BION ENVIRONMENTAL TECHNOLOGIES INC
Form 10-K
September 19, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

[X]

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended: **June 30, 2016**

OR

[ ]

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from: _____ to _____

Commission File No. **000-19333**

BION ENVIRONMENTAL TECHNOLOGIES, INC.

(Exact Name of Registrant as Specified in its Charter)

Colorado

84-1176672

(State or Other Jurisdiction of Incorporation or Organization)

(I.R.S. Employer Identification Number)

Box 566/1774 Summitview Way

Crestone, Colorado 81131

(Address of Principal Executive Offices, Including Zip Code)

Registrant s Telephone Number, including area code: **(212) 758-6622**

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Exchange on Which Registered
None	
N/A	

Securities Registered Pursuant to Section 12(g) of the Act:

Common Stock, No Par Value

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. [ ] YES [X] NO

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. [ ] YES [X] NO

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. [X] YES [ ] NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). [X] YES [ ] NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements

incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer	[ ]
Accelerated filer	[ ]
Non-accelerated filer	[ ]
Smaller reporting company	[X]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act)

[ ] Yes [X] No

The aggregate market value of the approximately 13,000,000 shares of voting stock held by non-affiliates of the Registrant as of December 31, 2015 approximated $8.2 million. As of August 22, 2016, the Registrant had 23,636,969 shares of common stock issued and 22,932,660 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (and the documents incorporated herein by reference) contain forward-looking statements, within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that involve substantial risks and uncertainties. Forward-looking statements generally can be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "project," "predict," "plan," "believe," or "continue," or the negative thereof or variations thereon or similar terminology. The expectations reflected in forward-looking statements may prove to be incorrect.

Important factors that could cause actual results to differ materially from our expectations include, but are not limited to, the following (not set forth in any order that ranks priority or magnitude):

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failure of the political, legal, regulatory and economic climate to support funding of environmental clean-up and enforcement of environmental rules and regulations;

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changes in the public's perceptions of large scale livestock agriculture/CAFOs, environmental protection and other related issues;

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continued delays in (and/or failure of) development of markets (or other means of monetization) for nutrient reductions from agriculture and CAFOs;

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failure of markets for nutrient (nitrogen and phosphorus) reductions to develop sufficient breadth and depth;

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the Company's extremely limited financial and management resources and limited ability to raise additional needed funds and/or hire needed personnel and extremely limited working capital;

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unsatisfactory resolution of negotiations with Pennvest regarding the Pennvest Loan (presently in default) and the Kreider 1 System (see Item 1, Item 7 and Notes to Financial Statements);

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further delays in the Kreider 2 Project and other potential Projects;

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industry risks, including environmental related problems;

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the ability of the Company to implement its business strategy;

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the extent of the Company's success in the development and operation of Projects (including Integrated Projects) and retrofit/remediation of existing livestock facilities(Retrofits);

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the ability of the Company to keep its existing personnel and their accumulated expertise including the risk of illness or death of one or more key personnel;

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engineering, mechanical or technological difficulties with operational equipment including potential mechanical failure or under-performance of equipment;

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operating variances from expectations;

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the substantial capital expenditures required for construction of the Company's proposed CAFO Retrofits and Projects (including Integrated Projects) and the related need to fund such capital requirements through commercial banks and/or public or private securities markets;

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the need to develop and re-develop technology and related applications;

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dependence upon key personnel;

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the limited liquidity of the Company's equity securities;

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operating hazards attendant to the environmental clean-up, CAFO and renewable energy production, fertilizer and/or food processing and biofuel industries;

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seasonal and climatic conditions;

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availability and cost of material and equipment;

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delays in anticipated permit approval and/or start-up dates;

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availability of capital for small public companies like Bion in the current financial markets;

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the strength and financial resources of the Company's competitors; and

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general economic conditions, including the recent recession and its effects on the national and international capital markets.

We do not undertake and specifically disclaim any obligation to publicly release the results of any revisions that may be made to any forward-looking statements to reflect the occurrence of anticipated or unanticipated events or circumstances after the date of such statements.

PART I

ITEM 1. BUSINESS.

GENERAL

Bion Environmental Technologies, Inc.'s ("Bion," "Company," "We," "Us," or "Our") patented and proprietary technology provides comprehensive environmental solutions to a significant source of pollution in US agriculture, Concentrated Animal Feeding Operations ("CAFO's"). Bion's technology substantially reduces excess nutrients from CAFO waste that fuel toxic algae blooms and dead zones in the Chesapeake Bay, Gulf of Mexico and the Great Lakes. Our technology platform can also largely eliminate greenhouse gases, ammonia, odors and other air emissions, as well as pathogens, in the waste stream that have been linked to foodborne illnesses and growing antibiotic resistance.

According to the USDA s 2012 agriculture census, there were more than 9M dairy cows, 80M beef cattle, 62M swine and two billion poultry in the U.S. that produced over $180 billion in sales. These animals also produced over one billion tons of organic waste, more than 100 times more than is produced by humans. In the U.S. we spend approximately $110 billion annually to remove nutrients and treat human wastewater. In contrast, livestock waste is generally spread on the ground (often by aerial spraying) untreated where it is subject to runoff/migration (through air and soil) to our water and ultimately to the sources of our water supply. The livestock industry has been acknowledged as one of the largest sources of pollution in the U.S. (and the world) and its impacts on public health and the environment are coming under increasing scrutiny from environmental groups and health organizations, regulatory agencies and the courts, the media and the consumer.

Bion s proven second generation technology (2G Tech) platform provides comprehensive onsite livestock waste treatment for wet (beef/dairy/swine) waste streams and has been proven at commercial scale at Kreider Dairy Farm (Kreider 1) in Pennsylvania (PA). In 2012, the Pennsylvania Department of Environmental Protection (PADEP issued the Kreider 1 system a full water quality management permit and verified the nitrogen and phosphorus reductions it achieved. These verified nutrient credits can be used as qualified offsets to PA s federally-mandated Chesapeake Bay nutrient reduction requirements. In 2014 the 2G Tech was reviewed and qualified for federal loan guarantees under USDA s Technical Assessment program.

Bion is working with several stakeholders, including national representatives of the livestock industry and members of the PA Legislature, to establish a competitive bidding program in PA that will allow the PA to purchase low-cost nutrient reductions from private-sector providers such as Bion. A bipartisan 2013 PA legislative study demonstrated that savings in compliance costs of up to 80 percent could be achieved in PA if such a strategy were implemented. Bion believes that other states that face similar livestock waste-related nutrient pollution issues will adopt a similar

strategy. When developing markets for nutrient reductions become fully-established, Bion anticipates a robust opportunity to use its 2G technology platform to retrofit existing CAFOs to generate sales of verified nutrient reduction credits.

Over the last three years, Bion has worked on development of its third generation technology (3G Tech) which is designed to: a) generate significantly greater value from the nutrients and renewable energy recovered from the waste stream, b) treat dry (poultry) waste streams as well as wet waste streams (dairy/beef cattle/swine), c) while maintaining or improving environmental performance. The 3G Tech platform will produce a) a stable nitrogen fertilizer product that Bion believes will qualify for certification for use in organic food production, as well as b) renewable natural gas that can be conditioned to pipeline quality. Pilot trials indicate that large scale 3G Tech-based Projects may be able to generate sufficient revenues from byproducts and renewable energy combined to support certain 3G Tech-based projects absent revenues from nutrient reduction credits. In such cases, revenues from sales of nutrient reductions would significantly enhance project economics, but might not be required to develop certain Projects (including Integrated Projects).

