted by Flocculants	Dairy Plus application only, for an operation with a past completed AMMP project	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) to improve separation efficiency to reduce Green House Gases.	Stanislaus	10,407	2,081	\$ 1,250,000.00	\$ 800,831.72	Advanced solid-liquid separation assisted by flocculants and/or bead filters
33	Silvas Holsteins Dairy #2 Advanced Solid-Liquid Separation Assisted by Flocculants	New project in conjunction with a 2024 AMMP application	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) to improve separation efficiency to reduce Green House Gases.	Merced	14,053	2,811	\$ 1,250,000.00	\$ 173,086.78	Advanced solid-liquid separation assisted by flocculants and/or bead filters
34	Silveira Dairy Advanced Solid-Liquid Separation Assisted by Flocculants	Dairy Plus application only, for an operation with a past completed AMMP project	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) as well as a second sloped mechanical separator screen to improve separation efficiency to reduce Green House Gases beyond the already implemented AMMP mechanical separator project.	Madera	13,844	2,769	\$ 1,250,000.00	\$ 778,956.12	Advanced solid-liquid separation assisted by flocculants and/or bead filters
35	Soares and Sons Dairy LP 4 Vermifiltration Project	New project in conjunction with a 2024 AMMP application	The Soares and Sons Dairy LP 4 proposes to install a vermifiltration treatment system at the dairy located in Stanislaus County to treat all the liquid manure produced daily. The dairy currently collects manure by flushing freestall barns, parlor, and feed lanes in the open lots. The dairy lacks mechanical solid-liquid separation and only has partial gravity settling before storing flushed manure in anaerobic lagoons. This generates significant methane and ammonia emissions. The vermifiltration system will act simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of the dairy's liquid manure volatile solids and nitrogen will be stored anaerobically. Therefore, vermifiltration will significantly reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salt to soils and the consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors and transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Stanislaus	16,767	3,353	\$ 1,249,995.00	\$ 1,038,410.00	Vermifiltration
36	Soares Dairies LP Advanced Solid-Liquid Separation Assisted by Flocculants	New project in conjunction with a 2024 AMMP application	Installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) as well as two 8'x12' sloped screen mechanical separators to reduce Green House Gases.	Stanislaus	29,219	5,844	\$ 1,250,000.00	\$ 529,602.76	Advanced solid-liquid separation assisted by flocculants and/or bead filters
37	Solo Dairy Vermifiltration Project	New project in conjunction with a 2024 AMMP application	The Solo Dairy proposes a Dairy Plus project of installing a vermifiltration treatment system at the dairy in Kern County to treat all the liquid manure produced daily. The dairy currently flushes freestall barns, milk parlor, and feed lanes in the open lots. Solo Dairy has an old and inefficient mechanical solid-liquid separation system and stores flushed manure in anaerobic lagoons, generating significant methane and ammonia emissions. The proposed vermifiltration system will treat all the liquid manure collected daily at the Dairy. The vermifilter unit operates simultaneously as a solids separator, a manure treatment system, and nutrient removal and recovery technology. Once the proposed vermifiltration system is operational, only a fraction of Solo Dairy's liquid manure volatile solids and nitrogen will be stored anaerobically. Therefore, vermifiltration will significantly reduce the Dairy's greenhouse gas emissions generated by the current manure management system. Specifically, vermifiltration will greatly reduce the methane and ammonia emitted from the anaerobic long-term storage as well as the nitrous oxide emitted when lagoon water is used to irrigate crops. Using vermifiltration-treated water for irrigation will decrease the application of nitrogen and salt to soils and consequent risks of groundwater pollution. Additionally, the use of a vermifilter will decrease odors. Finally, the vermifiltration treatment will transform the manure into a nutrient-rich vermicompost that recovers valuable manure nutrients, increases soil health, and adds carbon to crop soils.	Kern	35	7	\$ 1,249,995.00	\$ 2,956,472.00	Vermifiltration
