

Forward Looking Statements

Statements made in this ‘**Executive Summary**’ (and any documents delivered with it) that are not historical or current facts are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and section 21E of the Securities Exchange Act of 1934, as amended. These statements often can be identified by the use of terms such as "may," "will," "expect," "believe," "anticipate," "estimate," or "continue" or the negative thereof, or other words which clearly indicate that future possibilities rather than currently existing facts are being discussed. Bion Environmental Technologies, Inc. and its subsidiaries (collectively ‘Bion’) intend that such forward-looking statements be subject to the safe harbors for such statements. We wish to caution readers not to place undue reliance on any such forward-looking statements, which speak only as of the date made. Any forward-looking statements represent management's best judgment as to what may occur in the future. However, forward-looking statements are subject to risks, uncertainties and important factors beyond our control that could cause actual results and events to differ materially from either or both of historical results of operations and events and those presently anticipated or projected. These factors include adverse economic conditions, entry of new and stronger competitors, inadequate capital, unexpected costs, failure to gain product approval and/or market acceptance in particular states or provinces in the United States or foreign countries, failure to capitalize upon access to new markets and/or adverse litigation results. Additional risks and uncertainties that may affect forward-looking statements about Bion's business and prospects include the possibility that Bion’s technology may not perform as anticipated, that a competitor will develop a more comprehensive or less expensive environmental solution, delays in market awareness of Bion and our systems and soil, possible delays in Bion's marketing strategies, or inability to obtain financing on a timely basis and/or on reasonable terms, each of which could have an immediate and material adverse effect by placing us behind our competitors. Bion disclaims any obligation subsequently to revise any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events.

The following Executive Summary should be read in conjunction with our financial statements and accompanying notes and other publicly available information concerning Bion including the materials on (or referenced on) our website.

Mission Statement

We will provide the highest value to our shareholders only by serving the highest interests of our entire stakeholder community:

- Farmers/Producers - empowering those in animal husbandry to become more sustainable, comply with environmental regulations and maximize profitability.
- Employees, Vendors and Technology Partners – providing challenging and rewarding work on the cutting edge of the most important odyssey in agricultural environmental technology.
- Livestock – improving livestock’s environment which we believe will also improve livestock health and well-being.
- The Environment – protecting the planet by making continuous improvement in mitigating polluting livestock production releases to air, land and water while preserving threatened ecologies, recycling valuable nutrients and organics, and conserving energy.



EXECUTIVE SUMMARY (October 24, 2005)

Agricultural runoff is the number one cause of water pollution according to the US EPA and livestock are its major source. Livestock operations are also a major source of air pollution. According to California's San Joaquin Valley Air District (SJVAPCD), emissions of Volatile Organic Compounds (VOCs) from cows in the Valley exceed those from cars and refineries combined. The polluting releases to water and emissions to air from Confined Animal Feeding Operation (CAFOs) are in the process of being regulated more stringently around the country.

This environmental problem is the result of increased herd concentration per acre of farmland. The increase in herd concentration has become an economic necessity because the lack of contiguous land at affordable prices makes increased density the only means of expansion which can maintain profitability while achieving the national objective of affordable food prices.

The CAFO industry employs a waste disposal methodology of land application. As herd sizes increase without an increase in farmland available for waste disposal, the resulting environmental problems are excess nutrient application and concentrated air emissions. Excess nutrient application results when the nutrients applied to an acre of farmland exceed the agronomic rate (roughly the nutrient needs of the crops that are grown on that acre). Excess nutrient application results in surface and ground water pollution. More than 90% of the dairies in the US have insufficient farmland to properly land-apply the nutrients that their existing herds produce.

Air emission pollution is largely a function of emissions per animal and the greater the concentration of animals in an air district the greater the emissions.

Essentially the costs of increased herd concentration to date has been borne by the environment and the public. That cost is now being shifted back to the agricultural producers.

Bion has developed patented, proprietary technology, versions of which are in operation on over 20 CAFOs. Peer-reviewed performance data has demonstrated that Bion's technology mitigates most of the pollution to air, water and soil from CAFOs. Bion's process, which is economically affordable, can be utilized to retrofit existing dairies, hog farms, cattle feedlots and poultry operations to comply with existing and pending regulations, and it will also allow them to gain permits to expand, thereby enhancing their profitability.

Bion's core technology enables a significant increase in herd concentration by solving the nutrient and air pollution issues that CAFOs face. The economics of Bion's solution are driven by scale and, as a result, increased herd concentration and environmental benefit are no longer mutually exclusive but can actually complement each other. Bion's core technology applications for large scale herds creates: a) an integrated technology platform for production of renewable energy utilizing the

CAFO waste stream as its feedstock; b) waste solids converted into various soil amendments and fertilizers that can be both applied locally, packaged and transported for sale to markets in need of organic nutrients, as well as single cell protein products that can be used as an animal feed; and c) environmental reduction credits (ERCs) for air and nutrient pollution. As herd size in a small geographic area increases, Bion's integration platform expands to incorporate ethanol production. Lastly, Bion's core technology can support a fully integrated and balanced facility where the dairy cows, a 'milk user' (such as a cheese plant), and Bion's technology platform (including an ethanol plant) can all be located within one site to collectively utilize Bion's biological technology to extract value/revenue from their respective waste streams that had been a cost burden to each separate enterprise.

Bion refers to its integrated facilities as Central Processing Facilities (CPFs) when the installation serves an off-site dairy herd (10,000 or more dairy animals) in a small geographic area and as Dairy Parks (DPs) when a dairy herd (25,000 or more dairy animals) is directly integrated into the Bion site. Both CPFs and DPs allow integration of ethanol production. Dairy Parks additionally directly integrate end-product producers with the dairy herd's milk production on the same site.

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INTRODUCTION:

At the heart of the U.S. livestock industry lies an environmental problem resulting from increasing herd concentrations, which has resulted in livestock densities that create better economics to producers while significantly increasing the environmental damage/threats to both water and air quality. Confined Animal Feeding Operations (CAFOs) are rapidly increasing in number as well as herd size. Economic pressures continually force increased consolidation in order to maintain profitability. Concurrently, permitting for these large, high-density CAFOs is becoming more rigorous as environmental organizations and regulatory authorities bring increased scrutiny and regulation to bear on the need for environmental compliance. In many areas, including California, permitting activity has effectively come to a halt. According to the US EPA, agricultural runoff from CAFOs is the greatest remaining untreated cause of water pollution in the U.S. Awareness of the air pollution from CAFOs has increased many-fold in the past several years. The status quo is a losing strategy for today's large livestock producers, as they are increasingly unable to maintain their profitability. Without expansion and/or increased herd concentrations, the constant pressure on margins will continue to erode profitability.. Political awareness, new regulations and litigation prevent such expansion in ever larger portions of the country. The status quo is also a losing strategy for the public and the environment as the negative impacts of conventional CAFO expansion have become increasingly evident.

Bion believes that it has developed a comprehensive, affordable environmental solution to CAFO air and water emissions----a solution that will both enable and drive the continued consolidation and vertical integration of the livestock industry while eliminating the negative environmental impacts on air, soil and water. Bion's technology creates the possibility of a comprehensive solution that will enable the industry to increase herd density (and profitability) without the need for additional contiguous land (which is often not available) while mitigating existing polluting releases and emissions. Bion's technology platform provides a long-term economically and environmentally sustainable solution to the environmental air and nutrient issues facing the CAFO industry.

Bion's initial CAFO focus is the dairy industry due to the industry's fragmentation at both the producer and finished product levels. Bion's ability to solve the environmental constraints will allow the dairy industry to realize the significant economic benefits that can be derived from the vertical integration of the dairy industry with synergistic business opportunities based upon renewable energy production such as ethanol. Increased herd density will create both the opportunity and economic need to integrate these large herds with business line extensions (both vertical and horizontal). Such integration cannot be achieved without Bion's technology.

The result will be a transformed industry with diversified, new and improved cash flows and with a smaller, more benign environmental impact. This transformation results from the combining of existing industry segments into integrated new facilities capable of reducing operating costs and generating economic benefit from their respective waste streams. Further, many of the risk factors of these individual entities will be significantly reduced or eliminated while new risk factors associated with integrated processes can be managed in a coherent manner. Overall the risk/reward ratio will improve dramatically since the risks associated with such integrated complexes can be better defined and managed and, as a result, insured. Lastly, since the significant, but usually unquantified, environmental risks will have been addressed by Bion's technology and converted to

a defined, conventional regulated industry risk, it will become possible to finance these projects through the institutional capital markets in the same manner as any other large integrated industrial complex.

Bion has developed its integration model so that it is scalable and capable of delivering benefits at various levels of implementation. Depending upon whether the technology is being deployed to address the environmental issues of existing dairies or new dairies would determine whether they would be classified as 'retrofit' installations or new installations. This classification has no relevance to Bion's core technology or its technology platform, but is relevant to the CAFO industry as it relates to its environmental regulation and compliance.

The economics of scale are a function of many factors. As a rule of thumb, a basic Bion installation for 5000 dairy animals will provide sustainable economics as it relates to Bion's core technology and some additive revenue including ERCs and anaerobic digestion producing renewable energy in the form of methane gas. On smaller dairies (from 1000-5000 dairy animals) the economic benefits from renewable energy production will be more limited. Such dairies will, however, be able to achieve the benefits related to environmental compliance and herd expansion.

In the context of a Bion CPF, sufficient methane gas energy will be produced to support economic utilization to: a) make on-site process heat, b) be converted into electricity for internal use and/or resale, c) cleaned and piped locally to heat homes and/or businesses, d) run LNG powered cars, and/or e) potentially converted into hydrogen. In almost all such cases Bion would enter into a long term facility operating agreement including operation and maintenance (O & M) (these services would be either provided directly by Bion employees or would be subcontracted by Bion to local agricultural, environmental engineering firms) for which Bion would receive annual operating and/or 'tipping' fees.