Currently, Bion is focused on using applications of its patented and proprietary waste management technologies and technology platform to pursue three main business opportunities: 1) installation of Bion systems (some of which may generate verified nutrient credits and revenues from the production of renewable energy and byproducts) to retrofit and environmentally remediate existing CAFOs (Retrofits) in selected markets where: a) government policy supports such efforts (such as the Chesapeake Bay watershed, Great Lakes Basin states, and/or other states and watersheds facing EPA total maximum daily load (TMDL) issues, and/or b) where CAFO s need our technology to obtain permits to expand or develop without negative environmental consequences; 2) development of new state-of-the-art large scale waste treatment facilities in strategic locations (Projects) (some of these may be Integrated Projects as described below) with multiple revenue streams, and 3) licensing and/or joint venturing of Bion s technology and applications (primarily) outside North America. The opportunities described at 1) and 2) above each require substantial political and regulatory (federal, state and local) efforts on the part of the Company and a substantial part of Bion s efforts are focused on such political and regulatory matters. Bion is currently pursuing the international opportunities primarily through the use of consultants with existing relationships in target countries.

INDUSTRY BACKGROUND

The traditional business model for CAFO's, regardless of livestock type, has relied on a combination of: 1) a passive environmental regulatory regime (including exemptions for agriculture pursuant to certain statutes) and 2) access to a relatively unlimited supply of cheap land and water to serve as the basis for "environmental" treatment of animal waste. Such land and water resources have now become significantly more expensive and, due to climate/weather variations, less reliable, while ongoing consolidation of the CAFO industry has produced substantially larger and more geographically concentrated waste streams that exceed the ability of natural systems to mitigate the land disposal of

manure. At the same time, regulatory scrutiny of, and public concern about, food security and the health and environmental impacts from CAFO's has intensified greatly.

The production of animal protein (meat and dairy) in the United States (and elsewhere) now faces substantial production constraints due to environmental pollution problems (primarily air and water), public health concerns, resource limitations (land, water and energy), input cost increases (feed, fuel, etc.), fluctuations in product pricing, and, potentially, climate/weather variability/change, each of which negatively affect both the current profit levels and the future activities of the industry as presently structured. Bion believes that its technologies (and its technology platform) can not only remediate/mitigate many of these problems, but can also be a catalyst for substantial amounts of needed relocation and rationalization required by the livestock industry in the U.S.

Agricultural release of nitrogen and phosphorus into rural watersheds negatively effect and create large remediation costs not only for local waterways and aquifers but also for downstream water bodies and urban areas. Bion s Retrofit (the remediation/mitigation opportunity) and Projects business segments utilize our ability to efficiently remove nutrients (primarily nitrogen and phosphorus) and prevent air emission at the CAFO source at far lower cost than such nutrients can be removed downstream in municipal waste water and storm water treatment facilities in urban areas.

Agricultural runoff (including atmospheric deposition of nitrogen from livestock-related ammonia emissions) is the largest water pollution problem in the United States. Over-application of animal waste to cropland has resulted in manure nutrients polluting surface and ground water systems, adversely impacting fresh and salt water quality throughout the country, including the Chesapeake Bay, the Great Lakes and the Gulf of Mexico 'Dead Zone'. Clean-up initiatives for the Chesapeake Bay, the Great Lakes and elsewhere are requiring the expenditure of substantial sums of money to reduce excess nutrient pollution and resultant algal blooms. In each such case, agriculture in general--and CAFO's in particular--have been identified among the main contributors of pollution. CAFO's are also significant emitters of pollutants to air, with dairy CAFO's having been identified as the largest contributor to airborne ammonia and other polluting gases in the San Joaquin Valley in California and elsewhere and among the largest contributors to nutrient pollution of the Chesapeake Bay. A substantial volume of the nitrogen released to the atmosphere from CAFOs and their waste streams as ammonia and other nitrogen gases is re-deposited to the ground and then adds to nitrogen pollution of surface and ground water systems. Further, untreated manure from CAFO s utilized as fertilizer has been linked to pathogens that cause food-borne illnesses, as well as the spread of antibiotic-resistant bacteria, such as MRSA. Bion believes that its patented and proven technologies offer the only comprehensive solution to the environmental impacts of these concentrated livestock waste streams.

For several years, the Company focused on completion of the development of second generation waste treatment systems and applications based on its patented and proprietary waste handling/renewable energy technology ("Bion System" or "System" or 2G Tech) and its technology platform based on its core technology. That re-development process was substantially completed approximately five years ago and the initial commercial system based on our 2G

Tech was constructed and placed in commercial operation in Pennsylvania.

Current research and development work is focused on additional applications for our second generation technology and work toward completion of the development of the next generation (3G Tech) with emphasis on a) creating increased efficiencies, b) with lower operating costs, and c) increased recovery of valuable by-products (including nutrients in organic and/or organic forms, production of renewable energy from by-products together with related renewable energy and/or environmental credits). Bion believes its 3G Tech will produce significantly greater value from the waste stream through the recovery of a concentrated natural nitrogen fertilizer products and pipeline-quality renewable natural gas. As a result of R&D efforts and pilot trials over the last nine months, Bion has determined that revenues from byproducts and renewable energy alone may be sufficient to support certain large-scale 3G Tech-based projects. These potential opportunities will be dependent on a number of factors that are described below. At this time, Bion is primarily focused on using its 3G technology to develop new (or expanded) large-scale Projects with strategic partners (including the Kreider 2 Project).

Portions of Bion s business can be analogized to a utility model which requires a long term commitment from the producer (whether a third party CAFO or an Integrated Project developed by the Company) and the purchaser(s) of nutrient reduction credits and other by-products, in return for Bion making the necessary capital investments to install its systems to treat the livestock waste. Our technology focus is to separate and aggregate the various assets in the waste stream and then to re-assemble them to maximize their economic value. The revenue sources from such assets will likely include sales revenue from renewable energy (both from solids combustion and methane/renewable natural gas generation thru the use of anaerobic/microaerobic digestion modules), fertilizer and soil amendment products (some of which may be organic), water reuse, and from monetization of environmental and reduction credits (including but not limited to nutrient, carbon, sediment, water and pathogen reduction). Bion continues research and development activities to enhance its technology platform so that it can maximize the revenue streams from these separated and aggregated assets taking into account the multiple variables such as species, location, etc. The Company will focus a portion of its efforts on normalizing its technology platform for performance across a range of species. This effort has required significant work and resource allocation on research regarding balancing the activities of each unit process so that its output enables the subsequent unit processes to maximize efficiency and discharge to the subsequent unit in order to process a feedstock cost effectively. The by-products of this series of unit processes (which include certain Bion proprietary elements) are then reassembled into products to maximize their economic value.

Potentially, certified environmental branding of animal protein products produced in CAFOs (including Integrated Projects) using the Company s technology for waste mitigation/remediation and of by-products (fertilizer, soil and/or feed additives, etc.) produced in the Company s installations can be an additional benefit of Bion s systems (and a source of revenue to the Company). Bion has commenced efforts to obtain such branding.

Bion is now actively pursuing business opportunities in three broad areas 1) Bion systems to retrofit of existing CAFO s (some of which may generate verified nutrient credits and revenues from the production of renewable energy and byproducts) (Retrofits), and 2) development of new state-of-the-art large scale waste treatment facilities in strategic locations (Projects) (some of these may be Integrated Projects that were not previously possible due to environmental constraints as described below), and 3) licensing and/or joint venturing of Bion s technology (primarily) outside North America. Bion is pursuing these opportunities within the United States and internationally.

The Company began pursuing these opportunities within the United States during the later stages of technology re-development in 2009 but has achieved very limited success to date (as described below) and has recently begun activities to pursue such opportunities internationally as well.

A substantial portion of our activities involve public policy initiatives (by the Company and other stakeholders) to encourage the establishment of appropriate public policies and regulations (at federal, regional, state and local levels) to facilitate cost effective environmental clean-up and, thereby, support our business activities. Bion has been joined by National Milk Producers Federation, Land O Lakes, JBS and other national livestock interests to support changes to our nation s clean water strategy that will allow states to acquire low-cost nutrient reductions through a competitive procurement process in a similar manner to how government entities now acquires many other goods and services on behalf of the taxpayer. As developing markets for nutrient reductions become fully-established, Bion anticipates a robust opportunity to retrofit existing CAFOs and develop Projects to provide cost-effective alternatives to today s high-cost and failing clean water strategy.