38	T&C Louters Dairy Plus Weeping Wall 2024 (AMMP2018)	Dairy Plus application only, for an operation with a past completed AMMP project	T&C Louters Dairy Plus Weeping Wall 2024 (AMMP2018) project will result in a total GHG reduction of 9,683 MTCO ₂ e and nearly 40,000 gallons of diesel after the implementation of an advanced automated weeping wall technology and implementing intensive composting windrows. The benefits beyond this technology include, but are not limited to, reduced nitrogen and salt on cropland and ground water around the dairy and the local disadvantaged community. The technology is simple and can be implemented on many small and mid-size dairies across the valley to further the goals of the CV-SALTS program and the Climate Smart goals of California to reduce GHGs.	Merced	9,683	1,937	\$ 705,401.12	\$ 705,791.75	Weeping wall (minimum of 2 cells)
39	Western Pacific Dairy Vermifiltration Project	Dairy Plus application only, for an operation with an in-progress AMMP project	Western Pacific Dairy is proposing a project to install a vermifiltration treatment system at the dairy in Tulare County to treat all the liquid manure produced daily. Currently, the dairy flushes manure from the parlor and feed lanes in open lots, storing it in anaerobic lagoons. This process, coupled with the absence of mechanical solid-liquid separation, contributes to significant methane emissions. The proposed vermifiltration system will act as a solids separator, manure treatment system, and nutrient removal and recovery technology. Once operational, the system will substantially lower the amount of volatile solids and nitrogen stored in lagoons, reducing methane and ammonia emissions. It will also lower nitrous oxide emissions when lagoon water is used for irrigation. By using vermifilter-treated water for irrigation, salt and nitrogen application to soils will decrease, mitigating the risk of groundwater pollution. Additionally, the vermifiltration process will reduce odors and transform manure into nutrient-rich vermicompost, a soil amendment that recovers valuable manure nutrients, increases soil health, and adds carbon to cropland soils.	Tulare	12,043	2,409	\$ 1,249,995.00	\$ 1,584,123.00	Vermifiltration
40	Westwood Farms, LLC. Dairy Plus Weeping Walls Project	Dairy Plus application only, for an operation with a past completed AMMP project	For our Advanced Manure Management Project through Dairy Plus, we are proposing to implement weeping wall separation to replace our existing settling basin. The Facility has a separator that was on site when the facility was purchased but has never worked reliably. We propose to demo the old separator and use its manure handling pad and its connections to the existing octagon flush pit to feed the 3 weeping wall cells	Tulare	18,409	3,682	\$ 1,250,000.00	\$ 893,152.00	Weeping wall (minimum of 2 cells)
41	Ackerman Dairy Inc. Post-Digester Advanced Solid-Liquid Separation Assisted by Flocculants	Dairy Plus application only, for an operation with a past completed DDRDP project	Ackerman Dairy Inc. Post-Digester installation and implementation of an Advanced Solid Liquid Separation System assisted by Flocculants known as the Livestock Water Recycling System (LWR) to improve separation efficiency to reduce Green House Gases.	Stanislaus	83,454	8,345	\$ 1,250,000.00	\$ 754,309.69	Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters

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#	Project Title	Application Category	Project Description*	County	GHG Emission Reduction Life of Project (MTCO ₂ e)**	Annual GHG Emission Reduction (MTCO ₂ e)**	Requested Grant Funds	Matching Funds	Primary Management Practice
42	Anchor J Dairy Digester Effluent Capture Project	New project in conjunction with a 2024 DDRDP application	The Anchor J Dairy Digester Effluent Capture Project will construct a post digestion decanter centrifuge for post digestion solid-liquid separation. The centrifuge will capture solids from the digester effluent and repurpose them. The centrifuge will be separating volatile solids that would normally go to lagoon storage and is making them far easier to manage and repurpose. The Anchor J Dairy Digester Effluent Capture Project is working in tandem with the DDRDP Anchor J Dairy Digester Project, as it will handle manure effluent from the Anchor J Dairy Digester.	Merced	176,032	17,603	\$ 1,250,000.00	\$ -	Post- digester centrifuge
43	Centralized Azevedo Dairy Digester Effluent Capture Project	New project in conjunction with a 2024 DDRDP application	The Centralized Azevedo Dairy Digester Effluent Capture Project will construct a post digestion decanter centrifuge for post digestion solid-liquid separation. The centrifuge will capture solids from the digester effluent and repurpose them. The centrifuge will be separating volatile solids that would normally go to lagoon storage and is making them far easier to manage and repurpose. The Centralized Azevedo Dairy Digester Effluent Capture Project is working in tandem with the DDRDP Centralized Azevedo Dairy Digester Project, as it will handle manure effluent from the Centralized Azevedo Dairy Digester.	Merced	142,429	14,243	\$ 1,250,000.00	\$ -	Post- digester centrifuge