Commercial solids processing, including packaged fertilizers and single cell protein animal feeds (depending upon climate), which will usually require a scale of 10,000 (or more) dairy animals to achieve sustainable economics, will be part of Bion's activities in CPFs and DPs.

ERCs related to regulated air emissions as well as greenhouse gas emissions and nutrient emissions are potential sources of income for each Bion CPF.

Herd concentrations in a specific geographic area in excess of 25,000 dairy animals will be able to support integration of an ethanol production facility into the Bion technology platform in either a CPF or DP.

The harvested solids can be made into a high Nitrogen, high Phosphorus premium organic fertilizer, cellulose rich bedding for the dairies and, subject to feeding trials, a high-grade animal feed depending upon climate, geographic access to markets, herd size and the equipment utilized as part of the Bion technology platform. Due to the energy embodied in fertilizer (most commercial fertilizer production utilizes natural gas as a primary feedstock), Bion anticipates that ERC's will also develop over time in relation to Bion's solids/fertilizer production.

Scale can be achieved in a number of ways: a) a single large dairy, b) a dairy complex that utilizes the capabilities of Bion's technology to expand the facility to allow siting the necessary herd density (DP), or c) a group of dairies in a small geographic area that deliver their waste into on large scale economically efficient Bion treatment system (CPF).

A fully site integrated Bion facility which incorporates a dairy herd of a minimum of 25,000 milking cows on site and includes end-product production (such as cheese, yogurt, ice cream or fluid milk), together with ethanol production and a Bion system (including anaerobic digestion and solids processing) is referred to as a Dairy Park (DP).

At each level of herd concentration, the efficiencies that can be achieved as a result of process integration with particular emphasis on waste recovery and utilization become more pronounced. As a result, the larger the herd, the greater the degree of integration that will be possible. The greater the integration that takes place, the larger the energy recovery and utilization efficiencies will be. This results in greater savings in capital expense and operating costs and higher returns on invested capital as the scale increases and integration benefits are more fully realized.

The more advanced the integration model, the more energy independent and more immune the dairy operations will be from future potential energy inflation which limits the profit from the protein products produced from the entire integrated facility (such as cheese, fertilizer and single cell fish food). In fact, the integration of large-scale ethanol and methane production enables the enterprise to benefit from energy prices.

Bion technology provides the key to this industry transformation. *In nature there is no waste.* Bion's core principle is enhanced profitability with reduced environmental risk through the use of its patented and proprietary technology to enable process integration. The Bion solution results in agriculture enterprise that is both environmentally and economically sustainable.

THE REVENUE PLAN

Bion's revenue stream from a CPF facility would consist of:

- a one-time license and engineering fee for its waste treatment technology which would constitute part of the capital cost of the facility; plus
- annual user/tipping fees in the range of \$200-250 per milking cow (related to the technology fees, O&M costs, and debt service) for the waste treatment services.

Additionally, Bion would have an ownership interest in:

- Processed solids (to be sold as soil amendments, fertilizer and/or a single cell protein feed source, etc.);
- ERCs;
- The renewable methane/energy output from the anaerobic digester system.

In the case of a fully integrated DP or a large CPF, in addition to the items set forth above, Bion would also participate in:

- revenues from ethanol production (including ethanol sales, sales of the spent corn/distillers grain to the dairies, and energy production from recycling the ethanol plant's 'solubles' stream through the digester).
- management fees for operating the entire integrated complex on a long-term basis.
- Enhanced revenue streams resulting from the greater integration of the ethanol plant, waste treatment system, end-product user and the dairy cows;

In addition, DPs will generate 'lease/rental' income from provision of the barns and related facilities to the dairy producers.

And, in some DPs (but probably not the initial DP), Bion may also have an ownership interest/participation in:

- The dairy operations (including direct participation in the milk revenue stream);
- The cheese plant or other end-product facility.

In its CPF and DP revenue models, Bion projects that the aggregate realizable value of solids, environmental credits and renewable energy production from anaerobic digesters will range between \$200-\$800 per dairy cow per year depending upon the size, location and climate of the installation.

Bion's 40,000 milking cow DP model projects an aggregate capital cost of approximately \$440M (prior to any grants and subsidies) and an annual EBIT/DA for all components of the DP to range between \$110-\$120M annually. Bion will retain direct ownership of the Bion waste system and associated platform components including anaerobic digestion facilities, environmental credits and all aspects of solids processing including drying, composting and packaging. Bion would also own the ethanol production facilities with purchase agreements with the participating dairies for its spent corn/distillers grain by-product. The capital cost of the Bion system platform (for environmental waste handling and soil production) and a 40M gallon ethanol plant at a DP are estimated at \$100 million (prior to any grants and subsidies) and an annual EBIT/DA for these components is estimated at between \$35-\$40 million annually. In some cases, but probably not the initial DP, Bion may have a direct ownership interest/participation in the revenue from the dairy animals and/or end-user. In such cases, there will be additional capital costs.

THE NEAR TERM IMPLEMENTATION PLAN:

Bion is pursuing an implementation plan for 2006 that consists of installing two large facilities: a warm weather and a cold weather CPF type facility. The completion of these large-scale commercial projects will not only provide substantial revenue streams to Bion, but will also provide further validation of the economic and environmental performance to facilitate future partnering, financing, and regulatory and local approvals required to fully develop the DP business opportunity. In addition, these initial projects will serve as drivers for regulatory standards to be adopted for new

and expanded facilities that will comprise the vast majority of Bion's retrofit opportunity as the dairy industry elects to leverage Bion's environmental compliance technology into operating permits.

- **Initial Large Scale Projects:** Bion is working towards both a warm (California) and a cold weather (Indiana) large scale (at least 5-10,000 cows each for initial stage) project that will:
 - a) generate operating income, and b) also provide the 'proof of concept' required to commence full scale Dairy Park projects.
- **California Dairy Project:** Bion is working towards securing a project for construction in early 2006, which it expects to result in air and nutrient emission standards being adopted in California (and later elsewhere) for existing large dairies and new installations. Bion believes it will not only qualify under the Best Available Control Technology (BACT) initiative presently under way in CA, but will drive the regulatory standards to a higher level of rigor (and environmental protection) than previously contemplated by either the industry or the regulatory community. There are currently in excess of 200,000 dairy animal permit applications pending in Kern County, CA alone that are required to use BACT to meet these new standards. At present, in the ongoing political process, the dairy industry and the environmentalists in California are each seeking a BACT outcome that virtually guarantees that, whatever the outcome, the "loser" will commence litigation which will continue to defer the issuance of permits. Bion has proposed a solution of 'voluntary interim standards' which would only apply to new permits. These interim environmental standards would be far more stringent than anything presently proposed but would be on a voluntary basis. By committing to meet such standards, dairies that wanted to secure permits could proceed immediately (in 2006). Existing dairies would not be required to achieve these emission levels until the BACT process was completed. Bion has recently submitted an application to the SJVAPCD for a review for an air permit for an initial CPF and has been promised an expedited review. Bion projects that it will be able to secure a permit for an initial CPF module during the first quarter of 2006. This commercial installation will provide additional peer-reviewed data commencing 4-6 months after the system begins operation. CA is presently the leader in air emission standards. The standards and BACT adopted in California will significantly influence the regulatory agencies nationwide as well as existing and future litigation between the industry and the environmental and regulatory agencies. Once rigorous CAFO standards for emissions to air and releases to water are promulgated anywhere, regulators (and environmentalists) elsewhere will be far less likely to implement (or allow) less rigorous standards.
- **Indiana Dairy Project:** Bion has executed an initial agreement to install a 10,500 milk cow Bion system for the proposed expansion of Fair Oaks Dairy Farm (FODF). Bion has completed its engineering and feasibility analysis. The proposed project would be a joint venture (JV) with FODF and Bion being 50/50 partners in the installation in Phase I. In addition, the JV under discussion now contemplates construction and operation of a 40M gallon ethanol plant that would subsequently be constructed on the site. Bion is presently in negotiations with FODF concerning final JV scope and terms with a projected commencement of construction scheduled for the spring of 2006 and projected completion of Phase I by the late fall of 2006.

Taken together, the CA and FODF installations will provide Bion with both warm and cold weather full-scale, commercial projects that can additionally be utilized to demonstrate the technology and its results for use in securing local and state approvals as part of its Dairy Park (DP) initiatives. It will also support the refinement of DP integration process engineering and provide an economic model for subsequent DP project development.

- Bion is currently working to develop a DP project in Nebraska. Bion has just completed an economic assessment of the value of the grant and subsidy programs available from state, federal and local government units for such a project. Review of potential sites has commenced. Bion anticipates making a decision on proceeding with the NE DP project by the end of calendar 2005.
- Bion is in the early stages of evaluating another cold weather DP installation in New York State.

THE LONG TERM IMPLEMENTATION PLAN:

Once the large scale warm and cold weather installation agreements have been completed and construction has commenced, Bion proposes to site, secure permitting, financing and economic assistance (grants/loans/subsidies) for an additional 5-10 large scale integrated DP facilities in the continental US. Additionally, Bion would seek approval for expansion of the first central processing facility (CPF) in California and begin permitting for 4-8 additional CPFs in California.

Bion is also in the preliminary stages of investigating Canadian and European opportunities. Europe and Canada, which have 20 million and 1 million cows respectively, are signatories of the Kyoto Treaty which requires that they take specific steps to reduce their output of Greenhouse Warming Gases. They are not meeting their current targets and this has pushed the value of Carbon Credits in Europe to approximately \$28 per ton. The Kyoto Treaty calls for granting of credits for reductions of greenhouse gases against established baselines. Defined 'greenhouse gases' include methane and NO_x, both of which are produced by livestock. Bion's process would mitigate approximately 9.3 tonnes of Greenhouse Gases per cow per year. While the total cost (including debt service and operating costs) of a Bion CPF is projected to be in the range of \$150-\$250 per cow per year, the value of the Carbon Credits that could be generated by a CPF at current prices is approximately \$260 per cow per year. This does not include other sources of CPF revenue from fees, the sale of energy, fertilizer, protein, etc.