We believe that the Bion technology platform creates the opportunity to develop Integrated Projects that profitably integrate large-scale CAFO's and their end-product users, renewable energy production from the CAFO waste stream, on site utilization of the renewable energy generated and biofuel/ethanol production in an environmentally and economically sustainable manner while reducing the aggregate capital expense and operating costs for the entire integrated complex. In the context of our Integrated Projects, Bion's 2G Tech, in addition to mitigating polluting releases to water and emissions to air, will recover cellulosic biomass from portions of the CAFO waste stream from which renewable energy can be produced to be utilized by integrated ethanol plants, CAFO end-product processors (including cheese, ice cream and /or bottling plants in the case of dairy CAFOs and/or slaughter and/or further processing facilities in the context of beef CAFOs) and/or other users as a replacement for fossil fuel energy or sold to unrelated purchasers. Also, an integrated ethanol plant's main by-product, called distillers grain, can be added to the feed of the animals in wet form thereby potentially lowering the: i)capital expenditures, ii) operating, marketing and shipping costs, and iii) energy/fossil fuel usage of the ethanol production process. Thus, integrated ethanol plants can potentially act as a feed mill for the CAFO, thereby reducing the CAFO's feeding costs and both lowering costs and generating revenue to the ethanol plant(s), and also provide a market for the renewable energy from the cellulosic biomass that Bion's System (defined below) modules produce from the CAFO waste stream. Utilization of our 3G Tech would vary the integration process in relatively minor ways as there would also be production and utilization of renewable natural gas and greater recovery of nutrients with value for fertizer/soil amendment products. As such, Bion Integrated Projects can be denominated "closed loop". We anticipate that the participants in our Integrated Projects will have substantially lower carbon footprints per unit of production compared to non-integrated producers of the same products. We anticipate that different projects will be integrated to different degrees and in different manners. Bion, as developer of, and a participant in, its Integrated Projects, anticipates that it will share in the cost savings and revenue generated from these (and other) benefits of integrated activities.

We anticipate that most Projects undertaken by the Company in which we retain ownership interests will be pursued through and owned by single project subsidiaries. Bion PA 1 LLC (PA1), through which the Kreider 1 System was developed at the Kreider dairy and Bion PA 2 LLC (PA2), through which we are pursuing development of the Kreider 2 poultry waste Project, are the first two of what are likely to be many such entities.

The Company's consolidated financial statements for the years ended June 30, 2016 and 2015 included herein have been prepared assuming the Company will continue as a going concern. The Company has not recorded significant revenue from operations for either of the years ended June 30, 2016 or June 30, 2015. The Company has incurred net losses of approximately of $4,522,000 and $5,642,000 during the years ended June 30, 2016 and 2015, respectively. The Company had a working capital deficit and stockholders' deficit, respectively, of approximately $10,602,000 and $13,938,000 as of June 30, 2016.The report of the independent registered public accounting firm on the Company's consolidated financial statements as of and for the years ended June 30, 2016 and June 30, 2015 includes a "going concern" explanatory paragraph, which means that there are factors that raise substantial doubt about the Company's ability to continue as a going concern.

PRINCIPAL PRODUCTS AND SERVICES

Bion has invested over $100 million in its technology platform, policy change initiatives and other activities since 1989. Its 2G Tech is proven at commercial scale and has been reviewed and qualified for federal loan guarantees under USDA s Technical Assessment program. The 2G Tech platform provides the only proven comprehensive and cost-effective treatment of wet livestock waste (dairy, beef, and swine) of which we are aware. The Company intends to implement its first 3G Tech systems during 2017.

Each Bion system (2G and 3G) is comprised of several process units combined in a process train , much like a municipal wastewater treatment plant. The platform utilizes a combination of mechanical, biological, and thermal processes and can be configured in a variety of ways, based on the needs and economics of the location, to provide the level of environmental treatment required, while separating and aggregating the various components of the waste stream for processing and recovery. A key attribute of the Bion platform is that the performance of the system can be measured, quantified and verified through a proprietary data collection system, providing a level of oversight and verification similar to waste water treatment facilities.

Bion s 2G Tech waste treatment solutions are scalable, proven in commercial operations and have been accepted by EPA, USDA and other regulatory agencies. Bion s 2G core processes are protected by seven U.S. patents and six international patents, with applications pending in the EU, New Zealand, Mexico, Brazil, Argentina and Australia.

There is no other known cost-effective technology that provides Bion s 2G system s level of treatment of wet livestock waste: dairy, beef and swine. Revenues from Bion s 2G platform are 90 percent dependent on developing markets for nutrient reductions.

Bion s 3G Tech platform has been developed over the past three years to maximize byproduct recovery values from large scale facilities (or multiple modular facilities). The 3G system will recover nitrogen from the CAFO waste stream for production of nitrogen-rich fertilizer products that Bion believes will qualify for certification for use in growing organic food. Further, the 3G Tech platform will recover methane that can be conditioned to pipeline quality and will qualify for various credits and subsidies as clean, renewable natural gas. These two revenue streams will supplement revenues from nutrient reduction credits. At this time, two U.S. patents are pending on the 3G Tech platform.

Building upon our 2GTech and Bion's over 20 years of experience providing waste treatment services to the livestock industry commencing with its first generation technology applications, the Company is pursuing the Retrofit opportunity related to environmental remediation of existing CAFOs. Our technology has evolved and been upgraded over the decades to meet changing standards and requirements. Bion's 2G and 3G Tech platforms create potentially profitable business opportunities to provide waste treatment services and systems and/or renewable energy production capability to existing large livestock operations (of which there are many) and potentially to smaller facilities through aggregation of waste streams. Candidates for these solutions include individual CAFO facilities that face impending regulatory action, CAFOs that wish to expand or relocate, and operations located in regions that suffer severe and immediate environmental issues, such as the Chesapeake Bay watershed, Great Lakes region and/or the San Joaquin Valley, where financial incentives (such as nutrient reduction credit trading programs) are (or may become) available that encourage voluntary reductions of nutrient releases and/or atmospheric emissions from agricultural sources. The Kreider 1 dairy system in Pennsylvania in the Chesapeake Bay watershed represents the Company's first Retrofit in this market segment. This Retrofit installation is designed and intended primarily to reduce nitrogen and phosphorus releases and ammonia emissions from the dairy waste streams to generate tradable nutrient reduction credits as part of a nutrient credit trading program through the PA Department of Environmental Protection (PADEP).

The Kreider 2 poultry waste treatment Project, which is in its early development and pre-permitting phase, will utilize our 3G Tech to treat the waste stream from Kreider Farm s large poultry operations (possibly together with waste from other poultry operations and/or other waste streams) to generate renewable energy, tradable credits and by-products (including nitrogen in organic and/or non-organic forms).

To complete and operate these projects, substantial capital (equity and/or debt) has been and will continue to be expended. Additional funds will be needed to be expended for upgrade and continuing operations of the Kreider 1 system until sufficient revenues can be generated and the Pennvest Loan (see below) situation can be resolved, of which there is no assurance. The Kreider 1 system was developed to earn revenue primarily from

the sale of nutrient reduction (and/or other) environmental credits. Upon successful construction and operation, the Company anticipates that the Kreider 2 Project will earn revenue from the sale of nutrient reduction (and/or other) environmental credits generated by its 3G Tech system and through sales of renewable energy and by-products (nutrients in organic and/or non-organic forms and/or renewable energy and environmental credits) recovered.

