



LEMNA LLC. SIGNS PILOT AGREEMENTS WITH CALIFORNIA DAIRY FARMS FOR ON-FARM PILOT TRIALS OF MANURE WASTEWATER TREATMENT TECHNOLOGY

Gilbert, AZ. (May 17, 2022)– Lemna, an emerging environmental technology company for the agricultural industry, based in Arizona, today announced the signing of a non-binding Memorandum of Understanding (“MOU”) with five leading dairy operations in California; Tiemersma Dairy, Vista Verde Dairy, Double DJ Dairy, Troost Dairy, LP, and Van Der Kooi Family Dairy Partnership; to initiate a pilot project to help remediate animal wastewater using Lemna’s proprietary phytoremediation process.

Lemna uses the controlled environment agricultural growth of lemnaeae (“duckweed”) as a key part of its proprietary process for the treatment of farm-generated wastewater. Its technology accelerates natural biological systems to remediate excess levels of nutrients; producing a high-protein aquatic crop species that can be implemented into on-farm livestock feed, while providing a precise liquid nutrient formulation within the treated water, prior to reaching crop fields for fertilization and irrigation.

Under the terms of the MOU, Lemna will install a pilot at each farm’s operational location and test the efficacy of Lemna’s technology to reduce wastewater nutrient densities while also producing high nutrient feedstock. The pilot trials are expected to last for approximately twelve months and are anticipated to start in the first quarter of 2023.

Significant potential to reduce freshwater algal blooms while producing resilient livestock feed systems.

Successful implementation of this technology across the entire animal waste stream in the world could have a significant impact on reducing agricultural-derived freshwater algae blooms, with the potential to produce thousands of pounds of harvested duckweed per farm each month.

Tiemersma Dairy, Vista Verde Dairy, Double DJ Dairy, Troost Dairy, and Van Der Kooi Family Dairy are participating in the pilot program. Together, these dairies are raising more than 15,000 head of cattle and farming more than 6,000 acres in California, providing high quality milk to prominent dairy processors in the state. All five farms are highly committed to sustainable farming operations.

“We are thrilled to sign this MOU with Tiemersma, Vista Verde, Double DJ, Troost, and Van Der Kooi dairies”, said Travis Andren, Chief Executive Officer, Lemna LLC. “These dairies recognize the importance of preserving and protecting the environment. They are seeking to minimize their environmental footprint and contribute to a healthier planet. Our phytoremediation technology will add to their toolkit in this area.”

“Tiemersma Dairy believes that processing our manure water, capturing it’s nutrient value and producing a feed biomass for dairy cattle, while complying with environmental standards by utilizing the Lemna technology could be a valuable tool in advancing agricultural stewardship,” said Diane Tiemersma, of Tiemersma Dairy.

“We believe that the principles of true sustainability are an evolving and growing industry on California dairies, our hope is that Lemna’s approach to wastewater treatment can be a tool in our tool-belt as we try to align with those principles”, said Richie Mayo, Farm Manager at DeJager Farms, overseeing Vista Verde, Double DJ, and Troost dairies. “As we seek new ways to continue dairy farming in California, the approach to wastewater treatment provided by the Lemna pilot shows potential promise as a solution to some of the problems we face moving forward.”

“I believe Lemna’s valuable approach to addressing feed and wastewater challenges, will help the dairy industry to have beneficial options in the future,” said Daniel Van Der Kooi, of Van Der Kooi Family Dairy.





About the dairies:

Tiemersma Dairy was started at its current location on Sept. 1, 1971, and continues to operate at the same location today. In order to provide high quality milk to our neighbors while stalwartly caring for the natural resources around us, we are consistently looking for better ways to manage a sustainable cycle of farming and milk production. Tiemersma Dairy is a family owned and operated dairy farm, producing 16 million pounds of milk annually.

Vista Verde Dairy was founded in 1980 by Edward DeJager. Currently the facility is owned and operated by Art and Renae DeJager and their son Alex. Our reason for participating in the Lemna trial is a general interest in the technology and how it will help us utilize our on farm by-product to create a sustainable feed source for our cows. Vista Verde Dairy is milking 3,500 cows and farming 2,500 acres, producing high quality fluid milk delivered to Hilmar Cheese Company, Inc.

Double DJ Dairy was founded in 1998 also by Edward DeJager. It is currently owned and operated by Edgar and Beverly DeJager. Our reason for participating in the Lemna pilot trials is to continue to investigate new ways to feed our cows sustainably. Double DJ Dairy is milking 3,000 cows and farms 2,100 acres, producing high quality fluid milk for California Dairies, Inc.

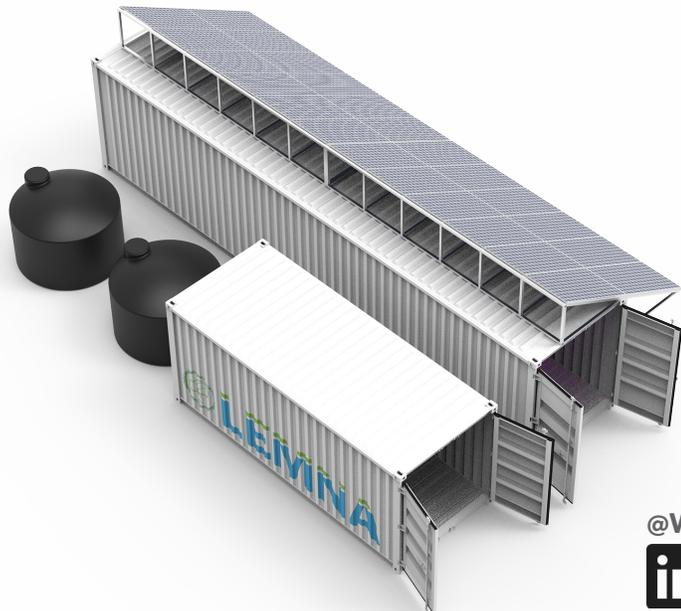
Troost Dairy was founded in 1993 by Jeff and Dana Troost and is currently operated by their son Johnny. Our reason for participating in the Lemna trial is to partner with a company in order to improve the on farm sustainability of our farm. Troost Dairy is milking 3,000 cows and farming 1,000 acres, producing high value milk with a high fat content for California Dairies, Inc.

Van Der Kooi Family Dairy was founded in 1985 by Charles and Lynette Van Der Kooi in Southern California, was later relocated in 2007 to the Central Valley of California. They strive to become more sustainable through their dairy, farming, and digester efforts as well as future thinking through projects such as the Lemna pilot trials. Van Der Kooi Family Dairy produces 130 million pounds of high quality, nutritious, and consistent milk annually for California Dairies, Inc.

About Lemna, LLC

Lemna LLC, located in Gilbert, Arizona, is developing biotechnologies to reduce the environmental impacts of livestock agriculture on surface water and groundwater systems. The company was designed within Arizona State University's Master of Science Innovation & Venture Development program, and is currently a cohort member of Dairy Farmers of America's CoLAB accelerator. Lemna has been awarded grants from Arizona State University, the Arizona Corporation Commission, and Dairy Farmers of America. Lemna is actively fundraising for the deployment of pilot trials within California.

For more information, visit lemna.farm.



Shown right, Lemna's digital rendering of their containerized pilot installation. Powered by renewable energy, these pilot installations will be installed on-farm, adjacent to existing manure containment systems.



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