R & D PROGRAM:

- **On-going R&D Activity:** While Bion's technology is ready for full-scale commercial implementation, Bion is presently pursuing a number of near-term R & D efforts to fine-tune aspects of its technology to incorporate into installations projected to commence construction during the first half of 2006. The results from these R & D efforts will also be incorporated into a final engineering and cost analysis, including modeling of the by-

products requirements and cash flow. Lastly, the results from this R & D effort will result in focusing R & D towards further maximizing the value of the by-products such as organic fertilizers and single cell protein feeds.

Specific R&D efforts currently underway include:

- **Solids Product Utilization:** Identification of optimum target market utilization for the captured solids, including an organic fertilizer as well as the potential for a single cell protein feedstock that can be used as a feed in various CAFO and other high-value animal markets such as fish and pet foods;
- **Solids Process Production Process:** Refine process engineering and platform integration in support of solids separation and drying for the identified target product uses, taking into account the various climates and solids product market opportunities;
- **Water Purification for Reuse:** Refine lab bench trial analysis that supports the economic viability of producing an effluent that can be discharged to groundwater or treated and reused by the herd; and
- **Energy Optimization:** Significant opportunities exist for Bion to capture value through a combination of peak period reduction and energy production (complementary anaerobic digestion). At 40%-60% of Bion's system operating costs (including debt service), energy is the single largest individual cost associated with Bion process implementation. Bion anticipates reducing system energy cost through use of process engineering refinements to reduce peak period usage and by maximizing use of off-peak rates. The Company will work with the local electric utility to ensure its operations achieve the lowest possible energy cost, while mutually exploring opportunities to create value through on-site production of renewable energy via methane capture.

MARKETING

According to the USDA, in 2004 there were approximately 1,300 dairy operations in the U.S. with greater than 1,000 cows. These dairies milk approximately 46% of all U.S. dairy cows. Meanwhile, approximately 500 dairies with more than 2,000 cows represent the fastest growing segment of the industry with a 5-year compounded annual growth rate in number of operations at 14%.

Based upon these demographics, Bion projects a realistic short-term target market at approximately 300 dairy producers (for retrofits and/or participation in CPFs and/or DPs). The target includes those dairies with the highest number of cows and therefore the greatest herd concentrations in the nation. These producers simultaneously face a disproportionately high degree of environmental pressure. Bion has contact information for these dairies and will do a combination of outreach directly as well as through their producer associations, milk marketing cooperatives, and agricultural/environmental engineering firms.

California has the greatest concentration of dairy cows in the world. At the same time, California's South Coast Air Quality Management District (SCAQMD) is widely recognized to be the most

rigorous air management district in the world. Upon review of Bion's published, peer-reviewed data (see www.biontech.com) and additional requested data, Bion received a letter from California's South Coast Air Quality Management District (SCAQMD) dated February 1, 2005 stating that Bion's 'NMS microaerobic animal waste treatment process' qualifies under SCAQMD's new Rule 1127 dealing with Emissions Reductions From Livestock Waste. SCAQMD states that Bion's process "demonstrates significant reductions from anaerobic manure storage lagoons" and "VOC and ammonia emissions are significantly less than one pound per cow per year." This recognition of Bion system's environmental performance is being utilized to facilitate Bion's marketing efforts and as part of the BACT process.

In addition, the initial CPF project in California and the FODF joint venture installation have been selected for their high visibility with our target market. Bion's potential customers/dairy partners will be acutely aware of these projects from permitting through construction and operations. These dairy operators will be in a position to uniquely recognize the economic significance of the environmental solution that Bion brings to the industry.

Market opportunities for retrofits to large dairies, herd expansion and construction of CPFs to service 10,000+ cows in small geographic areas exist in California, Texas, New Mexico, Washington/Oregon and Idaho.

The primary market opportunities for integrated dairy parks are those states that produce corn that has historically been produced largely for export outside of those states. In addition, the large dairy states which are importing corn (California, Texas, New Mexico, Washington/Oregon and Idaho) would benefit from having CPFs and/or DPs in which an ethanol plant utilizes the corn already being imported to produce energy and operates as a feed mill for the dairy cows.

Glossary

Aerobic – with an abundance of oxygen

Anaerobic – with no oxygen

Anoxic – with very little oxygen

AQTF – Air Quality Task Force – a joint EPA/USDA task force

AWMS - a facility which employs Bion's Animal Waste Management System technology to process and remove odors and other polluting releases to air and water associated with confined animal feeding operations (CAFO's)

BACT – Best Available Control Technology

CAA – Clean Air Act

CAB – California Air Resources Board

CAFO – Confined Animal Feeding Operation. CAFO's are high density animal rearing facilities where food and water is delivered to each animal and its waste is removed

CNMP – Comprehensive Nutrient Management Plan

CO₂ - Carbon dioxide

CPFs – Central Processing Facilities – a facility geographically located near a cluster of CAFOs which receives and processes the wastes from 5,000+ cows and integrates the Bion technology for waste management and soil production with renewable energy production (methane and/or ethanol depending on size).

CWA – Clean Water Act

CWT – 100 pounds of milk

DP - Dairy Park – a vertically and/or site integrated industrial park consisting of an assemblage of large dairies (~1,000 to ~4,500 dairy cows each) utilizing Bion's AWMS technology which are linked to other related activities such as a grain-based ethanol manufacturing plant, an anaerobic digester/methane co-generator, and/or an ice cream or cheese making plant.

EBIT/DA – Earnings Before Interest, Taxes, Depreciation and Amortization – an indicator of cash flow.

EPA – Environmental Protection Agency

EQIP - Environmental Quality Incentives Program is a grants program administered by the USDA's NRCS under the Farm Bill

ERCs – Emission Reduction Credits – tradable credits provided under the CAA to use market forces to incentivize the cleaning of the air. An operation which produces less air pollutants than an industry baseline is awarded ERC's. To pollute the air beyond an industry baseline, one has to purchase ERC's.

First Generation – also referred to as Big Slow systems - a large Bion AWMS with a long hydraulic retention time (in contrast to a High Rate AWMS)

FODF – Fair Oaks Dairy Farm in Indiana

Greenfield – brand new versus an existing or retrofit

GWG – Greenhouse Warming Gases such as CO₂, NO_x & CH₄,

High Rate – a compact Bion AWMS with a hydraulic retention time on the order of 20 days (in contrast to the First Generation Bion AWMS's)

JV – Joint Venture

K – Potassium

Microaerobic – a system which has some but not a lot of dissolved oxygen– in between aerobic and anaerobic

N – Nitrogen

NMOC – Non-methane Organic Compounds – similar to VOCs but includes acetone and other compounds not on the VOC list.

NOP – National Organic Program – the program for Organic Certification under the USDA

NO_x – Nitrous oxides – a criteria air pollutant

NMS – Nutrient Management System – another name for AWMS (see above)

NRCS - Natural Resource Conservation Service – a division of the USDA

NPDES – National Pollutant Discharge Elimination System

N:P:K – Ratio of Nitrogen:Phosphorus (as P₂O₅):Potassium

OMRI – Organic Materials Research Institute

P – Phosphorus

Retrofit – a Bion AWMS placed onto an existing farm which utilizes a portion of the existing waste systems including parts of the existing anaerobic lagoon(s), tanks, pumps, screens and related subsystems

R&D – Research and Development

SCAQMD – South Coast Air Quality Management District in California

Second Generation a high-rate complete mix Bion system with computerized monitoring and controls on the key process parameters

SJVAPCD – San Joaquin Valley Air Pollution Control District in California

Solids – the harvested solid materials from a Bion process

Solubles – the soluble fraction recovered from the spent corn after the recovery of the ethanol

SO_x – Sulfur dioxide – a criteria air pollutant

TNRCC – Texas Natural Resources Conservation Commission

Tonnes – 1,000 kilograms = 2,204 pounds = 1 metric ton

USDA – United States Department of Agriculture

VFAs – Volatile Fatty Acids

VOCs – Volatile Organic Compounds – as per the EPA definition - a criteria air pollutant which is an ozone precursor

WDG – Wet Distillers Grain – the wet, high protein by-product which remains after corn is made into ethanol which can be used as a high protein animal feed. Also referred to as ‘spent corn’.

Supplemental Information

Up until recently CAFO's have largely ignored their environmental problems, in part because solutions have been both expensive and hard to find, and in part because they have been allowed to. For many years CAFOs have not been effectively regulated. However, ignoring the problem is increasingly unacceptable, as most CAFO activities, from continuation of existing operations through construction of new facilities, require permits involving review of environmental impacts. Site selection, size of operation, marketing, financing structure and sources, expansion and integration (vertical and/or horizontal), are now subject to environmental review as a critical component of CAFO permit decisions.

In addition, CAFO's are subject to increasing pressure from generally successful law suits launched by environmental and public interest organizations, such as recent decisions by the 9th Circuit Court of Appeals (California) and the 2nd Circuit Court of Appeals (New York). These decisions clearly hold that there is no basis for exempting CAFOs from the provisions of the Clean Air Act and the Clean Water Act. Courts in major CAFO industry states have taken similar positions.

Due to increased public and regulatory scrutiny of airborne contribution to greenhouse warming, ground-level ozone production, acid rain and asthma, and water-borne contribution to nitrogen, phosphorus and pathogen pollution to surface and ground water, the dairy industry is now rapidly being challenged to respond in California, New York, Florida, Wisconsin, Idaho, Texas and New Mexico (the major dairy states). Similar changes in practice are also being required of swine, poultry and feedlot CAFO's in applicable states.

In anticipation of increasingly rigorous changes in the public and regulatory approach to CAFOs, Bion developed a cost effective, patented environmental compliance technology. Bion's first generation technology (which has been installed on over 20 large dairy and hog farms) has been adapted by Bion for use in relation to the waste streams of all categories of CAFOs.