To date the market for long-term nutrient reduction credits in Pennsylvania has been very slow to develop and the Company s activities have been negatively affected by such lack of development. Due to the slow development of the nutrient reduction credit market, the Company determined that the carrying amount of the property and equipment related to the Kreider 1 project exceeded its estimated future undiscounted cash flows based on certain assumptions regarding timing, level and probability of revenues from sales of nutrient reduction credits and, therefore, PA1 and the Company recorded impairments related to the value of the Kreider 1 assets of $1,750,000 and $2,000,000 at June 30, 2015 and June 30, 2014, respectively. During the 2016 fiscal year, effective June 30, 2016, PA1 and the Company recorded an impairment of $1,684,562 to the value of the Kreider 1 assets which reduced the value on the Company s books to $0. This impairment reflects management s judgment that the salvage value of the Kreider 1 assets roughly equals PA1 s contractual obligations related to the Kreider 1 system, including expenses related to future decommissioning of the Kreider 1 system, costs associated with needed capital upgrade expenses and re-certification/ permitting amendments.

Bion will also pursue the opportunities related to development of Projects, including Integrated Projects. Integrated Projects will include large CAFOs (such as large dairies, beef cattle feed lots and/or hog farms) with Bion waste treatment system modules processing the aggregate CAFO waste stream from the equivalent of 20,000 to 80,000 (or more) beef or dairy cows (or the waste stream equivalent of other species) while recovering cellulosic biomass to be utilized for renewable energy production (and possibly high nutrient fine solids to be marketed as feed and/or fertilizer), integrated with CAFO end product users/processing facilities and/or a biofuel/ethanol plant capable of producing 40 million to 100 (or more) million gallons of ethanol per year. Such Integrated Projects will involve multiple CAFO modules of 10,000 or more beef or dairy cows (or waste stream equivalent of other species) with waste treatment modules on a single site and/or on sites within an approximately 30 mile radius. Bion believes its technology platform (2G Tech, 3G Tech and/or a hybrid in different situations) will allow integration of large-scale CAFO's with end product processors and/or ethanol production together with renewable energy production from cellulosic biomass recovered from the waste streams and on-site energy utilization in a 'closed loop' manner that will reduce the capital expenditures, operating costs and carbon footprint for the entire Integrated Project and each component facility. Some Integrated Projects may be developed from scratch while others may be developed in geographic proximity to (and in coordination with) existing participating CAFOs, ethanol plants and/or end product processors. Each Integrated Project is likely to have different degrees of integration, especially in the early development phases.

The Company anticipates that the Kreider 2 poultry waste treatment facility in PA will be its initial Project. Bion anticipates that it will select a site for the Kreider 2 Project and/or its initial Integrated Project (and possibly additional Projects) during calendar year 2017. **Bion hopes to commence development of its initial Project by optioning land and beginning the permitting process during calendar year 2017, but delays are possible. It is not possible at this time to firmly predict where the initial Project will be developed or the order in which Projects will be developed. All potential Projects are in very early pre-development stages and may never progress to actual development or may be developed after other Projects not yet under active consideration.**

Bion also hopes to be able to move forward on additional Projects through 2017-19 to create a pipeline of Projects. Management has a 5-year development target (through calendar year 2023) of approximately 10 or more Projects. Management hopes to have identified and begun development work related to 3-5 Projects over the next 2 years. At the end of the 5-year period, Bion projects that 3-8 of these Projects will be in full operation in 3-6 states (and possibly one or more foreign countries), and the balance would be in various stages ranging from partial operation to early development stage. It is possible that one or more Projects will be developed in joint ventures specifically targeted to meet the growing animal protein demand outside of the United States (including without limitation Asia, Europe and/or the Middle East). **No Projects (including Integrated Projects) has been developed to date.**

The Company's successful accomplishment of its business activities is dependent upon many factors (see 'Forward-Looking Statements' above) including without limitation the following, none of which can be assured at this date:

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Successful development and completion of the first Project(s) to demonstrate the commercial economics of its technology platform (both 2G and 3G);

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Successful development of the first Integrated Project to demonstrate the operation of a fully integrated, environmentally compliant Integrated Project at a profitable level;

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Establishment of a substantial and liquid market for nutrient reductions generated from the Company s present and future facilities;

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Our ability to raise sufficient funds to allow us to finance our activities, Retrofits and Projects; and

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Regulatory and enforcement policies at the Federal, State and local levels.

CAFO INDUSTRY: PROBLEM AND OPPORTUNITY

In the U.S. today, we have over 9 million dairy cows, 80 million beef cattle, 62 million swine and billions of poultry (USDA NASS 2012) an indication of both the scope of the problem addressed by Bion, as well as its opportunity. Estimates of total annual U.S. livestock waste vary widely, but start around a billion tons, between 100 and 130 times greater than human waste. Although the U.S. spends over $110 billion a year to clean up human waste, animal waste is disposed of today largely as it has been for centuries: spread on the ground untreated for its fertilizer value. Today, however, the agronomic balance between livestock production and crop farming has been skewed, leading to runoff of excess nutrients and other pollution that contaminates local and downstream waters.

Over the last several decades the livestock industry specialized , essentially decoupling from crop farming, and began developing increasingly larger facilities that are often in close proximity to improve production efficiencies. CAFOs are now responsible for the majority of U.S. animal protein production. The unintended consequence of increased scale, together with concentration in certain geographies, has been to overwhelm nature s ability to absorb nutrients and mitigate other impacts from animal waste.

Nutrients from livestock waste enter the environment primarily through direct runoff or atmospheric deposition of nitrogen from ammonia emissions, after which they contaminate groundwater and surface waters. Livestock waste has now been acknowledged as one of the largest sources of excess nutrients that cause toxic algal blooms and dead zones in our waters, in addition to being a large source of greenhouse gases and ammonia, pathogens (that have been linked to food-borne illnesses) and antibiotic resistance. A major study completed in May 2016 by Colorado State University in collaboration with US EPA and the National Park Service determined that ammonia emissions (from livestock and nitrogen fertilizers) have surpassed NOx emissions (from automobiles and power plants) as the largest source of problem nitrogen cycling from the atmosphere to the biosphere.

Ironically, the same manure that is degrading our environment also represents lost opportunities for the industry as it represents a tremendous waste of the energy and most of the valuable nutrients it contains. Only about 25 percent of the highly-reactive and mobile nitrogen in manure is available to crops when applied as fertilizer; the rest is lost to runoff and/or volatilization to the atmosphere as ammonia or other gases. Further, in order to achieve the desired level of nitrogen via manure application, phosphorus must be over-applied, which is both wasteful and harmful to soil health and waters to which it migrates. Bion s technology platform separates the various components of the waste stream before release to the environment so that they can then be processed into value-added byproducts, thereby allowing the energy, nitrogen, phosphorus and micronutrients to be utilized independent of each other.

The traditional business model for CAFO's, regardless of livestock type, has relied on a combination of: 1) a passive environmental regulatory regime (including exemptions pursuant to certain statutes), and 2) access to a relatively

unlimited supply of cheap land and water to serve as the basis for "environmental" treatment of animal waste. Such land and water resources have now become significantly more expensive and, due to climate/weather variations, less reliable, while ongoing consolidation of the CAFO industry has produced substantially increased and more concentrated waste streams. At the same time, regulatory scrutiny of, and public concern about, food security and the health and environmental impacts from CAFO's has intensified greatly.

The production of animal protein (meat and dairy) in the United States (and elsewhere) now faces substantial production constraints due to environmental pollution problems (primarily air and water), public health concerns, resource limitations (land, water and energy), input cost volatility and increases (feed, fuel, etc.), product price volatility and, potentially, climate/weather variability/change, each of which negatively affect both the current profit levels and the future activities of the industry as presently structured. Bion believes that its technologies (and its technology platform) can not only remediate/mitigate many of these problems, but can also be a catalyst for substantial amounts of needed relocation and rationalization required by the livestock industry in the U.S.

Agricultural release of nitrogen and phosphorus into rural watersheds negatively effect and create large remediation costs not only for local waterways and aquifers but also for downstream water bodies and urban areas. Bion s remediation/mitigation business opportunity focuses on its ability to efficiently remove nutrients (primarily nitrogen and phosphorus) at the source and prevent air emission at the CAFO source at far lower cost than such nutrients can be removed downstream in municipal waste water and storm water treatment facilities in urban areas.

