



## **Bion Issues Operational Update**

**8-K, filed August 17, 2009.** Bion Environmental Technologies, Inc. (OTC BB: BNET) today issued the following summary operational update in compliance with Regulation FD Disclosure: Bion will be making a series of informational presentations to FINRA-Registered Representatives and institutional investors in the coming weeks.

Bion has made much progress since early 2008. The Company established two subsidiaries that allow it to focus on its two related but distinct business opportunities: Bion Services Group (Services Group) will provide environmental waste treatment and renewable energy production for existing livestock facilities and Bion Integrated Projects Group (Projects Group) will utilize Bion's patented technology to develop new, state-of-the-art livestock facilities integrated with related agriculture activities such as food processing and biofuels production. Services Group is proceeding with its initial project at Kreider Farms as described below. Projects Group is moving forward with pre-development of its initial Integrated Project in upstate New York and preliminary work with other potential projects.

### **Capital Resources**

**Operating Capital:** Bion recently completed a private placement (Capital Financial Services, Inc. served as underwriter) that netted the Company approximately \$2.45M after commissions and offering expenses. The Company sold 28,170 shares of its Series B Convertible Preferred Shares ('Preferred Shares'). The Preferred Shares pay a 10% dividend, are convertible into common shares at \$2.00 per share and will be redeemed at 3 years if not previously converted. For a complete description of the Shares, see Exhibit 3.3 of the Company's 10QSB for the quarterly period ended March 31, 2009. The proceeds of the offering will be used for working capital purposes, including investment in Bion's Kreider Farms projects and to fund pre-development expenses of Bion's initial Integrated Projects. [See earlier press release: [www.biontech.com/news/pressreleases/release20090730.php](http://www.biontech.com/news/pressreleases/release20090730.php)]

**Project Financing:** PENNVEST (Pennsylvania Infrastructure Investment Authority) has approved \$7.8M of low-interest debt financing for Phase 1 of Bion's Kreider Farms project. Bion anticipates that it will seek similar funding from PENNVEST or others for Phase 2 of the Kreider Farms project upon completion of permitting for Phase 2. [[www.biontech.com/news/pressreleases/release20090128.php](http://www.biontech.com/news/pressreleases/release20090128.php)]

### **Chesapeake Bay Watershed: Kreider Farms Projects, PA**

In May 2008, the Pennsylvania Department of Environmental Protection ('DEP') approved Bion's protocols to determine how many tradable nutrient (nitrogen and phosphorus) credits Bion will receive for reductions achieved through installation of its comprehensive dairy waste management technology in Phase 1 of the Kreider project pursuant to Pennsylvania's efforts under the Chesapeake Bay (CB) Program mandates. The DEP's approval includes Bion's innovative multi-media measurement protocol,

enabling the certification of credits both for ammonia air emission reductions as well as significantly reducing the leaching and runoff potential of land applied nutrients.

[\[www.biontech.com/news/pressreleases/release20080520.php\]](http://www.biontech.com/news/pressreleases/release20080520.php)

Bion is currently working with the DEP to finalize credit protocols for Phase 2 of Bion's Kreider project which involves generation of renewable energy from the dairy solids produced in Phase 1 and poultry waste from Kreider's poultry operations. The Company recently submitted its formal poultry protocol application for approval by the DEP and the review to clarify certain issues is in process.

Pursuant to a September 2008 agreement (as amended), Bion will build the Phase 1 livestock waste treatment system at Kreider's Manheim facility to treat waste from the milking herd of approximately 1,200 to 1,300 dairy cows. The agreement provides for development of an integrated energy production facility that will generate renewable energy through the combustion of the cellulose captured by Bion in the Phase 1 system, as well as waste from Phase 2 that will include the dairy support herd and approximately 4.2 million chickens. Bion anticipates that revenue will be generated from nutrient credits, sale of the renewable energy produced from the waste and, in time, credits for the reduction of greenhouse gas emissions. Bion estimates that treatment of Kreider's combined dairy and poultry waste will ultimately produce between approximately 1.5 to 2 million tradable nutrient credits annually, with the potential of additional nutrient credits to be generated from the treatment of waste from other livestock operations located in the area.

