



Bion Announces Initial Success of Advanced Separation Technology Pilot – Enables Improved Asset Recovery, Further Reductions of N & P, Increased Sustainability at Lower Cost

August 2, 2012. New York, New York. Bion Environmental Technologies, Inc. (OTC BB/QB: BNET) announced today positive initial results of the advanced separation technology the Company is piloting at its livestock waste treatment facility at Kreider Farms in Manheim, Lancaster County, Pennsylvania. In mid-July, Bion began conducting (invitation-only) tours for various stakeholders to showcase the new solids separation technology, now being piloted on-site after a series of successful bench trials.

The on-going pilot is demonstrating Bion's ability to separate a substantially greater amount of particulates from the bioreactor's discharge stream, allowing the capture of more nutrient solids for reuse, as well as production of a high-value, liquid soluble nutrient stream. Increased capture of nutrients will also result in an increase in the number of verified nitrogen and phosphorus credits produced by the system.

This pilot represents the last step in Bion's "separate and aggregate" strategy. This strategy focuses not only on treating the waste stream to mitigate environmental impacts, but also isolating and capturing the various value-components in the stream so that they can be recaptured and then converted into assets instead of being lost to contaminate local and downstream waters.

Bion's patented micro-aerobic livestock waste treatment system accomplishes this strategy through a multi-stage process:

Stage 1 produces a cellulosic biomass that can be used to produce renewable energy.

Stage 2, the bioreactor, produces inert nitrogen gas in lieu of detrimental ammonia emissions to the atmosphere, greatly reduces a wide range of environmental problems including greenhouse gases, hydrogen sulfide and VOC emissions, and converts nitrogen and phosphorus into a more stable form; where, in

Stage 3, the pilot separates the nutrients to produce both an energy-rich soluble stream of nutrients that can be used as a feedstock for an onsite greenhouse or hydroponic growing facility, as well as a particulate nutrient stream that can be dried and used as an organic fertilizer or as a single-cell protein livestock feed component.

The final discharge will be water from the greenhouse facility that can be land-applied to recharge the aquifer or be treated and reused by the livestock facility. The existing livestock facility, where current practices dictate that the economic costs of treating its environmental impacts exceeds the economic value of the existing business enterprise, is now converted into an integrated producer of protein products, a renewable energy feedstock, feedstock for an on-site greenhouse or hydroponic growing facility, a single cell protein livestock feed component, and water that can be used in a variety of ways. Bion believes that its integrated approach to livestock agriculture will enable the

production of livestock proteins using the least amount of water and energy possible per unit of livestock protein produced.

Bion anticipates concluding its advanced separation technology pilot at Kreider Farms in September of 2012. Barring unforeseen challenges, a full scale separation technology installation could be implemented in late 2012 to early 2013, coupled with greenhouse growing trials utilizing the soluble nutrient stream and feed trials using the single-cell protein from the recovered particulate nutrients.

Dominic Bassani, Bion's CEO, stated, "Over the past several years, Bion has adapted and improved its technology in response to changing demands – and opportunities. The livestock industry's expansion post WWII has been based on cheap and abundant energy and water – the industry now needs to restructure itself in order to survive in today's world where energy and water are no longer cheap and abundant. Bion continues to focus on providing a technology platform that will enable its industry partners to be the most efficient producers of livestock protein per unit of energy and water utilized."

Mr. Bassani added, "Recent studies have advanced our understanding of the real impacts and costs of livestock production agriculture. These studies have highlighted the need to reduce agriculture's environmental impacts while increasing its efficiencies. As our world population grows, along with demand for better nutrition and a higher protein diet, it is critical that we improve both the economic and environmental sustainability of livestock protein production by reducing its environmental footprint and improving efficiencies."

- May 2012: the Chesapeake Bay Commission (CBC) hosted a webinar "Nutrient Credit Trading for the Chesapeake Bay, An Economic Study" in which they concluded that TMDL compliance costs could be reduced by 50% to 90%, substantially lessening the burden on the Bay states. The study, prepared for CBC by RTI International, determined that nitrogen was the primary cost driver and that reductions from agriculture would be the most cost-effective.
- July 2012: the Mid-Ohio Regional Planning Commission hosted a forum entitled "Nutrient BMP's: Voluntary Incentives, Regulation, Free Markets—What Will It Take to keep Ohio's Waters Clean." Brent Sohngen, an agricultural economist with Ohio State's Ohio Agricultural Research and Development Center and one of the presenters, recently was quoted as saying, "We can do better than what we have done. We really haven't gotten our money's worth in terms of water quality with the current programs that we are using."
- July 2012: a new U.N. Food & Agriculture Organization (FAO)-led partnership announced it will seek to improve how the environmental impacts of the livestock industry are measured and assessed, a necessary first step in improving the sustainability of this important food production sector. Peter Gerber, a senior FAO livestock policy officer, said, "We must establish a shared understanding of how to assess the environmental performance of the livestock sector. The goal is to improve that performance, and create more sustainable forms of production that will continue to provide food and income. To do that, we need reliable quantitative information on key environmental parameters along livestock supply chains, as an evidence base from which to drive improvements."

Dr. Frank Mitloehner, of University of California-Davis, representing the feed industry, said, "this is a vital and first step in improving the sustainability of this important food sector--developing credible and consistent (lifecycle assessment) calculation tools."

UN FAO estimates that demand for livestock products will continue to intensify over the decades to come. Meat consumption is projected to rise nearly 73 percent by 2050; dairy consumption will grow 58 percent over current levels. "This continued growth in demand

will be occurring within the context of increasing competition for finite and sometimes dwindling natural resources, additional challenges posed by climate change, and the imperative of making food production much more sustainable,” said Henning Steinfeld, Chief of FAO’s Livestock Information, Sector Analysis and Policy Branch. “We need to safeguard this important food sector, and improving the efficiency of its use of natural resources and bettering its performance in terms of sustainability is key.”