Agricultural runoff (including re-deposition of nitrogen from ammonia off-gassing) is the largest water pollution problem in the United States. Over-application of animal waste to cropland has resulted in manure nutrients polluting surface and ground water systems, adversely impacting fresh water (lakes, rivers, streams, ponds, etc.) and salt water quality throughout the country including the Chesapeake Bay, the Great Lakes and the Gulf of Mexico 'Dead Zone'. Clean-up initiatives for the Chesapeake Bay, the Great Lakes and elsewhere are requiring the expenditure of substantial sums of money to reduce excess nutrient pollution and resultant algal blooms. In each such case, agriculture in general--and CAFO's in particular--have been identified among the main contributors of pollution. CAFO's are also significant emitters of pollutants to air, with dairy CAFO's having been identified as the largest contributor to airborne ammonia and other polluting gases in the San Joaquin Valley in California and elsewhere and among the largest contributors to nutrient pollution of the Chesapeake Bay. A substantial volume of the nitrogen released to the atmosphere from CAFO waste streams as ammonia and other nitrogen gases emitted by CAFOs is re-deposited to the ground and then adds to nitrogen pollution of surface and ground water systems. Further, untreated manure from CAFO s has been linked to pathogens on food and hormones and antibiotics in water supplies. Bion believes that its patented and proven technologies offer the only comprehensive solution to the environmental impacts of these concentrated livestock waste streams.

We believe Bion's technologies can enable animal protein production to take place in a manner which is both economically and environmentally sustainable because our technology removes nutrients from the waste streams generated by animal operations at the source and, thereby, dramatically reduces releases to water and gaseous atmospheric emissions. The potential resulting herd concentration increase (due to lower pollution) will reduce marginal costs of production for the CAFO s. Previously unavailable locations close to markets, feed and other needed inputs may become available due to the reduced pollution created by our technology. Also, it results in a core Bion technology platform that can enable substantial integration of environmental treatment and renewable energy

production and utilization with ethanol production and/or animal protein processing operations, thereby creating the basis for the Company's Integrated Projects business opportunity.

Bion s 3G Tech platform will provide comprehensive onsite waste treatment and byproduct recovery capabilities at very large-scale production facilities (Projects). The 3G Tech platform will recover renewable energy and nitrogen (that can be processed into a high-value natural nitrogen fertilizer product), while simultaneously offering cost-effective solutions to several pressing environmental and public health issues.

Bion s 3G Tech Project business model, which is applicable to large scale installations (such as the Kreider poultry operations in PA) or, potentially, central waste process facilities that serve multiple geographically close CAFO facilities, is based on revenue from the sale of financial products generated in the course of Bion s 3G Tech waste treatment including: a) nutrient reduction credits, b) carbon and other environmental credits, c) byproducts, including i) natural concentrated nitrogen fertilizer , ii) other fertilizer/soil amendment products, and iii) renewable natural gas (RNG) and related environmental credits. Based on pilot study results over the last 3 months related to the 3G Tech platform (and assuming such pilot results are achievable at commercial scale), Bion s management currently estimates that in a commercial-scale Bion 3G Tech Project (such as the proposed Kreider 2 poultry waste treatment facilities) that there will be three large and roughly equivalent sized revenue streams (based on currently projected pricing, which may vary in the future):

1.

sales of verified nutrient reductions (when competitive bidding markets mature);

2.

sales of nutrient/soil amendment byproducts (which will require building distribution with industry partners, regulatory certifications (including organic certification), field trials and market acceptance); and .

3.

sales of renewable natural gas (and related credits).

Assuming that Bion can accomplish the tasks above, we believe that in a fully built-out Project, any two of the above revenue categories may be sufficient to support profitability, based upon current estimated CAPEX and OPEX costs, with a much higher return if all three revenue streams can be realized by a particular Project). Additional revenue streams will potentially be available in Integrated Projects (see below).

There are many risks associated with these projections, but Bion s management is cautiously optimistic that the challenges will be met as the initial Projects are developed.

The Company is involved in ongoing work with regard to:

1)

Ammonium Nitrogen Recovery

As part of our 3G Tech work, Bion filed a patent application in September 2015 for a process that recovers a natural nitrogen fertilizer product without the use of chemical additives. Bion is preparing a filing with the Organic Materials Review Institute (OMRI) for certification for use in growing of organic food. The fertilizer product is intended to contain 12 to 15 percent nitrogen in a solid crystalline form that is water soluble and provides readily-available nitrogen. It will contain none of the phosphorus, salt, iron and other mineral constituents of the livestock waste stream, and will be in an industry-standard form that can be precision-applied to crops using existing equipment. Successful OMRI approval, if achieved, for the product s use in organic crop production will provide Bion with access to a higher value market for the product than the synthetic nitrogen markets.

2)

Renewable Energy/Credits

Bion s 3G Tech platform incorporates anaerobic digestion (AD)(following pre-treatment) to recover methane from the volatile solids in the CAFO waste stream. At sufficient scale, methane can be cost-effectively conditioned and injected into existing pipelines, resulting in a renewable compressed natural gas. Federal programs to support renewable energy production include a 30 percent Biogas Investment Tax Credit (ITC) for qualifying biogas technologies and the Renewable Fuel Standard program that provides ongoing renewable energy credits for the production and use of renewable transportation fuels. Livestock waste is one of the largest contributors of methane and nitrous oxide emissions, two of the most potent greenhouse gases. Under California s carbon cap-and-trade program, eligible credits can be purchased from dairy farms located anywhere in the U.S. that utilize AD. Bion will file an application to include poultry layer manure, such as will be processed at Bion s Kreider 2 poultry waste treatment facility, as an eligible feedstock.

3)

Sustainable Branding

During December 2015, Bion submitted its branding application to the USDA Agricultural Marketing Services Process Verified Program (PVP) to certify a number of verifiable environmental and public health benefits associated with the application of Bion s technology to livestock production facilities. The initial application includes reductions in both nitrogen and carbon footprint, as well as pathogens. Licensing Bion s brand, if approval is received, will allow producers that utilize Bion s technology to differentiate themselves to consumers who are becoming increasingly more sustainability- and safety-conscious in their food choices.

4)

Nutrient Reductions

Public expenditures on clean water from federal, state and local ratepayers are rising rapidly while overall water quality continues to decline. Harmful algal blooms that block sunlight and lead to dead zones are regular occurrences in the Chesapeake Bay, Great Lakes, Gulf of Mexico and many other U.S. waters. Toxic algal blooms, like the 2014 Lake Erie bloom that shut down Toledo, Ohio s water supply for several days, occur with increasing frequency. High nitrate levels in water wells located near livestock production are also increasing. Livestock waste has been acknowledged as one of the largest sources of excess nutrients. A task force of EPA and state officials described excess nutrients as having the potential to become one of the costliest, most difficult environmental problems we face in the 21st century. In 2010 US EPA established the Chesapeake Bay regulations that require substantial reductions in nutrients and sediment from the six Bay states and Washington, DC. This is the first watershed-wide, multi-state regulation of U.S. water quality. Compliance cost estimates vary widely, from $30 to $50 billion. Bion s technology will capture most of the nutrients from a livestock production facility, providing large-scale nutrient reductions at a fraction of the cost of traditional agricultural or downstream treatment.

US EPA and USDA support a market-driven strategy that will engage the private sector to provide innovative solutions to reduce costs. Nutrient reduction credit trading and/or procurement programs are being evaluated and proposed in many states. They would allow verified reductions from unregulated sources, such as agriculture, to be used to offset federal requirements, in lieu of dramatically higher-cost infrastructure projects, such as municipal wastewater and storm water treatment. Nutrient reductions from Bion s manure treatment technologies can be verified and achieved at substantially less cost than traditional infrastructure solutions. Additionally, treating livestock waste at its source also provides many benefits to the local environment and community that cannot be achieved with downstream treatment.