A second generation, high-rate Bion system installed on a 1,300 cow dairy farm in Texas was subjected to an independent, third party performance review conducted by a team of scientists/engineers from regulatory agencies, Land Grant Universities and private industry. This independent, third party review validated Bion's technology regarding elimination of almost all pathogens and polluting releases to air, and demonstrated reductions in nitrogen and phosphorus nutrient releases to water by up to 80%. All of the system's performance data is available at <http://www.biontech.com/>. No other technology for CAFO waste/pollution remediation has such independent, peer-reviewed data to support claims of pollution reduction to Bion's knowledge. No other technology is even claiming to provide a comprehensive solution to the polluting emissions to air and releases to water associated with CAFOs.

VALUE FOR THE EXISTING DAIRY INDUSTRY

For years, producers have used their land to assimilate livestock waste as an integral part of a Comprehensive Nutrient Management Plan (CNMP). However, according to the USDA, only 2%

of large dairies have sufficient land to assimilate the waste stream nutrients (primarily nitrogen and phosphorus) to remain in compliance with existing regulations as they are increasingly enforced. Compounding the problem, newly proposed ASAE standards pending adoption by the USDA reflect that there is actually at least 20% - 30% more nitrogen and phosphorus discharged per dairy animal than previously believed. As a result, CAFO's will require additional land to remain in compliance with the waste stream from their existing herds. Many dairy operations that are currently in compliance will no longer be so. As a rule of thumb, in the Northeast and Midwest, each dairy cow requires approximately two acres of land for adequate handling of its associated waste stream, depending upon local soil conditions and the nature of farming activity. In CA, the acreage requirement has been significantly less since it is possible to farm throughout the year. In the Midwest where land costs can run close to \$2,500 per acre, these requirements for additional land can drive added capital costs for compliance to as much as \$5,000 per head. In California, land costs are considerably greater.

The cost of environmental compliance will place an increasing burden on the cash flow of dairy CAFOs, unless they can find economic relief through operational efficiencies. Bion's technology, not only solves the environmental problem, but also provides the basis for increasing herd size while maintaining environmental compliance. Increased herd size results in increase cash flows to cover the cost of the environmental solution. Compliance technologies like other dairy operating costs are very sensitive to scale. The ability to increase an operation's herd size will also serve to further reduce per animal cost of compliance.

Dairy industry adoption of Bion's technology will initially involve support for environmental compliance and permitted herd expansion at existing CAFO operations. Similarly, Bion technology will be utilized to support permitting of new, large-scale facilities that cannot otherwise get the required permits. Bion's technology will support much larger dairy herds where expanded herd density makes economic sense. Where a producer is currently environmentally compliant, Bion's technology will support herd expansion by as much as three-fold without need for additional land (assuming contiguous land were available).

Bion's environmental technology's capital and operating costs are sensitive to scale. As an example, dairies that achieve a herd size of 8,000 - 10,000 dairy cows will be able to access a capital cost advantage of 20-30% over smaller 3,500 cow dairies assuming use of a Bion environmental system including anaerobic digestion. Economic integration of renewable energy production is generally unavailable to smaller herds, as it is also sensitive to scale with regard to both capital and operating costs. One scenario for increasing scale and decreasing the cost per animal for implementing Bion's technology would have adjoining dairies utilize a Bion CPF as their model.

USDA NRCS Approval: In April 2005, the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) issued new National Conservation Practice Standards for biological treatment systems, which qualify Bion's environmental compliance technology process for funding under its Environment Quality Implementation Program (EQIP). The EQIP program provides direct farm support in the form of grants to cost share up to 75% of

qualified conservation practices, not to exceed \$450,000 to any individual during the term of the Farm Bill.

Bion had provided substantial input to the NRCS in their recent review of applicable waste stream technologies, including the results of our third-party, peer reviewed demonstration project in Texas. The new practices are embodied under the new Amendments for the Treatment of Agricultural Waste (Code 591), Liquid/Solid Waste Separation Facility (Code 632) and Waste Treatment (Code 629) which is a new standard intended to address the installation of alternative animal waste treatment systems and processes.

As such, Bion's entire system now qualifies under the USDA NRCS Environmental Quality Incentives Program (EQIP).

Integration Opportunities: Additional opportunities for Bion and its producer clients to leverage value from Bion's technology occur where the herd concentration in a local area is sufficient to integrate specific complementary technologies that have been developed for Bion's CPF and DP initiatives. As an example, approximately 70,000 dairy animals currently reside on farms in a small section of Kern County near Bakersfield, California. Kern County may well represent a prime example of the kind of area that will support significant available integration opportunities, such as ethanol, through the use of Bion's environmental compliance technology.

Ethanol made from corn is rapidly replacing the toxic gasoline additive MTBE. At present wholesale gasoline prices, dairies will need to recover the non-nutritive ethanol value of the corn they feed their cows, and Bion's proprietary technology creates the possibility of maximizing this economic opportunity. A 40,000 milking cow dairy herd (plus its dry cows and heifers) will be able to consume the spent corn/wet distillers grain that yields ethanol value of \$40-\$60M annually. As ethanol production continues to expand, the energy value of corn will begin to drive up its price in the marketplace which will negatively impact dairy producers unless they look to opportunities like Bion's integration approach as a logical incorporation into their business model and revenue stream.

To create and maximize this opportunity, Bion's technology will be required to permit herd concentration without negative environmental impact while creating a feed by-product for the dairy herd that does not contain excess nutrients or unsaturated fats that limit its inclusion in the feed ration in comparison to corn. Bion has been working with University of Nebraska and FODF on feed trials, as well as on the development of other feed by-product opportunities.

By eliminating the need to dry the spent corn (wet distiller's grain) at a properly sized and integrated ethanol facility, Bion's technology will allow a \$12-16 million capital cost reduction compared with a typical stand-alone 40 million gallon per year ethanol plant that would have a capital cost of \$48-55 million.

Additional benefits from herd concentration and vertical integration not presently quantifiable involve the elimination of environmental and litigation risk as well as the long-term preservation of the land value of farms for future development. Environmental liability cleanup costs could significantly impair the future value of these assets.

Participation in a Dairy Park holds a number of significant value opportunities for the dairy operator (all of which are made possible by Bion's technology). The structure of the Dairy Park will provide the producer with the ability to manage a large herd with significantly reduced need for capital at the same time that his access to capital will be increased based upon the elimination of environmental risk. Operating within the structure of a long-term lease, the DP will also provide the dairy operator with reduced risk and access to a stable market for his milk. The combination of reduced market and environmental risk, along with reduced cost of operations and decreased requirements for capital, should prove to be extremely attractive to dairy producers. It is anticipated that Bion will have direct ownership interests in the dairy herd and milk production in the context of some Dairy Park developments (but probably not in the initial DP).

THE ECONOMIC OPPORTUNITY FOR BION

Bion's core business opportunity starts with its role as a technology partner to the dairy (and other CAFO) industry where large herd concentrations exist or can be created. Bion will provide the technology to support environmental compliance for existing herds as well as achieve economies of scale from increased herd concentration at existing and proposed dairy operations. Bion will also provide the technology, management and resources to successfully develop large-scale, integrated ag-production complexes that take advantage of the energy (anaerobic digestion and ethanol), feed (spent corn) and other business opportunities (such as solids conversion to both fertilizers and other products) available from herd concentration.

In addition, Bion also anticipates access to some level of value from ERCs in the future. Air and nutrient credits will be available to industries that produce environmental results beyond regulatory requirements, but are not yet readily available to the CAFO industry. That could change if the industry offers environmental remediation in return for emission reduction credits (ERCs) and / or nutrient credits as a way to pay for it. Greenhouse Gas Emission Credits are now trading on the Chicago Climate Exchange at \$2-\$5 per ton/year for non-Kyoto signatory based credits (for countries such as the U.S.) and \$24-\$30 per ton/year for Kyoto signatory based credits (including Canada). Bion believes that our technology will produce reductions on which to base credits of approximately 4 - 10 tons/year per dairy cow.

The Retrofit Business: Bion defines its "retrofit" business as the opportunity to support existing and new dairy operations achieve environmental compliance while optimizing herd size for economic benefit. Bion believes that its potential retrofit market exceeds one million dairy animals out of the present U.S. total herd of 8.5 million. California currently represents the largest dairy market in the world with two million dairy cows. 70,000 dairy animals currently reside in Kern County near Bakersfield, California, which, therefore, represents a prime example of the kind of area that will support significant integration opportunities leveraged through the use of Bion's environmental compliance technology.

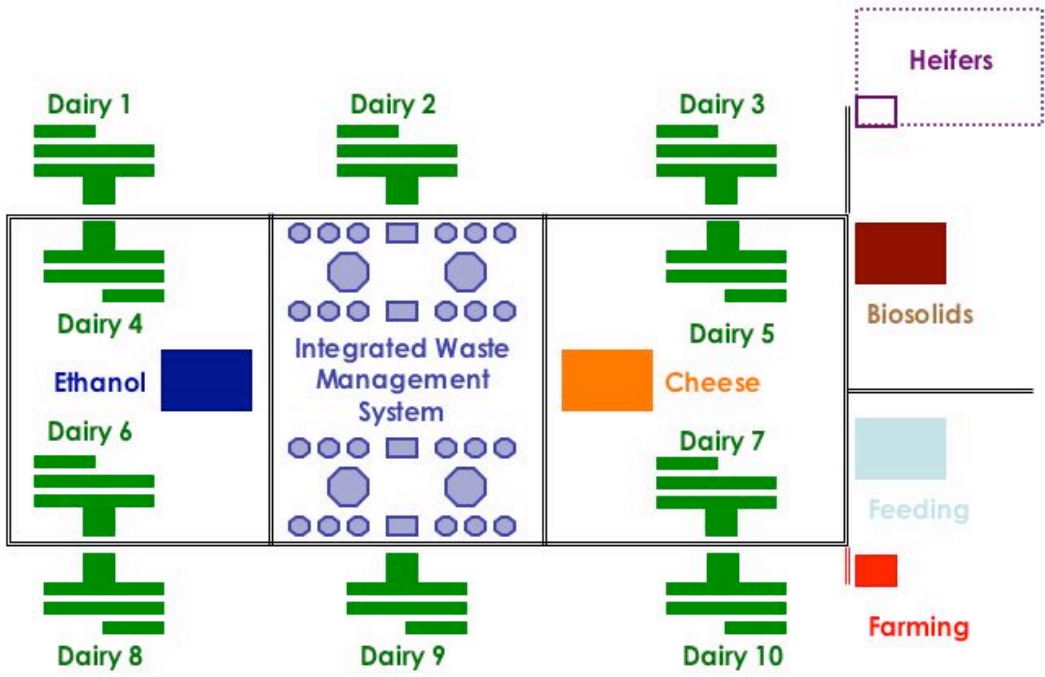
As technology provider, Bion will be responsible for construction and operation of these retrofit projects, and anticipates generation of revenue from multiple sources, including:

- One time technology license fees of approximately \$200-\$250 per cow;
- Annual fees in the \$200-250/year per cow;
- Possible installation O&M service contacts;
- Environmental credits; and
- Development of markets for its processed solids as either an organic fertilizer or a high protein feed product.