The conclusion from the Ohio forum, the CBC and the UN FAO-led partnership, along with many other studies, is that livestock production agriculture must reduce its environmental impacts: the high cost of maintaining clean water by removing nitrogen and other contaminants downstream of their agriculture source can no longer be sustained. Reductions of the environmental impacts from livestock agriculture must be accomplished on-site, where they can be achieved most cost-effectively and with the added benefits to local water quality. Bion’s focus on verified (measurable) environmental reductions achieved in this process is consistent with the conclusion of the UN FAO study: the need for consistent, quantified environmental baselines to provide reliable measurements of livestock agriculture’s existing environmental impacts.

Bion’s integrated agricultural approach is consistent with the effort to develop credible and consistent (lifecycle assessment) calculation tools. For example, Bion’s technology reduces carbon-equivalent (methane and oxides of nitrogen) emissions from the waste, reducing greenhouse gas emissions by 90% or greater. Separately, Bion’s patented process uses less than 50% of the energy per unit of nitrogen treated than is used in a traditional waste water treatment plant, further reducing carbon output. These distinct carbon reductions are part of Bion’s lifecycle analysis. The ability, at some point, to measure and monetize these carbon reductions can be used to lower the cost of livestock proteins and will increase both the environmental and economic sustainability of livestock agriculture.

The recent adoption by Pennsylvania of Section 1764F (See [Bion press release](#) dated July 16, 2012) in Governor Corbett’s budget requires a study to quantify the benefits of achieving overall environmental standards through nutrient reductions in rural communities versus the existing approach of focusing on high-cost urban waste and storm water treatment projects. Bion believes this study will be the basis of a shift from existing policies predicated on sector-allocated reductions for nitrogen to a competitive bidding approach. This strategy will provide livestock agriculture with access to the capital necessary to adopt on-site waste treatment technologies that will result in tax- and rate-payer savings of 50% to 90% over existing costs.

An ‘upstream treatment’ approach is not only significantly cheaper for overall TMDL compliance, but results in local environmental and economic benefits that downstream treatment cannot deliver. In the local environment, Bion’s technology significantly reduces phosphorus, odors, greenhouse gases, and other volatile-organic compounds (VOC’s). Bion’s patented bio-reactor also reduces the level of pathogens in its discharge stream by 99%, as well as significantly reducing antibiotics, hormones and other endocrine disruptors in the discharge stream. The result is significantly reduced impacts to the local environment, streams and aquifers, providing a safer and healthier environment for recreation and other activities.

Further, the ability to substantially reduce the environmental, therefore physical, footprint of a livestock facility provides a variety of opportunities for environmentally sustainable economic development, with benefits for both agriculture and rural communities. A July 31, 2012, press release from Kreider Farms begins, “A cleaner environment, new local jobs and lower costs...Kreider Farms is celebrating the one-year anniversary of its highly successful livestock waste treatment system, a joint collaboration with Bion Environmental Technologies, Inc.” Bion

has long proposed a scoring program to determine overall cost benefit for nutrient credits that would include local environmental and economic benefits, as well as reductions to the common federal watersheds such as the Chesapeake Bay.

Ed Schafer, Bion's Executive Vice Chairman and former US Secretary of Agriculture said, "Whether in the United States, China or elsewhere on earth, everyone is confronted with the reality that expanding livestock production (based on current sustainability practices) to meet the growing world demand is neither economically nor environmentally sustainable. The cost of these environmental impacts has been monetized, both from a remediation and public health perspective, and they can no longer be absorbed by society."

Mr. Schafer continued, "But the good news is that policy makers now recognize that by reallocating resources and spending to enable livestock production to adopt technologies to mitigate their environmental impacts at the source, clean water and improved quality of life and public health can be achieved at a small fraction of what is presently being spent downstream. A strategy based on upstream treatment provides not only a pathway to low-cost TMDL compliance; it ensures that the local rural communities achieve environmental improvements, as well, that result in enhanced quality of life and improved public health. Lastly, the adoption of upstream technology solutions like Bion's will result in expanding economic opportunities in rural communities that translate to real growth and non-transferable jobs."

Bion Environmental Technologies has provided environmental treatment solutions to the agriculture and livestock industry since 1990. Bion's patented next-generation technology provides a unique comprehensive treatment of livestock waste that achieves substantial reductions in nitrogen and phosphorus, ammonia, greenhouse and other gases, as well as pathogens, hormones, herbicides and pesticides. Bion's process simultaneously recovers cellulosic biomass from the waste stream that can be used to produce renewable energy.

Bion recently installed its next-generation dairy waste treatment system at Kreider Dairy Farms, a 1,200 cow dairy facility in Lancaster County, Pennsylvania. The system was installed to reduce ammonia emissions and nitrogen and phosphorus discharges, as well as greenhouse gases, odors, pathogens and other pollutants that impact both the Chesapeake Bay and local waters. For more information, see Bion's websites, www.biontech.com and www.bionpa.com.

This material includes forward-looking statements based on management's current reasonable business expectations. In this document, the words 'expect', 'will', 'proposed' and similar expressions identify certain forward-looking statements. These statements are made in reliance on the Private Securities Litigation Reform Act, Section 27A of the Securities act of 1933, as amended. There are numerous risks and uncertainties that could result in actual results differing materially from expected outcomes.

Contact information:

Craig Scott
Vice President-Capital Markets
303-843-6191 direct