Integrated Projects

Some of Bion s Projects may be Integrated Projects. In the context of Integrated Projects, Bion's waste treatment technologies and technology platform (and the resulting herd concentration), in turn, potentially provide the opportunity to integrate a number of revenue generating operations (thereby reducing unit production costs) while maximizing the realized value of the renewable energy and by-product production. The Bion Integrated Project model will access diversified revenue streams through a balanced integration of herd and technologies to provide a hedge/buffer of the commodity risks associated with any of the separate enterprises. We believe that Bion's Integrated

Projects may generate revenues and profits for the Company from one or more of the following items:

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Waste processing and technology licensing fees;

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Fees and savings related to permanently integrated utilization of the wet distiller grains, which are a by-product of ethanol production;

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Renewable energy production from the cellulosic biomass recovered from the livestock waste streams combined with utilization of the energy produced within the Integrated Projects;

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Ethanol production cost savings;

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Various "environmental" and renewable energy credits; and

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Other by-product items including feed products or fertilizers (organic and inorganic).

Exactly what fees and revenues would accrue to Bion will depend on the nature of Bion's participation in each Integrated Project and on negotiations with other participants in such Projects. If Bion is simply the operator of its waste system within an Integrated Project that it develops, it would probably generate revenue from: a) waste processing and technology licensing fees charged to the CAFO, b) sales of renewable energy to the ethanol plant and/or other facilities, c) fees related to the utilization of the wet distillers grain made possible by the integration, d) fees for its "developer" role, and/or e) sales of the fertilizer and/or other products generated from the waste treatment process. If Bion also participates in the ownership and/or operation of the ethanol plant, it would further generate revenue from sales of ethanol and sales of feed products to the CAFO. Sales of distillers grain as feed products generally represent 14-20% of the total revenues of an ethanol plant if there is an available market for the distillers grain. If Bion participates in the ownership and/or operation of the integrated CAFO (and its facilities), we will most likely also generate revenues from the sale of the CAFO's end products. While it is possible that Bion would have a uniform ownership interest throughout an Integrated Project, it is likely that in many cases Bion will have differing ownership interests (from 0% to 100%) in each component of an Integrated Project.

We believe that our technology platform and the proposed Integrated Projects do not involve significant technology risk. Our waste handling technology is modular and scalable, has been utilized efficiently in the past and has been verified by peer-reviewed data and by extended commercial-sized operation. Our second generation Bion System module (at the Kreider dairy farm in Pennsylvania) has been tested and monitored through extended commercial operations and performed up to (or exceeded) expectations for nutrient removal from the CAFO waste stream. The other Integrated Project components required for an integrated operation, such as CAFO facilities, ethanol plants and solids separation, drying and combustion equipment, primarily consist of available and fully-tested processes and equipment (or process and/or equipment which Bion has tested at its facilities) that do not pose any experimental challenges once properly sized, selected and installed. It is Bion's ability to integrate the component parts in a balanced proportion with large CAFO herds and ethanol production in an environmentally sustainable manner that creates this unique economic opportunity.

Bion anticipates that the output (meat or dairy) from one or more Integrated Projects (in any of the categories above) may be primarily dedicated international export markets designated by Integrated Project participants. Bion has recently commenced activities related to seeking the participation of international end users in our Integrated Projects.

Although we have developed the structure and basic design work related to Integrated Projects, we have not yet actually developed or operated an Integrated Project. Further, we have not completed the development of all of the System applications that will be necessary to address all targeted markets (such as swine, poultry, etc.) and all geographic areas and we anticipate a continuing need for the development of additional applications and more efficient integration.

In order to implement an Integrated Project, Bion will need to work with (and/or acquire) CAFO's, ethanol producers and/or end-product processors to generate multi-party agreements pursuant to which the Integrated Projects will be developed and which will provide that, at a minimum, the following take place: a) the CAFO and ethanol plant (and other facilities) agree to locate in geographic proximity to each other, b) Bion licenses, constructs and operates its Systems to process the CAFO's waste stream and produces renewable energy and other products from the waste stream, c) the CAFO agrees to purchase and utilize the wet distillers grain by-product of the ethanol plant in its feed ration and d) the ethanol plant and/or end product facilities agree to purchase and utilize the renewable energy produced by Bion from the CAFO waste stream in the place of natural gas or other energy purchases. These agreements could be in the form of joint ventures, in which all parties share the cost and ownership of all facilities in the Integrated Project (in negotiated uniform or varied manners across the various facilities), or in other forms of multi-party agreements including agreements pursuant to which Bion would bear the cost of construction of its System and the owners of the CAFO and the ethanol plant would bear the cost of construction of the CAFO facilities and ethanol plant, respectively, and negotiated contractual arrangements would set forth the terms of transfer of products (wet distillers grain, combustible dried solids, etc.), energy and dollars among the parties.

No Integrated Project has been developed by Bion to date and there is no assurance that an Integrated Project will ever be developed by the Company.

CORPORATE BACKGROUND

The Company is a Colorado corporation organized on December 31, 1987. Our principal executive offices are located at the residence of our President at 1774 Summitview Way, Crestone, Colorado 81131. Our primary telephone number is 212-758-6622. We have no additional offices at this time.

HISTORY AND DEVELOPMENT OF OUR BUSINESS

Substantially all of our business and operations to date has been conducted through wholly-owned subsidiaries, Bion Technologies, Inc. (a Colorado corporation organized September 20, 1989), Bion Integrated Projects Group, Inc. ("Projects Group") (formerly Bion Dairy Corporation through August 2008 and originally Bion Municipal, Inc., a Colorado corporation organized July 23, 1999) and Bion Services Group, Inc. ("Services Group") (formerly Bion International, Inc., a Colorado corporation organized July 23, 1999) and BionSoil, Inc. (a currently inactive Colorado corporation organized June 3, 1996). Bion is also the parent of Bion PA 1 LLC (a Colorado entity organized August 14, 2008) (PA1) and Bion PA 2 LLC (a Colorado entity organized June 24, 2010) (PA2). In January 2002, Bion entered into a series of transactions whereby the Company became a 57.7% (now 58.9%) owner of Centerpoint Corporation (a Delaware corporation organized August 9, 1995) ("Centerpoint").

Although we have been conducting business since 1989, we determined that we needed to redefine how we could best utilize our technology during 2003. From 2003 through early 2008, we primarily worked on technology improvements and applications and in furtherance of our business model of Integrated Project development. During 2008 we re-commenced pursuing active commercial transactions involving installation of our 2G Tech for CAFO waste treatment and related environmental remediation and initiation of pre-development modeling and pre-development work to prepare for our initial Integrated Projects.

Our original systems were wastewater treatment systems for dairy farms and food processing plants. The basic design was modified in late 1994 to create Nutrient Management Systems ("NMS") that produced organic soil products as a byproduct of remediation of the waste stream when installed on large dairy or swine farms. Through June 30, 2002, we sold and subsequently installed, in the aggregate, approximately 30 of these first iteration of Bion s systems in 7 states, of which we believe a few may still in operation in 3 states. We discontinued marketing of our first generation NMS systems during fiscal year 2002 and turned control and ownership of the first generation systems over to the farms on which they were installed over the following two years. We were unable to produce a business model based on the first generation systems that would generate sufficient revenues to create a profitable business. While continuing to market and operate the first generation systems, during the second half of calendar year 2000, we began

to focus our activities on developing the next generation of the Bion technology. We no longer operate or own any of the first generation NMS systems.

As a result of our research and development efforts, the core of our current technology was re-developed during fiscal years 2001-2004. We designed and tested Systems that used state-of-the-art, computerized, real-time monitoring and system control with the potential to be remotely accessed for both reporting requirements and control functions. These Systems were smaller and faster than our first generation NMS systems. The initial versions of our second generation of Bion Systems were designed to harvest solids used to produce organic fertilizer and soil amendments or additives (the "BionSoil(R) products") in a few weeks as compared to six to twelve months with our first generation systems.

