COMMODORE APPLIED TECHNOLOGIES INC
Form 10-K
April 15, 2009

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2008

OR

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

For the transition period from _____ to _____

Commodore Applied Technologies, Inc.

(Exact Name of Registrant as specified in its charter)

Delaware	**001-11871**	**11-3312952**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

517 Knight Street, Suite B, Richland, Washington	**99352**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(509) 943-2565**

Securities Registered pursuant to 12(b) of the Act: **None**

Securities Registered pursuant to Section 12 (g) of the Act: **Common stock, Par Value $0.001**

(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 15(d) of the Act.

[ ] Yes **[X] No**

Indicate by check mark whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act during the past 12 months (or for such shorter period that the Company was required to file such reports), and (2) has been subject to such filing requirements for the past ninety (90) days.

Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers in response 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. [ ]

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 Exchange Act)

Yes [ ] **No [X]**

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was sold, or the average bid and asked price of such common equity, as of the last business day of the registrant s most recently completed second fiscal quarter: **$224,204 as of June 30, 2008**, based on the last sales price of $0.03 per share of the Company s common stock on the National

Association of Securities Dealers OTCBB.

State the number of shares outstanding of each of the issuer s classes of common equity: 8,288,217 shares of common stock **as of March 31, 2009.**

DOCUMENTS INCORPORATED BY REFERENCE:

Not Applicable.

COMMODORE APPLIED TECHNOLOGIES, INC.

FORM 10-K

DECEMBER 31, 2008

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PART I

This Annual Report on Form 10-K contains forward-looking statements." These forward-looking statements can generally be identified as such because the context of the statement will include words such as the Company "believes," "anticipates," "expects" or words of similar import. Similarly, statements that describe the Company's projected future results, future plans, objectives, goals, future conditions or events are also forward-looking statements. Actual results are inherently difficult to predict. Any such forward-looking statements are subject to the risks and uncertainties that could cause actual results of operations, financial condition, acquisitions, financing transactions, expenditures, expansion and other events to differ materially from those expressed or implied in such forward-looking statements. Any such forward-looking statements would be subject to a number of assumptions regarding, among other things, future economic, competitive and market conditions. Such assumptions would be based on facts and conditions as they exist at the time such statements are made as well as predictions as to future facts and conditions, the accurate prediction of which may be difficult and involve the assessment of events beyond the Company's control.

Further, the Company's business is subject to a number of risks and uncertainties that would affect any such forward-looking statements. These risks and uncertainties include, but are not limited to:

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the Company s critical need for additional cash to sustain existing operations and meet existing obligations and capital requirements (the Company s auditor s opinions on our fiscal 2002 through 2008 financial statements contain a going concern qualification in which they express doubt about the Company s ability to continue in business);

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the ability to contract for and generate profitable operations from large scale remediation projects;

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the ability of the Company to implement its waste processing operations, including obtaining commercial waste processing contracts and processing waste under such contracts in a timely and cost effective manner;

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the timing and award of contracts by the U.S. Department of Energy for the cleanup of waste sites administered by it;

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the acceptance and implementation of the Company s waste treatment technologies in the government and commercial sectors;

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the Company s ability to obtain and perform under other large technical support services projects;

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developments in environmental legislation and regulation;

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the ability of the Company to obtain future financing on favorable terms;

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other circumstances affecting anticipated revenues and costs;

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the expiration of the Company s nationwide EPA permit in September 2001 (The Company believes that the permit may be renewed subject to providing additional information. The Company has not resubmitted information for a new permit); and

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the ability of the Company to replicate on a large scale, economically viable basis, the results of its technology test results.

These risks and uncertainties could cause actual results of the Company to differ materially from those projected or implied by such forward-looking statements.

ITEM 1. DESCRIPTION OF BUSINESS

GENERAL

Commodore Applied Technologies, Inc. (the "Company") is an environmental solutions company offering a range of environmental and technical services to the public and private sectors related to (i) providing services related to environmental management for on-site and off-site identification, investigation remediation and management of hazardous, mixed and radioactive waste and (ii) remediating contamination in soils, liquids and other materials and disposing of or reusing certain waste by-products by utilizing our Solvated Electron Technology (SET™").