The increased urgency and priority of the Chesapeake Bay Program was made clear recently with President Obama's executive order to clean up the CB and the appointment of Chuck Fox by EPA Secretary Lisa Jackson to act as a "czar" for CB cleanup efforts. The overall mission has been defined as requiring a 140 million pound annual reduction from the existing nitrogen (N) loading to the CB (from 315 million lbs of N to 175 million pounds of N per year) by 2025. More importantly, the timetable for compliance has been moved up, with greater reductions required in the early years rather than the old approach of backend loading the reductions. As a result, PA's near term 2012 N reduction is being increased by 2 million lbs. Similar increases have been imposed on other states (Maryland & Virginia) in the CB watershed. As a result, Bion believes that the long term opportunity for the CB program is being significantly expanded and extended.

Note that the Metcalf & Eddy study commissioned by the PA State Senate estimates that capital costs of \$1.4 billion plus \$60 million annual operating costs (an average of \$28 per lb per year for the initial 7.5M lbs) will be required to upgrade the municipal wastewater treatment plants in Pennsylvania to meet the nutrient reduction requirements of the CB program. Bion anticipates that it will be able to profitably sell nutrient credits from its Kreider Farms facilities (and subsequent projects) for an annual total cost in the range of \$8 per lb – the equivalent of the projected annual operating costs alone – thereby potentially saving Pennsylvania ratepayers most of the \$1.4B capital cost required for the initial 7.5 million lbs of N reduction if Bion's technology is utilized to make the required reduction.

Bion estimates that the overall market opportunity for Bion in the CB watershed is larger and of a longer duration than initially anticipated. While regulatory and enforcement policy is still evolving and, therefore, the impact of those future policies upon Bion's operations cannot be precisely predicted and/or fully quantified, Bion believes that the tremendous difference between its cost to remove nutrients from a waste stream and the cost required for conventional waste water treatment technologies makes it

reasonable to believe that Bion's potential profitability from these projects should be significant. Bion is currently projecting annual EBITDA (not a GAAP term) from its current CB watershed projects from nutrient credit sales (without revenue from renewable energy sales) could be in the range of \$7 to \$10 million with steady growth over the following five years from new projects as CB cleanup requirements expand. Based on the aggregate size of livestock operations in the Chesapeake Bay watershed, Bion believes that the potential market for reductions in N loadings to the CB basin from livestock could increase tenfold to total in excess of 75 million lbs annually (including airborne ammonia) with certified tradable nutrient credits equaling 50 to 60% of that aggregate N reduction.

Bion also believes that it is reasonable to assume that the CB Program strategies developed by US EPA and various state regulatory agencies to address the issue of excess N loadings to the CB watershed clean-up will be subsequently applied to deal with the much larger nutrient pollution problems of the Mississippi-Atchafalaya River Basin ('MissBasin') that are a primary cause of the 'Dead Zone' in the Gulf of Mexico and similar problems elsewhere. For more information on the MissBasin, visit the US EPA's website at [www.epa.gov/msbasin/index.htm](http://www.epa.gov/msbasin/index.htm).

### **Integrated Projects**

In early 2007, Bion began pre-development work on an Integrated Project comprised of a large-scale beef cattle finishing operation and an ethanol production facility to be located in upstate New York. Bion was initially focused on St. Lawrence County but has also explored opportunities in other upstate regions including Oswego County which has an existing ethanol production facility.

Bion's closed loop integrated projects' substantial competitive advantages are due to the overall scale and gains in resource efficiency, branding opportunities, and proximity to a market consisting of 50 million people within a 350 mile radius as well as export potential through the St. Lawrence Seaway. Bion's current preliminary plans call for Phase 1 of this project to include approximately 72,000 beef cattle with a dedicated slaughter and cooking (further processing) facility integrated with an ethanol plant (existing or newly constructed). Bion anticipates that renewable energy produced from the cellulosic solids that Bion's technology recovers from the livestock waste stream will replace most (if not all) of the fossil fuel needs of the ethanol production and other integrated facilities. This project is in early development phase although Bion anticipates that it may move into actual development phase during the current year. Bion estimates that the basic CAPEX for the NYS project will be not less than \$200 million with the creation of 350 to 400 permanent long term jobs.