During 2003-4 we designed, installed and began testing a commercial scale, second generation Bion System as a temporary modification or retrofit to a waste lagoon on a 1,250 milking cow dairy farm in Texas known as the DeVries Dairy. In December 2004, Bion published an independently peer-reviewed report, a copy of which may be found on our website, www.biontech.com, with data from the DeVries project demonstrating a reduction in nutrients (nitrogen and phosphorus) of approximately 75% and air emissions of approximately 95%. More specifically, those published results indicated that 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 from the waste stream as follows: (in pounds per 1,400 pound dairy cow per year):

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Ammonia

0.20

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Hydrogen Sulfide

0.56

.

Volatile Organic Compounds

0.08

.

Nitrogen Oxides

0.17

These emissions represented a reduction from published baselines of 95%-99%.

Through 2007 the demonstration project at the DeVries Dairy in Texas also provided Bion with the opportunity to explore mechanisms to best separate the processed manure into streams of coarse and fine solids, with the coarse cellulosic solids/biomass supporting generation of renewable energy and the fine solids potentially becoming the basis of organic fertilizer products and/or a high protein animal feed ingredients. On-going research was also carried out on various aspects of nutrient releases and atmospheric emissions.

Bion discontinued operation of the DeVries demonstration research system during 2008.

During the 2005-2008 period, Bion focused on completing development of its 2G Tech platform and business model. As such, we did not pursue near term sales and revenue opportunities such as retrofitting existing CAFO's with interim versions of our waste management solutions, because such efforts would have diverted scarce management and financial resources and negatively impacted our ability to complete development of an integrated technology platform in support of large-scale sustainable Integrated Projects.

From 2009 through the present period, Bion has actively pursued business opportunities in three broad areas 1) Bion systems to retrofit of existing CAFO s (some of which may generate verified nutrient credits and revenues from the production of renewable energy and byproducts) (Retrofits), and 2) development of new state-of-the-art large scale waste treatment facilities in strategic locations (Projects) (some of these may be closed loop Integrated Projects that were not previously possible due to environmental constraints as described below), and 3) licensing and/or joint venturing of Bion s technology (primarily) outside North America. Bion is pursuing these opportunities within the United States and internationally. Launch of our 3G Tech (for use in all these areas) is anticipated during 2017.

We believe significant Retrofit opportunities exist that will enable us to generate future revenue streams from Bion's 2G and 3G Tech. The initial Retrofit opportunities we are pursuing have related to the existing clean-up program for the Chesapeake Bay ('Chesapeake Bay Program' or 'CB Program'). The Company has at times deployed some of its limited resources toward an initiative in the Great Lakes/North Central states that has not yet yielded any contracts. The Company anticipates that further opportunities for our remediation/retrofit business will develop in other areas with CAFO s including the watersheds of the Great Lakes (from New York to Minnesota), the extended Mississippi River/Gulf of Mexico watershed (including its tributaries from Pennsylvania in the east to Montana/Wyoming/Colorado in the west), and other areas with excess nutrient pollution from agriculture in general and CAFO s in particular.

Over the past 24 months the Company has undertaken research and development efforts to develop the 3G Tech (and related applications) with emphasis on increasing efficiency and increasing recovery of high value by-products (organic and inorganic), which efforts continue during the current fiscal year.

Chesapeake Bay Watershed: Kreider Farms Projects/Pennsylvania Initiatives

The urgency and priority of the need to clean up nutrient (primarily nitrogen and phosphorus) pollution to the Chesapeake Bay was clearly demonstrated with promulgation of President Obama's 2009 Executive Order concerning clean-up of the Chesapeake Bay and the EPA s publication and issuance during December 2010 of the Chesapeake Bay Total Maximum Daily Load (TMDL) standard (http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/tmdlexec.html) for nutrient pollution in Chesapeake Bay tributaries. In May 2010, the EPA published their overall strategy for remediating the Chesapeake Bay, and they have committed to reducing nitrogen and phosphorus flows to the Bay sufficiently to enable 60% of the Bay watershed segments to meet water quality standards by 2025. At that time, 89 of the 92 Bay and tidal watershed segments were not in compliance with water quality standards (97% out of compliance). The EPA and associated state agencies also committed to short-term 3-year compliance milestones to enhance accountability and corrective actions, along with a host of definable and measurable goals, enhanced partnerships, and major environmental initiatives. Based on these actions, greater compliance has been required commencing with the 2016 water year . EPA documents defined the overall mission as requiring an approximately 65 million pound annual reduction from existing nitrogen (N) loading to the Chesapeake Bay by 2025, of which 35 million pounds was allocated to Pennsylvania. Importantly, the 3-year compliance milestones were established as a part of the compliance program to add both short- and long-term accountability to state actions associated with reduced nutrient and sediment flows to the Chesapeake Bay. According to the EPA s Interim Evaluation of Pennsylvania s Milestone Progress published in June 2015, PA was 14.6 million pounds behind its 2014-2015 milestone commitments for nitrogen, a remarkably large deficit given the previously stated 2 million pound deficit from the 2012-2013 water year. EPA has placed PA s agriculture and urban/suburban sectors under a Backstop Actions Level , the highest level of EPA oversight. EPA has also stated that if load reductions remain off track, EPA may consider seeking additional (and expensive) pollutant reductions from the wastewater sector. In an effort to get back on track and hold off federal intervention, PA unveiled a purported comprehensive strategy to "reboot" the state's efforts to improve water quality in January 2016. The reboot strategy relied upon a mix of enhanced farm compliance and enforcement activities along with the promotion of additional best management practices (BMP). This proposed strategy has been met with skepticism about its efficacy/practicality and resistance within the agricultural community. While many of these reboot efforts are continuing today, the PADEP Secretary resigned in May 2016 and PA appears to have slowed implementation efforts recently while seeking alternative approaches to reduce PA s nitrogen pollution to the Chesapeake Bay.

As a result of the host of both short and long-term specific commitments and compliance deadlines, Bion believes that its long-term opportunity related to the Chesapeake Bay clean-up has potentially been significantly expanded and accelerated.

During 2008 Bion executed an agreement to install a Bion System at the Kreider Farms (KF) in Lancaster County, Pennsylvania to reduce nitrogen (including ammonia emissions which are re-deposited as nitrogen from the atmosphere) and phosphorus in the farm's effluent. Bion undertook this project due in large part to Pennsylvania's nutrient credit trading program, which was established to provide cost-effective reductions of the excess flow of nutrients (nitrogen and phosphorus) into the Chesapeake Bay watershed. Bion worked extensively with the Pennsylvania Department of Environmental Protection ('PADEP') over several years to establish nutrient credit calculation/ verification methodologies that were appropriate to Bion's 2G Tech and recognizes its 'multi-media' (both water and atmospheric) approach to nutrient reductions. Pennsylvania's nutrient credit trading program allows for voluntary credit trading between a 'non-point source' (such as a dairy or other agricultural sources) and a 'point source' polluter, such as a municipal waste water treatment plant or a housing development. For example, pursuant to this program, since Bion can reduce the nutrients from an existing dairy much more cost-effectively than a municipal wastewater treatment plant can reduce nutrients to meet its baseline, a municipal facility can purchase nutrient reduction credits (Credits) from Bion to offset its nutrient discharges, rather than spending significantly more money to make (and operate) the plant upgrades necessary to achieve its own reductions. **However, the market for long term Credits in PA has failed to develop any significant breadth or depth and no Credits have been sold from the Kreider 1 system.**

During May 2008, the PADEP approved Bion's initial protocols to determine how many tradable nutrient (nitrogen and phosphorus) credits Bion would receive for nutrient reductions achieved through installation of its comprehensive dairy waste management 2G Tech Kreider 1 project pursuant to PA's efforts under the Chesapeake Bay Program mandates. During April 2010, the PADEP issued an amended certification. The PADEP's approval includes the certification of credits both for ammonia air emission reductions and for significantly reducing the leaching and runoff potential of land applied nutrients. The PADEP has certified the Kreider 1 dairy system for 107 nitrogen and 13 phosphorus credits (each credit represents an annual pound of reduction) for each of the 1,200 dairy cows (subject to testing and verification based on operational data). Bion's agreements with Kreider Farms provide for the Kreider 1 System to expand through-put to treat the waste from the Kreider dairy support herd after the PADEP has verified the operating results. **It is anticipated that this expansion will take place and lead to a proportionate increase in credits generated for sale only if a more robust market for long term nutrient reductions develops.**

The economics (potential revenues, profitability and continued operation) of the Kreider 1 System are based almost entirely on the long term sale of nutrient (nitrogen and/or phosphorus) reduction credits to meet the requirements of the Chesapeake Bay environmental clean-up. See below for further discussion.