Bion can also provide its environmental technology through centralized manure treatment facilities (CPFs) to that portion of the dairy industry (smaller farms and farms located in small, concentrated geographic areas) that would otherwise bear significantly greater capital and operating costs per unit of production if implementing environmental compliance technology individually. Bion believes that implementation by smaller dairies will require restructuring on a local level to enable them to achieve a minimum percentage of the available benefits of herd concentration and scale to justify implementation of Bion's technology for environmental cleanup.

The “Dairy Park” Business : The larger, long-term opportunity for Bion remains in the development of a proprietary business, referred to as Dairy Parks (DPs). DPs are greenfield, large-scale, integrated projects that can be populated by the end product producers (i.e.—cheese, milk or ice cream plants, etc.) and large dairy producer groups with Bion providing development services along with the environmental technology integration. Development of these large, multi-function ag-production facilities will involve integration of complementary business opportunities such as ethanol and anaerobic digestion. Bion projects that its proprietary Dairy Park business will eventually house (at minimum) an additional 500,000 cows beyond those served through its retrofit and CPF business (approximately 12 Dairy Parks).

Conceptual Integrated Dairy Park Layout



Bion expects to retain an equity position in certain components of the projects it develops DPs. Integration opportunities in which Bion intends to retain an equity position include the production and marketing of solids, ethanol and distiller grains feed products as well as energy generation, and, in some DPs, the dairy herd/milk production and end-product user.

Bion's role in the Dairy Park business will have evolved from that of a technology provider and financial partner limited to waste management and possibly renewable energy, to include the activities of developer/ integrator and joint venture participant. As a developer, Bion would secure the site, local and state permits and financing for all aspects of the project. Bion would secure the dairy producers and end product manufacturers, such as a cheese plant, to occupy and lease the facilities. In certain instances Bion may elect to partner directly with the other DP participants and as a result own a direct equity interest in the dairy herd and/or end product producer. In return, these participants may seek such a business JV relationship to diversify and gain access to Bion's more stable and predictable cash flow components of user fees, renewable energy and feed mill activities.

It is important to note that in a DP, Bion's technology creates the integration opportunities that significantly reduce the capital and operating costs for every DP participant. In particular, Bion anticipates that revenues from its "Dairy Park" business will be generated from:

- Revenues as detailed above, including license fees, annual fees, marketing of solids and capture of environmental credits;
- Increased access to lower-cost capital; and
- Its equity position in selected components of the integrated facility.

Other Initiatives: Bion has a number of other initiatives under negotiation/discussion including a potential demonstration hog project in Canada with a major hog producer. Canada is a Kyoto Treaty signatory. As a result, new large livestock projects in Canada, as well as for all Kyoto Treaty signatories, will have to use technology that mitigates emissions of greenhouse gases

Intellectual Property

In June 21, 2005 Bion was awarded patent # 6,908,495 titled **Low Oxygen Organic Waste Bioconversion System**. The authors are Bion's Technology Director, Dr. Jere Northrop, PhD., who received the initial patents on earlier versions of this process starting in 1988, and Dr. James Morris, PhD, P.E., Bion's Chief Technology Officer.

This patent is a 'divisional' (extension) of our previous process patent #6,689,274 issued on February 10, 2004 and provides considerably wider protection than the initial Bion biological process patent. With this publication and issuance, Bion's technology now has protection under nine (9) US patents, one Canadian and one US patent pending (Bion biological phosphorus removal

patent application). In addition, it is anticipated that Bion will also be receiving parallel patents from a number of other targeted countries and the European Union.

Other patents owned by Bion include the following:

US Pat No	Date issued	Title
4,721,569	1/26/88	Phosphorus Treatment Process
5,078,882	1/7/92	Bioconversion Reactor and System
5,472,472	12/5/95	Animal Waste Bioconversion System
5,538,529	7/23/96	Bioconverted Nutrient Rich Humus - CIP of A3
5,626,644	5/6/97	Storm Water Remediatary Bioconversion System – CIP of A3
5,755,852	5/26/98	Bioconverted Nutrient Rich Humus - CIP of A4

Canadian Patents

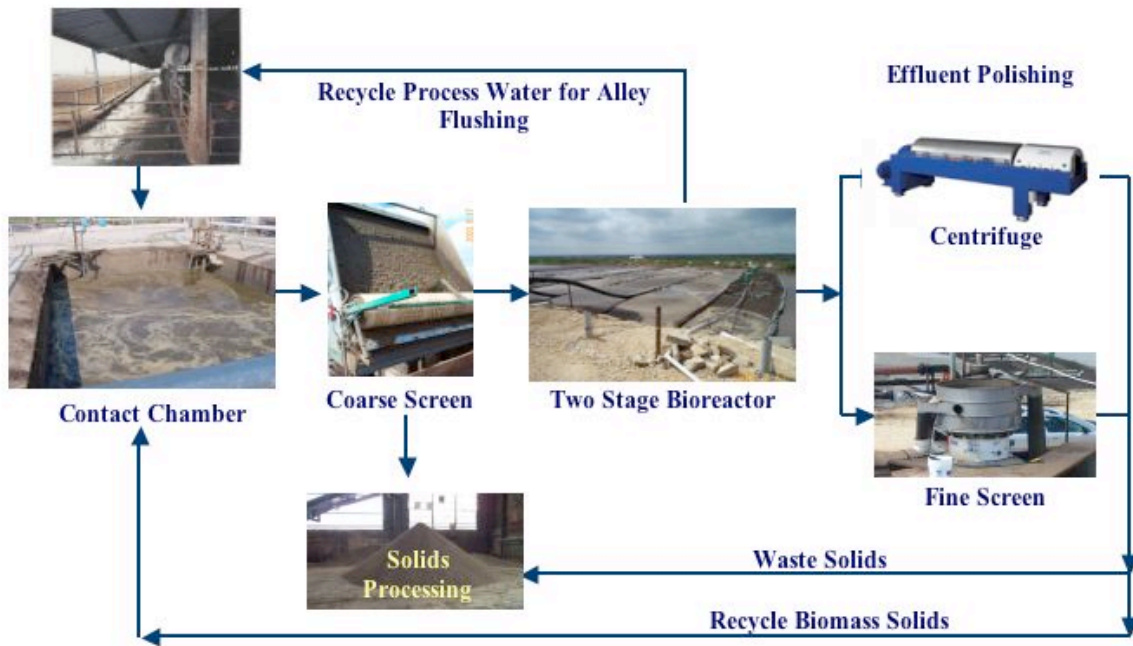
1,336,623	8/8/95	Aqueous Stream Treatment Process (Canada)
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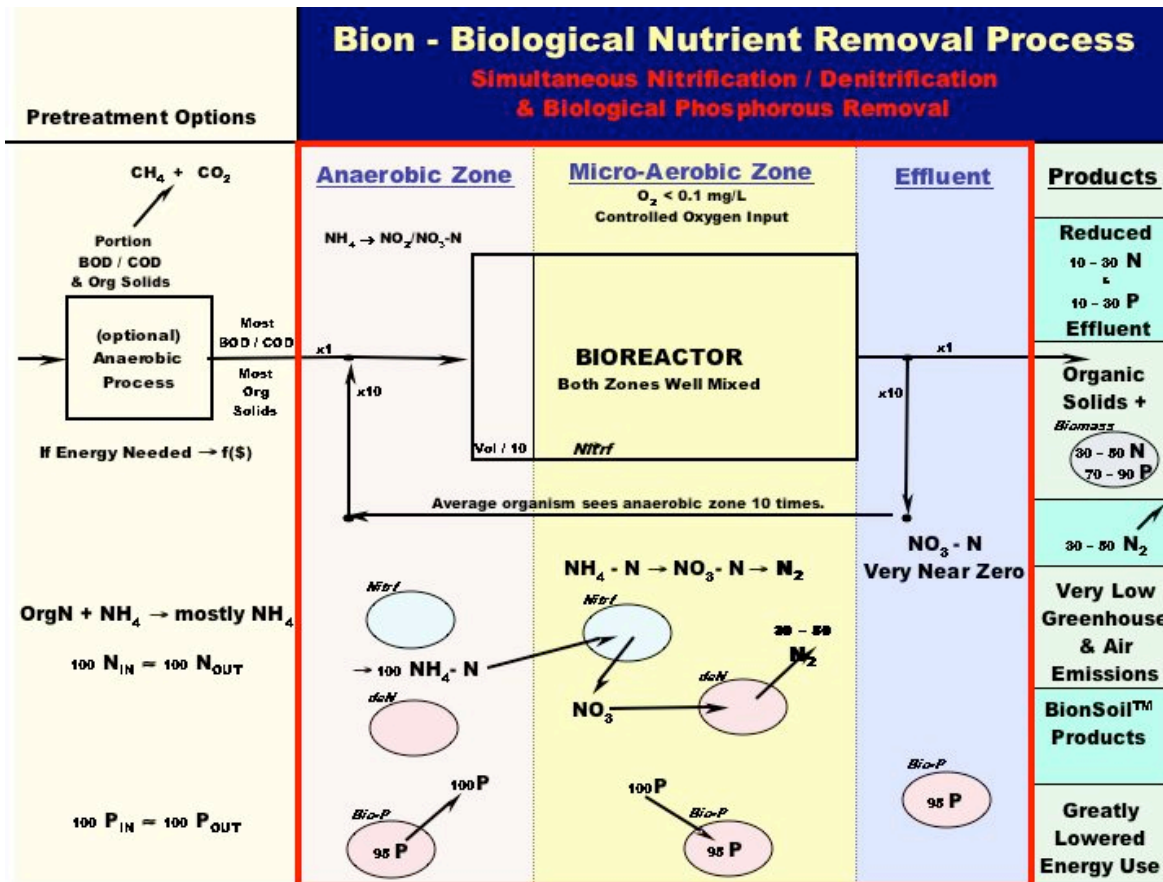
Air and Water Testing Results from DeVries Dairy

