



Green Plains Announces Clean Sugar Project at York, Nebraska Innovation Center

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CST™ Production to Target Applications in Food Production, Renewable Chemicals and Synthetic Biology

OMAHA, Neb., Jan. 19, 2021 (GLOBE NEWSWIRE) -- Green Plains Inc. (NASDAQ:GPPE) and Ospraie Management, today announced that recently-acquired Fluid Quip Technologies (Fluid Quip) is engineering and constructing a fully scalable commercial Clean Sugar Technology™ (CST) production facility at the Green Plains York Innovation Center. This technology effectively transforms a dry milling facility into a clean sugar biorefinery where dextrose/glucose replaces ethanol as the primary product.

"Over the past two years, Green Plains has made strategic investments to dramatically transform our business into a leading, technology-focused producer of sustainable, value-added ingredient solutions," said Todd Becker, president and chief executive officer of Green Plains. "Fluid Quip is leveraging our York Innovation Center to validate and develop technologies, beginning with their patented CST system. We believe this technology will provide industrial quantities of carbohydrate feedstock for manufacturing applications in the growing biochemical, renewable chemicals and synthetic biology industries at more competitive prices than other technologies today, providing a significant uplift in overall margins and profitability."

Co-located on the York, Neb. biorefinery campus, the Green Plains York Innovation Center was originally built by the previous owners for over \$70 million. It is comprised of pilot and industrial scale fermentation systems which have been utilized for various functions including sugar based cellulosic fuel developments, algae production, yeast fermentation processes, as well as antimicrobial scale up for third party customers. A world class analytics lab allows for rapid testing of process yields and efficiencies. Additionally, the York Innovation Center has downstream separation equipment which is ideal for testing enhancements to the CST system, as well as the MSC™ technology. Green Plains expects the initial CST project at the York Innovation Center to begin production by the end of the first quarter.

"In addition to CST, the York Innovation Center will also function as a platform to further develop Fluid Quip's MSC system to enhance protein concentration levels, increase yields and develop additional high-value proteins and yeasts," added Becker. "Consistent with our focus on ESG initiatives, early indications are that sustainable products and fuels produced using Fluid Quip's CST system, will reduce carbon intensity scores compared to those produced from competing wet milling processes. The indicated customer demand for our new products, in addition to interest in single use technology licenses, has motivated us to accelerate implementation of this technology."

Fluid Quip has been in over 40 active CST dialogues or trials with customers in a wide range of industries including synthetic biology, renewable chemicals and energy, and industrial biotechnology. This technology also has the ability to produce food grade sugars and Fluid Quip has been actively working with customers in the food production space. Initial quantities from the York Innovation Center will be around 2.5 million pounds per year. Upon successful implementation, Green Plains anticipates modifying one or more biorefineries to the CST system, to meet anticipated customer demand.

About Green Plains Inc.

Green Plains Inc. (NASDAQ:GPPE) is a leading biorefining company focused on the development and utilization of fermentation, agricultural and biological technologies in the processing of annually renewable crops into sustainable value-added ingredients. This includes the production of cleaner low carbon biofuels, renewable feedstocks for advanced biofuels and high purity alcohols for use in cleaners and disinfectants. Green Plains is an innovative producer of ultra-high protein and novel ingredients for animal and aquaculture diets to help satisfy a growing global appetite for sustainable protein. The Company also owns a 48.9% limited partner interest and a 2.0% general partner interest in Green Plains Partners LP. For more information, visit www.gpreinc.com.

About Fluid Quip Technologies

Fluid Quip Technologies® (Fluid Quip) provides custom technologies and engineering services to biofuel and biochemical industries worldwide. Fluid Quip's capabilities include process optimization, yield improvement technologies, advanced co-product technologies and turnkey capital projects. Fluid Quip has commercialized multiple patented and patent-pending technologies to enhance the base corn-to-ethanol dry grind process, create new and novel alternative feed products, and supply the growing need for carbohydrate feed-stocks into the biochemical market. For more information, visit www.fluidquiptechnologies.com.

About Ospraie Management, LLC

Ospraie Management, LLC (Ospraie), was established an independent firm in 2004. Ospraie is an asset management firm that actively invests in commodity markets and basic industries worldwide.

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