44	Diamond D Dairy Digester Effluent Capture Project	New project in conjunction with a 2024 DDRDP application	The Diamond D Dairy Digester Effluent Capture Project will construct a post digestion decanter centrifuge for post digestion solid-liquid separation. The centrifuge will capture solids from the digester effluent and repurpose them. The centrifuge will be separating volatile solids that would normally go to lagoon storage and is making them far easier to manage and repurpose. The Diamond D Dairy Digester Effluent Capture Project is working in tandem with the DDRDP Diamond D Dairy Digester Project, as it will handle manure effluent from the Diamond Dairy Digester.	Kings	197,745	19,775	\$ 1,250,000.00	\$ -	Post- digester centrifuge
45	Centralized Silva Dairy Digester Effluent Capture Program	New project in conjunction with a 2024 DDRDP application	The Centralized Silva Dairy Digester Effluent Capture Project will construct a post digestion Livestock Water Recycling System (LWR) for post digestion solid-liquid separation. The LWR will capture solids from the digester effluent and repurpose them. The LWR will be separating volatile solids that would normally go to lagoon storage and is making them far easier to manage and repurpose. The Centralized Silva Dairy Digester Effluent Capture Project is working in tandem with the DDRDP Centralized Silva Dairy Digester Project, as it will handle manure effluent from the Centralized Silva Dairy Digester.	Merced	129,322	12,932	\$ 1,250,000.00	\$ -	Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters
46	Antonio Brasil Dairy LP Advanced Solid-Liquid Separation Assisted by Flocculants	New project in conjunction with a 2024 DDRDP application	Antonio Brasil Dairy is committed to building a Livestock Water Recycling (LWR) First Wave advanced solid-liquid separation system assisted by flocculants to treat the dairy facility's digestate. The LWR system will reduce nutrients and volatile solids in the dairy's wastewater, following the anaerobic digestion process. The project seeks to primarily reduce nutrients such as Nitrogen and Phosphorus from the digestate, while also reducing methane emissions.	Merced	90,409	9,041	\$ 1,239,876.62	\$ 364,250.00	Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters
47	John Silveira Dairy Inc. Advanced Solid-Liquid Separation assisted by Flocculants	New project in conjunction with a 2024 DDRDP application	John Silveira Dairy is committed to building a Livestock Water Recycling (LWR) First Wave advanced solid-liquid separation system assisted by flocculants to treat the dairy facility's digestate. The LWR system will reduce nutrients and volatile solids in the dairy's wastewater, following the anaerobic digestion process. The project seeks to primarily reduce nutrients such as Nitrogen and Phosphorus from the digestate, while also reducing methane and ammonia emissions.	Merced	49,433	4,943	\$ 1,242,126.62	\$ 364,250.00	Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters
48	Pires Dairy Farms (John B Pires & Eldred C Pires PTR) Advanced Solid-Liquid Separation Assisted by Flocculants	New project in conjunction with a 2024 DDRDP application	Pires Dairy Farms is committed to building a Livestock Water Recycling (LWR) First Wave advanced solid-liquid separation system assisted by flocculants to treat the dairy facility's digestate. The LWR system will reduce nutrients and volatile solids in the dairy's wastewater, following the anaerobic digestion process. The project seeks to primarily reduce nutrients such as Nitrogen and Phosphorus from the digestate, while also reducing methane and ammonia emissions.	Merced	185,682	18,568	\$ 1,250,000.00	\$ 342,580.00	Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters
49	Correia Family Dairy LP Advanced Solid-Liquid Separation Assisted by Flocculants	New project in conjunction with a 2024 DDRDP application	Correia Family Dairy is committed to building a Livestock Water Recycling (LWR) First Wave advanced solid-liquid separation system assisted by flocculants to treat the dairy facility's digestate. The LWR system will reduce nutrients and volatile solids in the dairy's wastewater, following the anaerobic digestion process. The project seeks to primarily reduce nutrients such as Nitrogen and Phosphorus from the digestate, while also reducing methane and ammonia emissions.	Merced	31,540	3,154	\$ 856,376.62	\$ 750,000.00	Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters
				Total	1,822,669	255,929	\$ 57,759,838.08	\$ 44,261,722.45	