The following is a system diagram of a Bion system and a diagram showing the underlying biochemistry:

DeVries Dairy - Bion Process

Biological Nutrient Removal System





During early 2004 a team of independent experts was assembled to design a protocol to determine the releases to water and emissions to air of Bion's high rate animal waste treatment system installed at the 1,300-cow DeVries Dairy in Dublin, Texas.

The protocol, data and reports, which were published in final form on December 22, 2004, are downloadable from www.biontech.com.

Third Party Review and Demonstration Scrutiny: The independent team that developed and/or approved the protocol and subsequently reviewed all performance data involved the following scientists:

- Lynne H. Moss, P.E., DEE; Mark Gould, P.E. DEE; Clyde Burnett, P.E. DEE - Camp, Dresser & McKee
- Richard Nicolai, PhD, P.E. South Dakota State University
- Richard Stowell, PhD, University of Nebraska - Lincoln
- William Clarkson, PhD, P.E. Oklahoma State University - Tulsa
- Kevin Young, P.E. J.R., Wauford & Co.

Other parties who provided input into the testing protocol and accepted the testing protocols included:

- Raymond Loehr, PhD, University of Texas
- Ron Heavner, USDA/NRCS/CED
- Dave Warner, San Joaquin Valley Unified Air Pollution Control District.

John R. Smith and Anna M. Rodrigues of the Texas Commission on Environmental Quality witnessed water and air sample collection.

MidWest Laboratories analyzed collected water samples and Ace Laboratories analyzed collected air samples. In both cases, the laboratories used are certified laboratories and are entirely independent of Bion.

In addition, representatives of numerous Congressional offices, the Mayor of Waco, and representatives from numerous environmental groups, including the Sierra Club and Waterkeeper Alliance, visited the operating Bion system at the Devries Dairy.

Summary Results: In summary, the water results showed that only 4% of the original Phosphorus input and only 10% of the original Nitrogen input remained in soluble form in the effluent, 40% of the Nitrogen being converted to inert Nitrogen gas and the remaining Nitrogen and Phosphorus incorporated into solid form. On a whole farm basis, the Bion System produced a 74% reduction of nitrogen and a 79% reduction of phosphorus. The air results show that the Bion system limited emissions as follows: (in pounds per 1,400 pound dairy cow per year):

- | | |
|------------------------------|------|
| ▪ Ammonia | 0.20 |
| ▪ Hydrogen Sulfide | 0.56 |
| ▪ Volatile Organic Compounds | 0.03 |
| ▪ Nitrogen Oxides | 0.17 |

These emissions represent a reduction from published baselines by 95%-99%

Based upon these results, Bion received a letter from California's South Coast Air Quality Management District (SCAQMD) dated February 1, 2005 stating that Bion's NMS microaerobic animal waste treatment process qualifies under SCAQMD's new Rule 1127 dealing with Emissions Reductions From Livestock Waste.

Because of this great concentration of cows and the ongoing litigations, regulation promulgation, and specifically as a result of a settlement agreement between the SJVUAPCD and Western United Dairymen, a trade association, new research was undertaken to address the dairy industries challenge to the California Air Resources Board that the existing emission factor of 12.8 pounds of VOCs per cow per year overstated the actual releases.

New research was conducted with the results provided to a Dairy Permitting Advisory Group, which consisted of representatives of the dairy industry, regulators and environmentalists who made recommendations to the Air Pollution Control officer of SJVUAPCD. In August 2005, the Air Pollution Control Officer come out with their VOC revised emission factor which is 19.3 pounds of

VOCs per cow per year. As a result, dairy cows emit more VOCs in the Central Valley than cars and refineries combined.

This research found that the composition of the emissions previously measured as NMOC or VOC (volatile organic carbon) included significant amounts of acetone (which is not in the EPA VOC definition) and did not include a number of reactive gases of concern which are components of VOCs but not measured by the established standard VOC sampling and analytical techniques. Compounds unmeasured included some alcohols, volatile fatty acids (VFAs), phenols and amines. This California research thus indicated new techniques for more precise sampling and analysis of VOCs.

Based upon the methodologies that were developed for the research which supported the new emission factor, Bion retested the VOCs emitted by its process in DeVries Dairy.

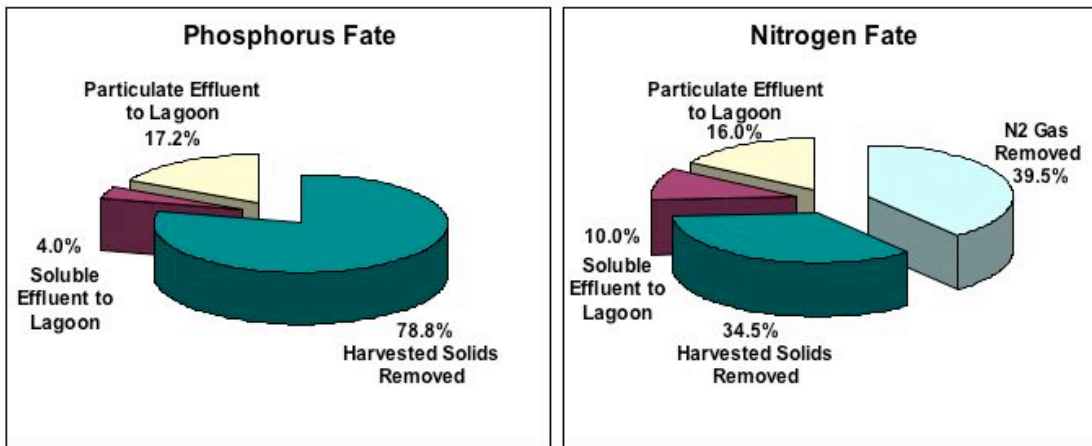
These independent lab results document non-enteric emissions of approximately 0.08 pounds per 1400 pound dairy cow per year of Reactive Organic Gases (ROGs) or 80 lbs per year for a 1000 cow dairy from the Bion system prior to discharge to the storage lagoon serving the DeVries 1250 cow free-stall flush-lane dairy in Dublin, Texas.

To incorporate these findings into its recent study, Bion used Columbia Analytical Laboratories in Simi Valley California (www.caslab.com) that had prepared standards, and developed and published methods for sampling and analyzing these categories of VOCs. In addition to a total volatile organic compounds measurement based upon gas chromatograph mass spectroscopy data, the library of additional standards and tests consisted of 17 VFAs, 13 amines, 10 phenols and cresols, methanol, ethanol, isopropyl alcohol, acetone, and methane. The sampling involved the collection of composite emissions over a 48 hour period in vacuum canisters as well as in a variety of sorbent tubes. Sorbent tubes allow the air being sampled to flow through media having a selective affinity for the target compounds sought, trapping them to then be released and analyzed in the laboratory. The technical improvements incorporated into the new study resulted in detection limits in the parts per billion range (ppb) for each specie or component of VOCs.

Using these more accurate techniques, and computing all non-detect values as producing emissions at one-half the detection limit, resulted in the currently reported value of approximately 0.08 pounds VOCs per cow per year.

Nitrogen and Phosphorus Pollution Reduction

- On-farm P Levels Reduced by **79%**
- On-farm N Levels Reduced by **74%**



BION NMS™ RESULTS FOR AIR EMISSIONS

Total System Average Emissions In Lb/1,000 Lb Animal-Year		
	7/12/05 – 7/14/05	4/20/04-7/15/04
Methane - CH₄	28.81	27.49
Hydrogen sulfide – H₂S	0.48	0.40
Ammonia – NH₃	0.43	0.14
VOCs	0.057	NA
NMOCs	NA	0.020

Regulatory Background

The Clean Water Act (CWA)

In enforcing the Clean Water Act, new regulatory requirements as of April 2003 by the Environmental Protection Agency (EPA) mandate that dairy CAFO's of 700 cows or more apply for a National Pollutant Discharge Elimination System (NPDES) permit. Among other parameters, these permits require the applicant to quantify their current releases. To regulate and control their animals' releases to fresh and groundwater, CAFO's must develop and implement site specific nutrient management plans to ensure proper and effective manure and wastewater management, including compliance with the Effluent Limitation Guidelines. Failure to do so will now bring enforcement action. CAFO's are now required to secure water permits as well as being regulated as to their discharges. If they exceed their permit allowances, they can be shut down and/or be subject to large fines.