In addition to the NYS beef cattle project, Bion has been working with various local and state agencies in Nebraska to develop a large scale integrated dairy /cheese integrated project that would have a CAPEX cost estimated to be in excess of \$750 million and would generate 700 to 850 full time permanent jobs. This project is in its early stages. The Project would integrate a very large-scale dairy complex with a new dedicated milk processing/cheese production facility and, most likely, one or more existing ethanol production facilities. Preliminary plans involve up to 80,000 milking cows (requiring approximately 140,000 total head including the dairy support herd and steers) to be located on several satellite farms with waste treated by Bion's technology to assure environmental compliance and to produce renewable energy for use in the integrated facilities to replace fossil fuel requirements. Bion is in ongoing discussions regarding this project with Nebraska state development officials, as well as one of the largest national and international cheese producers and distributors.

In addition, Bion has had preliminary discussions with several nationally- and internationally-known food producers, processors, and distributors, regarding use of its technology to develop projects which integrate new livestock herds with both existing and new processing facilities in order to improve their economic efficiencies, reduce environmental impacts and carbon footprint, produce branding opportunities and address food-safety concerns.

At present it is not possible to project the exact economic returns and/or profitability for such Integrated Projects due to the early pre-development stage of each project and numerous variables related to future financing and partnering terms, as well as the availability of existing and proposed incentive plans for which such projects may qualify. However, Bion strongly believes that the economic efficiency of these closed loop integrated projects will increase the EBITDA (not a GAAP term) annual returns by 5 percentage points (or more) over the existing industry metrics. In a basic commodity business such as food products and ethanol production, this represents a very significant economic advantage which Bion believes will result in advantageous financing terms and in clearly superior profitability for its Integrated Projects.

### **Patents**

Since August 2008, Bion has been issued two new U.S. patents that broaden and deepen the Company's IP portfolio that now includes ten U.S. patents, the most recent extending through 2024. Since August, Bion also received new patents in Mexico and Australia, giving coverage in those countries, as well as those previously issued in Canada and New Zealand. One additional U.S. patents is applied for and pending, and patent applications are under consideration for the European Union, Brazil, Argentina and Australia. Also, the Company was recently assigned an additional preliminary patent application related to nutrient removal by Jere Northrop, the Company's founder and Technology Director. [See various press releases on the Company's website: [www.biontech.com/news](http://www.biontech.com/news)]

### **Website**

Bion recently modified its website to include a 'Links' tab that provides links to multiple locations on websites of the US EPA, Pennsylvania DEP, PENNVEST, the Chesapeake Bay Program and many other state and federal agencies, organizations and others that have an influence on Chesapeake Bay and larger national nutrient management issues. There are also several topical articles listed that concern those issues. As described on the Links page, the list is in no way complete but intended, along with the Company's SEC filings, to help provide a due diligence starting point for potential investors.

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About Bion: Bion has provided solutions to the agriculture and livestock industry since 1990, with 30 first-generation systems installed through 2003. Bion's next-generation technology results from 18 years of research & development, testing, commercial deployment, and further adaptation to evolving standards and opportunities. In addition to providing environmental treatment, the system recovers cellulosic biomass from the waste stream to produce renewable energy in a process different and much more efficient than others that seek to exploit this energy source. The technology is scalable, proven and quickly gaining acceptance by regulatory agencies and other stakeholders as an effective solution to the

environmental issues associated with concentrated livestock waste. For more information, see Bion's website: [www.biontech.com](http://www.biontech.com).

*This material includes forward-looking statements based on management's current reasonable business expectations. In this document, the word 'potential', '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. Potential investors are strongly urged to carefully review those risk factors and other information contained in the Company's SEC filings at [www.sec.gov](http://www.sec.gov) – a link to the Company's SEC filings is also prominently displayed on Bion's website at [www.biontech.com](http://www.biontech.com).*

Contact information:

Mark A. Smith  
President  
719-256-5329  
[mas@biontech.com](mailto:mas@biontech.com)

Craig Scott  
VP Capital Markets  
303-843-6191 direct  
[cscott@biontech.com](mailto:cscott@biontech.com)