Pursuant to the KF agreements, Kreider 1 system to treat KF's dairy waste streams to reduce nutrient releases to the environment while generating marketable nutrient credits and renewable energy was designed, constructed and entered full-scale operation during 2011. On January 26, 2009 the Board of the Pennsylvania Infrastructure Investment Authority (Pennvest) approved a $7.75 million loan to Bion PA 1, LLC (PA1), a wholly-owned subsidiary of the Company, for the initial Kreider Farms project (Kreider 1). After substantial unanticipated delays, on August 12, 2010 PA1 received a permit for construction of the Kreider 1 system. Construction activities commenced during November 2010. The closing/settlement of the Pennvest Loan took place on November 3, 2010. PA1 finished the construction of the Kreider 1 System and entered a period of system operational shakedown during May 2011. The Kreider 1System reached full, stabilized operation by the end of the 2012 fiscal year. During 2011 the PADEP re-certified the nutrient credits for this project. The PADEP issued final permits for the Kreider 1 System (including the credit verification plan) on August 1, 2012 on which date the Company deemed that the Kreider System was placed in service . As a result, PA1 commenced generating nutrient reduction credits for potential sale while continuing to utilize the Kreider 1 system to test improvements and add-ons. **However, to date liquidity in the Pennsylvania nutrient credit market has been slow to develop significant breadth and depth, which limited liquidity/depth has negatively impacted Bion s business plans and has resulted in challenges to monetizing the nutrient reductions created by PA1 s existing Kreider 1 project and Bion s other proposed projects. These difficulties have prevented PA1 from generating any material revenues from the Kreider 1 project to date and raise significant questions as to when, if ever, PA1 will be able to generate such revenues from the Kreider 1 system. PA1 has had sporadic discussions/negotiations with Pennvest related to forbearance and/or re-structuring its obligations pursuant to the Pennvest Loan for more than three years. In the context of such discussions/negotiations, PA1 elected not to make interest payments to Pennvest on the Pennvest Loan since January 2013. Additionally, PA1 has not made any principal payments, which were to begin in fiscal 2013, and, therefore, the Company has classified the Pennvest Loan as a current liability as of June 30, 2016. Due to the failure of the PA nutrient reduction credit market to develop, the Company determined that the carrying amount of the property and equipment related to the Kreider 1 project exceeded its estimated future undiscounted cash flows based on certain assumptions regarding timing, level and probability of revenues from sales of nutrient reduction credits and, therefore, PA1 and the Company recorded impairments related to the value of the Kreider 1 assets of $1,750,000 and $2,000,000 at June 30, 2015 and June 30, 2014, respectively. During the 2016 fiscal year, effective June 30, 2016, PA1 and the Company recorded an impairment of $1,684,562 to the value of the Kreider 1 assets which reduced the value on the Company s books to $0. This impairment reflects management s judgment that the salvage value of the Kreider 1 assets roughly equals PA1 s contractual obligations related to the Kreider 1 system, including expenses related to decommissioning of the Kreider 1 system, costs associated with needed capital upgrade expenses, and re-certification/ permitting amendments.**

On September 25, 2014, Pennvest exercised its right to declare the Pennvest Loan in default and accelerated the Pennvest Loan and demanded that PA1 pay $8,137,117 (principal, interest plus late charges) on or before October 24, 2014. PA1 did not make the payment and does not have the resources to make the payments demanded by Pennvest. PA1 has commenced discussions and negotiations with Pennvest concerning this matter but Pennvest rejected PA1 s proposal made during the fall of 2014. Neither party has any formal proposal on the table as of the date of this report, and only sporadic communication continues regarding the matters involved. It is not possible at this date to predict the outcome of such negotiations/discussions, but the Company believes that a loan modification agreement may be reached in the future when a more robust

market for nutrient reductions develops in PA, of which there is no assurance. PA1 and Bion will continue to evaluate various options with regard to Kreider 1 over the next 30-180 days.

During August 2012, the Company provided Pennvest (and the PADEP) with data demonstrating that the Kreider 1 system met the technology guaranty standards which were incorporated in the Pennvest financing documents and, as a result, the Pennvest Loan is now solely an obligation of PA1.

As a result of the extended period of Kreider 1 full-scale, commercial operations, Bion is confident that future Bion 2G Tech systems can be constructed with even higher operational efficiencies at lower capital expense and with lower operational costs. Operating results of the Kreider 1 system have documented the efficacy of Bion s nutrient reduction technology and vetted potential add-ons for future installations.

Additionally, the Kreider agreements provide for Bion to develop a waste treatment/renewable energy production facility to treat the waste from Kreider's approximately 5+ million chickens (planned to expand to approximately 9 million)(and potentially other poultry operations and/or other waste streams)('Kreider Renewable Energy Facility' or Kreider 2 Project). On May 5, 2016, the Company executed a stand-alone joint venture agreement with Kreider Farms covering all matters related to development and operation of the Kreider 2 system to treat the waste streams from Kreider s poultry facilities in Bion PA2 LLC (PA2). The Company continues its development work related to the details of the Kreider 2 Project. During May 2011 the PADEP certified Kreider 2 Project for 559,457 nutrient credits under the old EPA s Chesapeake Bay model. The Company anticipates that the Kreider 2 Project will be re-certified for between 1.5-2 million nutrient reduction credits (for treatment of the waste stream from Kreider s poultry) pursuant to the Company s pending reapplication (or subsequent amended application) during 2017 pursuant to the amended EPA Chesapeake Bay model and agreements between the EPA and PA. Note that this Project may be expanded in the future to treat wastes from other local and regional CAFOs (poultry and/or dairy) and/or Kreider poultry expansion (some of which may not qualify for nutrient reduction credits). **The review process to clarify certain issues related to credit calculation and verification commenced during 2014 but has been largely placed on hold while certain matters are resolved between the EPA and PA and pending development of a robust market for nutrient reductions in PA. The Company anticipates it will submit an amended application once these matters are clear. Design and engineering work for this facility, which will probably be the first to utilize Bion s 3G Tech, have not commenced, and the Company does not yet have financing in place for the Kreider 2 Project. This opportunity is being pursued through PA2. If there are positive developments related to the market for nutrient reductions in PA, of which there is no assurance, the Company intends to pursue development, design and construction of the Kreider 2 Project with a goal of achieving operational status during the 2017 calendar year, and hopes to enter into agreements related to sales of the nutrient reduction credits for future delivery (under long term contracts) during 2017 subject to verification by the PADEP based on operating data from the Kreider 2 Project. The economics (potential revenues and profitability) of the Kreider 2 Project, despite its use of Bion s 3G Tech for increased recovery of marketable by-products, are based in material part the long term sale of nutrient (nitrogen and/or phosphorus) reduction credits to meet the requirements of the Chesapeake Bay environmental clean-up. However, liquidity in the PA nutrient credit market has been slow to develop significant breadth and depth, which lack of liquidity has negatively impacted Bion s business plans and has resulted in challenges to monetizing the nutrient reduction credits generated by PA1 s existing Kreider 1 project and will most likely delay PA2 s Kreider 2 Project and other proposed projects in PA.**

Note that while Bion believes that the Kreider 1 System, the Kreider 2 Project and/or subsequent Bion Projects will eventually generate revenue from the sale of: a) nutrient reductions (credits or in other form), b) renewable energy (and related credits), c) sales o