CAFO farmers have been spreading manure on land as the way to dispose of those nutrients (principally nitrogen and phosphorus). Depending on the location, they require 1-2 acres of farmland per dairy cow cultivated with crops to allow manure application at a non-polluting agronomic rate at which crops/land would supposedly assimilate these nutrients. Under the new regulations, CAFO's must now meet nutrient application standards for disposal of their manure which requires the land to be tested for its ability to absorb nutrients as well as the manure to be tested to determine the nutrient load. As a result, many existing dairy farms cannot meet this standard and either need to acquire or rent additional land for disposal or need to transport solids to other locations. Lastly, the land application of manure is now being regulated to limit application to those seasons when an uptake crop is actively taking nutrients from the ground. This requirement demands additional manure storage capacity (and related costs).

A June 2003 US Department of Agriculture (USDA) Economic Research Service report states that only 2% of dairies have an adequate land base to meet a strict phosphorus-based standard of the new EPA regulations. As a result, the costs of either acquiring additional arable land, at an average of \$2,000 per acre, or trucking and disposing of the manure off site, becomes a large additional cost to the existing dairy industry.

The Clean Air Act (CAA)

The Clean Air Act, among other things, regulates the emissions by "Stationary Sources of Criteria Air Pollutants," such as acid rain, smog and ground-level ozone causing gases. In the past, CAFO's had been exempted from the Act. Yet farms are a major source of air pollution, especially in places like California's central valley. Dairy manure and its decomposition produce the Criteria Pollutants of methane, sulfur dioxide (SO_x), ammonia, which becomes nitrous oxides (NO_x) and other gases.

In May 2002, a successful suit against the EPA resulted in a settlement/ruling that there was no basis for excluding CAFO's for regulation under the CAA. Denying an appeal by the California Farm Bureau of the lower court ruling, the Federal Ninth Circuit Court in California reaffirmed on July 15, 2003 that CAFO's are Stationary Sources of Criteria Air Pollutants and they must now gain permitting for and regulate their releases to air under the CAA. In the ruling the court stated that

"blanket exemptions from regulation for entire industries ... violate the Clean Air Act." The farming exemption, the court ruled, had helped guarantee that residents of the state's central valley "will continue to breathe air that fails to meet national health-based standards." California's farms must now regulate polluting emissions from farms.

In September of 2003, Senator Florez's bill SB 700 became law in California. This legislation provides that CAFO's will no longer be exempted from having to employ Best Available Technology (BAT) in mitigating the waste releases from farm animals (primarily dairy cows in California). Farmers developing new farms are regulated as of January 1, 2004, and existing dairies need to comply by January 1, 2006. The existing law now requires that dairies fully implement solutions to these polluting releases irrespective of costs.

In Oct 2004, the 10th Circuit Court ruled that, just like in other parts of the Comprehensive Environmental, Response, Compensation, and Liability Act, the term "facility" should be given a broad reading when weighing whether animal farm emissions have to be reported. In this instance, the court's ruling meant that all the ammonia emissions from an Oklahoma pig-farming operation, consisting of two separate contiguous farms and numerous buildings and emissions points, will be aggregated together to determine whether those emissions triggered federal reporting requirements.

In June 2005 in California, the Air Resources Board (CARB) ruled that dairies larger than 1,000 cows in non-attainment areas and 2,000 cows in attainment areas will be regulated for their emissions to air.

In August 2005, the SJVAPCD, in response to a settlement agreement with the dairy industry brought on by a suit which charged that there was no basis for using CARB's placeholder VOC emission factor of 12.8 pounds per cow per year, ruled that there are instead [at least] 20.6 pounds of VOC emissions per cow per year, making the VOCs from cows in Central Valley greater than cars and refineries combined. This near doubling of the threshold which the dairy industry had claimed was too high by half, set the stage for the awareness by the California dairy industry that dairies are going to be seriously (and not just perfunctorily or cosmetically) regulated for their emissions. Shortly after this, new litigation (currently pending) commenced against a dairy claiming that they had begun construction of a facilities expansion without getting a permit.

In January 2005, California also passed rules requiring a 30% reduction in Greenhouse Warming Gases from cars and light trucks over the next 12 years. While it does not specifically apply to CAFOs, these are the first Greenhouse Gas regulations in the United States and Bion's process mitigates 9.3 tonnes of Greenhouse Gases per cow per year.

CAFO regulations in other states are following similar paths to California. For example, in March 2005, a Florida appeals court today ruled that industrial style dairies can no longer dump manure-polluted waste into state waters and directed the Florida Department of Environmental Protection (DEP) to start enforcing water protection laws.

There are many pending litigation cases in other states charging that CAFO's should be regulated under the CAA just like any other industry. The Company believes that other states, which neither have the resources to undergo this litigation nor the millions of dollars to research and develop their

own CAFO regulations, will adopt a version of the California legislation (and regulations adopted pursuant thereto).

For all intents and purposes, dairy farming has suddenly changed. On a nationwide basis, CAFO's releases to water are starting to be regulated. It is expected that soon CAFO's releases to air will also be regulated nationwide. The need for a process that provides a comprehensive solution to polluting releases to water and emissions to air is apparent.

INTERNATIONAL LAW

The Kyoto Treaty, which is a global compact on Greenhouse Warming Gases has been ratified. Countries that are signatories and companies that do business in signatory countries must make provision for mitigation of Greenhouse Warming Gases including carbon dioxide, methane and nitrous oxides (NOx) in the construction of any new CAFO facility. CAFO's produce carbon dioxide, methane and NOx. While CAFO's are considered to be 'carbon neutral' from a carbon dioxide perspective (the carbon dioxide that the animals respire is equal to the carbon dioxide taken up by the plants which the cows eat), the methane and NOx produced by CAFO's must be mitigated. On a molecule-to-molecule basis, methane and NOx's contribution to climate change are respectively 21X and 310X, greater than the impact of carbon dioxide.

Europe is already not meeting its commitments for Greenhouse Gas reductions and, as a result, prices of Carbon Credits have gone up (to \$28 per tonne per year as of Oct 5, 2005). Based on the documented, published reductions of methane and NOx produced by the Bion process (see www.biontech.com), the Bion process offsets the equivalent of 9.3 tonnes of Greenhouse Warming Gases per cow per year. At recent price levels, this reduction has a potential value to Bion equivalent to approximately \$260 of carbon credits per cow per year.

Emission Reduction Credits, Nutrient Credits and Carbon Credits

Emission Reduction Credits (ERC's) are a potentially large revenue stream which may be generated by the Bion AWMS technology under certain political, regulatory and economic circumstances which are not yet fully in place. To date the Company has neither applied for nor has it been granted ERC's for any of its existing projects. To a large extent, the purpose of the Texas installation and trials was to provide for third parties' documentation of emission levels from the Bion AWMS which can then be used to calculate the available ERC's once a scientific, regulatory baseline has been adopted

Emission Reduction Credits

On March 29, 1993, the Chicago Board of Trade added a new tradable commodity to its array of frozen orange juice and pork belly futures – permits to pollute the air. Under a sealed bid system \$21.4 million was paid for the right to emit 150,010 tons of sulfur dioxide from the purchasers' smokestacks (a primary cause of acid rain). The money went to companies that used low sulfur coal or Best Available Technology in pollution remediation.

Created by the CAA as a way to use market forces (and not government handouts) in offsetting the releases of air pollutants, ERC's have been traded throughout much of the country since 1993. Now that dairy emissions are to be regulated, the Company anticipates that its installations will be able to realize revenues from ERC's once dairy industry "baselines" are established and federal and state policy makers finalize and implement ERC procedures presently under development by the Air Quality Task Force (AQTF) (a joint EPA/USDA task force). The AQTF has endorsed the trading of ERC's from agricultural sources, but to date no specific regulations enabling trading have been adopted. Since CAFO's are now designated in California as Stationary Sources of Criteria Air Pollutants (such as acid rain causing, smog producing and ground level ozone causing gases), the ERC provisions of the CAA should apply.

While credits are often sold directly from the producer/owner of the credit to a party wishing to use the credit, they are also brokered. Cantor Fitzgerald Environmental Brokerage Service, Natsource and Evolution Markets, among others, trade these credits.

An active trading market in air pollution emission reduction credits exists throughout much of the country and around the world. For example, the ERC market price index of trades for thirty year contracts through Cantor Fitzgerald Environmental Brokerage Service in October 21, 2005, were at \$24,500 per ton of NOx ERC's, VOC's (like methane) traded at \$8,000 per ton, and SOx at \$5,900 per ton for reductions in the San Joaquin Valley, California. NOx ERC's have already been awarded for emission reduction on diesel engine emission reductions used on agricultural projects in central California for \$25,000 to \$40,000 per ton of annual reduction for long-term contracts.

As the impacts of Acid Rain and Ozone Causing gases are regional, the value of the ERC's is different in different air management districts. According to Cantor Fitzgerald Environmental Brokerage Services, NOx ERC's, for example, on October 21, 2005, traded for \$55,000 per ton in San Diego, CA, more than twice the price in the San Joaquin Valley.

Bion's AWMS process mitigates the releases of methane, nitrous oxides, ammonia and hydrogen sulfide. To the extent that the AWMS mitigates these releases compared to a regulatory/scientific baseline, the Company will be able to own and trade these credits in the future. Bion is closely monitoring developments in this area.

Greenhouse Gas – Carbon Credits

Like the CAA, the Kyoto Treaty has a provision for the earning and trading of carbon dioxide emission reduction credits – carbon credits. In anticipation of its ratification, carbon credits have been trading for several years.

In January 2005 the European Union carbon credit trading program commenced. The market for these credits has been predicted to grow to \$40 to \$100 billion per year. Europe is already not meeting its commitments for Greenhouse Gas reductions and, as a result, the prices of Carbon Credits has gone up (to \$28 per tonne as of Oct 5, 2005). With the known reductions of methane and NOx for the Bion process, the Bion process offsets the equivalent of 9.3 tonnes of Greenhouse Warming Gases per cow per year. At current levels, this is the equivalent of \$260 of carbon credits per cow per year.

AgCert, a privately owned company, has been awarded an approved protocol for taking animal manure, placing it a lined hole in the ground, flaring the methane gas which results, and earning tradable carbon credits. Bion believes that CAFO operations utilizing its technology in Kyoto signatory countries (including Canada) will be able to qualify for such credits. Bion is in the early stages of evaluating the business opportunities this potentially creates for the Company.

NUTRIENT CREDITS

Current EPA regulations under the Clean Water Act require that dairy CAFO's of 700 cows or more secure permits for their nutrient releases to water. It is anticipated that this will become the basis for the eventual widespread trading of "nutrient credits" in the United States.

In the Brazos River watershed, a subsidy with an economic effect on agriculture similar to credits has already commenced. In this watershed district, high concentrations of phosphorus in the water (and soil) represent the major pollution problem. The problem is so severe that, in addition to limiting the size of dairy farms, innovative regulators at the Texas Natural Resource Conservation Commission (TNRCC) have indirectly implemented the equivalent of a nutrient credit by subsidizing soil/manure sales that remove the nutrients from the watershed.

The TNRCC has reserved a portion of its federal Clean Water Act, Section 319(h) grant funds for incentive payments (rebates) to governmental purchasers (grantees) of composted dairy manure originating from the North Bosque and Leon River watersheds. This program is part of a joint state and federal non-point source pollution abatement initiative. Through composting excess livestock manure and selling the product to state and local agencies for erosion control and landscaping purposes, this project reduces the impairment of water resources both where the manure originates and where the compost is used.

This program pays \$5 per cubic yard of composted manure. Approximately 6 cubic yards of composted manure is produced per dairy cow per year in a Bion AWMS. The existing, full-size Texas Bion retrofit AWMS facility may be able to take advantage of these "nutrient credits" if the Company elects to keep it in operation after the testing period has been completed.

It costs \$22, on average, to remove one pound of phosphorus from the liquid waste stream in a municipal treatment facility in the U.S. today. With 37 pounds of phosphorus in the manure of a 1,400# dairy cow per year, it would cost \$814 per year to remove that much phosphorus using municipal wastewater technology.

In another "nutrient credit" equivalent type program, the Brazos River Water Authority is currently offering for a limited time, \$35 per dairy cow to dairies to physically remove the manure from the watershed area so that the nutrients do not re-enter the Brazos River.

There are 32 different local nutrient trading programs around the United States. To help save the Chesapeake Bay, in April 2005 Virginia instituted a statewide nutrient credit trading program. Other states are following suit.

The Company believes that at some point in the not to distant future, offset credits will probably be established to incentivize nitrogen and phosphorus removal from watersheds in much of the country. This will enable municipalities (and their taxpayers) to offset the economic burden on municipal utilities by eliminating the need to spend this much on nutrient remediation. Based on results of the AWMS at the Texas installation and in prior installations, the Company believes that the Bion AWMS will remove phosphorus and nitrogen at a small fraction of the cost of other treatment processes, thereby providing the economic and technical basis for profitable trading of "nutrient credits" in the future to the benefit of the Company, the dairy industry, the municipalities and the environment.

Competition

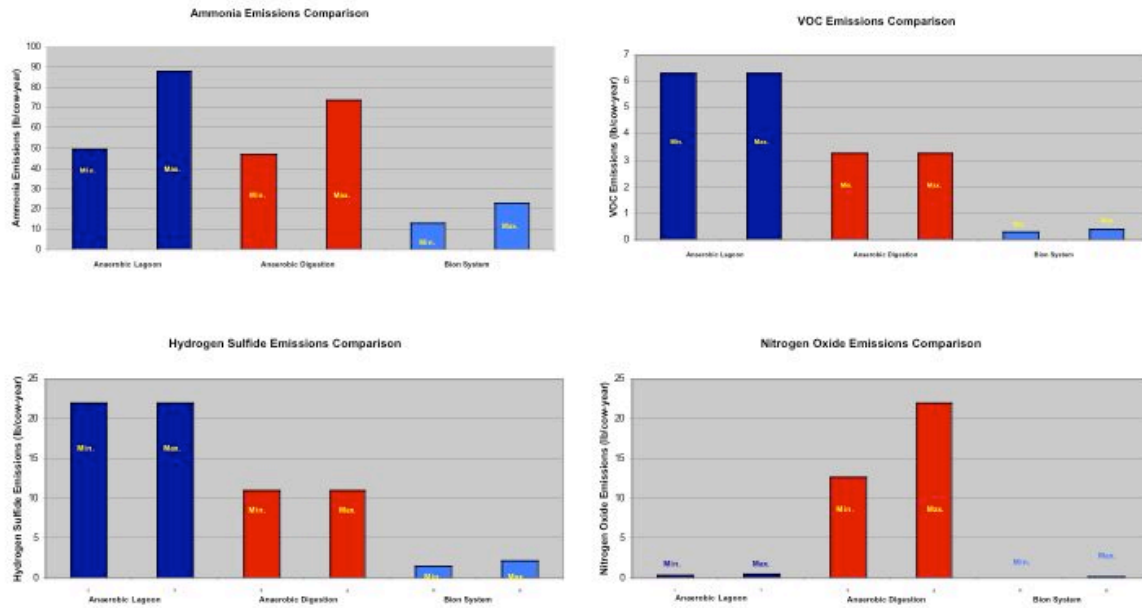
The Company knows of no other technology/company that makes a claim that its technology comprehensively mitigates the polluting releases to water and emissions to air from CAFOs. Further, the Company has not seen any peer reviewed data or data resulting from independent laboratory testing which indicates that there are other commercial technologies out there that mitigate CAFOs polluting releases to water and the emissions to air to the extent of the documented reductions by the Company's technology.

Anaerobic digestion technology is sometimes mistakenly considered a pollution control technology, but it is an energy solution, not an environmental solution. It captures the energy value from the manure but does not significantly mitigate the polluting emissions to air nor the releases to water. Compared to Bion's technology which has been documented to reduce nitrogen and phosphorus releases by 74% and 79%, respectively, anaerobic digestion creates releases of only 5-10%. While Bion's technology reduces polluting gaseous releases to the atmosphere by 95-99+%, anaerobic digestion produces far lower reductions (and may, in fact, increase methane emissions).. (See www.biontech.com and the July 2005 report commissioned by Western United Dairymen and produced by Sustainable Conservation titled Biomethane from Dairy Waste, by a paper authored by John H. Martin, Jr. PhD for the US EPA AgStar program written March 2003 titled, A Comparison of Dairy Cattle Manure Management with and without Anaerobic Digestion and Biogas Utilization and by the April 2004 draft Best Available Control Technology (BACT) Dairy Operations Evaluated by: Lead Engineer – Carlos Garcia for the SJVAPCD.)

Below is a table prepared by Bion using data from the DeVries operations for Bion and by John Martin for an EPA AgStar Report for Anaerobic digestion.

Releases to Water: Bion System vs Anaerobic Digestion*		
Fate of Nitrogen (N) and Phosphorus (P)		
*based upon EPA AgStar Study by J Martin, PhD		
	Bion System	Anaerobic Digester
N released as inert N₂ gas	40%	0%
N removed in organic solids	34%	5%
Balance of N in effluents	26%	95%
P removed in organic solids	79%	5%
Balance of P in effluents	21%	95%

Anaerobic Lagoon & Digester vs Bion's Microaerobic Process



Bion does not see Anaerobic digestion as competitive to Bion but complementary as an anaerobic system can be sited upstream of a Bion system and sized to economically harness the methane and then send its effluents to the Bion system for treatment.

The EPA Region IX in California has put together a group of stakeholders called the Dairy Manure Collaborative to evaluate various manure management technologies. The list of candidate technologies which address one or several aspects of manure management are as follows:

Company	Website
Advanced Concept Technologies	
Agricultural Modeling & Training Systems	www.agmodelsystems.com (active June 1 2005)
Agricultural Sustainable Energy Tech.	www.aset.us
Agricultural Waste Solutions	N. A.
Agrimass Enviro-Energy	www.agrimassenviroenergy.com
Agrimass-Induced Blanket Reactor	www.agrimassenviroenergy.com
AgSmart	www.agsmart.com
Air Diffusion Systems	www.airdiffusion.com
Baumgartner Environics - Nitrification/Denitrification (NDN) Nutrient Management System	www.beiagsolutions.com
Baumgartner Environics - Bio-CurtainO plus Electrostatic Particulate Precipitation Management System	www.beiagsolutions.com
Bencyn West	www.bwisolutions.com
Bigadan	www.bigadan.com

Bio Cap	www.beiagsolutions.com
Biogas Technology	www.greenfinch.co.uk
Bion Dairy Corp.	biontech.com
CH2M Hill	www.ch2m.com/composting
Coaltec Energy	www.cdp.siu.edu
Engineered Compost Systems	www.compostsystems.com
Everstech Consulting (UK)	www.everstech.com
Flex Energy	www.flexenergy.com
Haskell Edwards	
HumaCal	midwesternbioag.com
Integrated Separations Solutions	isepsol.com
Jeesung Livestock	www.jeesungle.com
Kyte Centrifuge	www.kcentrifuge.com
Lanstar Enviro	
Natural Aeration	CIRCUL8.com
Nutrient Control Systems	integrityagsystems.com
Omnifuel Technologies	www.downstreamsystems.com
Primenergy	www.primenergy.com
Pro-Act Microbial	www.ProActMicrobial.com
Pyromex	www.ils-partners.com
Sprecher Architects	www.loewenwelding.com
Waste Technology Transfer	
Wildcat Manufacturing	www.wildcatmfg.com
WoodChips	
Sharp Energy	
Warren Hutchings	www.advancedaeration.com
Hydrolve	www.hydrolve.com
Organic Waste Management	
Octaform	www.octaform.com
Agriventures	
Baleen Filters	www.baleen.com
Tennessee Valley Authority	www.tva.gov/environment/envservices

We do not believe any of these competitors is able to produce the pollution mitigation results and the economic opportunities that result from installation of Bion's technology. However, we have not reviewed the full product lines of these entities in detail at this date.