The Company's corporate mission is to serve the *environmental remediation market* from its primary operating center to profitably provide government and industry with environmental and remediation solutions to legacy waste environmental problems. Our strategy focuses the Company on the unique and high profit niches of hazardous

materials conversion and waste remediation.

The Company was incorporated in Delaware in March 1996. As used in this report, and except as the context otherwise requires, the "Company" means Commodore Applied Technologies, Inc. and its subsidiaries, including Commodore Solutions, Inc., Government Environmental Technologies, Inc. (inactive), and Commodore Advanced Sciences, Inc. The Company's

principal executive offices are located at 507 Knight Street, Suite B, Richland, Washington 99352, and its telephone number at that address is (509) 943-2565.

SEGMENT INFORMATION

The Company currently has identified two operating segments. These two segments are as follows:

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Commodore Advanced Sciences, Inc., which primarily provides various environmental and regulatory compliance services to Government agencies on a fixed rate and lump sum basis.

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Commodore Solutions, Inc., which is commercializing technologies to treat mixed and hazardous wastes, principally the Company s SET technology.

Additional information regarding the business of each segment is set forth below, and the information in Note 17 to the Company s Consolidated Financial Statements included in this Annual Report on Form 10-K is incorporated into this Part I by reference.

COMMODORE ADVANCED SCIENCES, INC. - ENVIRONMENTAL MANAGEMENT

The Company, through Commodore Advanced Sciences, Inc. (Advanced Sciences), provides specialized technical and project management products and services primarily to government-sector customers, including the Department of Energy (DOE) and the Department of Defense (DOD), and also to private-sector domestic industrial customers. Advanced Sciences engages in all aspects of environmental regulation and compliance, as well as access to leading technologies and innovative skills related to the identification, investigation, remediation and management of hazardous, mixed and radiological waste sites. Advanced Sciences also sells safety, protective and technical equipment used by its customers and hazardous material handlers. Advanced Sciences currently operates from an office located in Oak Ridge, Tennessee, with its principal executive officers and administrative activities being performed at the offices of its parent company, Commodore Applied Technologies, located in Richland, Washington.

Services

Environmental Services: Advanced Sciences is a nationwide firm specializing in environmental characterization, regulatory compliance technical support and waste management services. Advanced Sciences qualifies as a small

business under seven NAICS codes. This subsidiary employs approximately 30 professionals who are expert in providing environmental sample collection, transportation, and analyses, meeting rigorous quality assurance requirements while performing in accord with equally rigorous personnel health and safety requirements.

Advanced Sciences history of program management and technical services include:

- Environmental Site Restoration Planning

- D & D Planning & Implementation Support

- Preliminary Assessments/Site Investigations

- Waste Minimization

- Environmental Audits & Assessments

- Health & Safety Oversight & Planning

- Underground-Storage-Tank Site Investigation

- Biological Sampling and Characterization

- Environmental Impact Assessments & Statements & Remediation

- Structural Engineering Analysis

- Remedial Investigations/Feasibility Studies

- Deconstruction Planning

- Environmental Pollution Control

- Regulatory Compliance

- Hazardous, Radioactive, Toxic & Mixed-Waste

- Federal & State Agency Coordination Management Including Treatment

- Public Involvement Support

- Hazardous Waste Site Remediation

The two most significant clients Advanced Sciences has had over the past 10 years have been the DOD and the DOE, while also providing services to private industry. Advanced Sciences largest office provides environmental characterization and management, building decontamination and decommissioning (D&D), environmental protection, remediation, restoration, safety & health, and environmental regulatory compliance for the Department of Energy s Oak Ridge Complex.

In addition to the Oak Ridge Complex in Tennessee, the Company has performed environmental monitoring and remediation services at Rocky Flats in Colorado, Los Alamos in New Mexico, Chatfield Basin in Colorado and other significant sites, predominantly nuclear energy sites run by the DOD or DOE.

Remediation Services: Having already established a market position in the consulting and front-end analysis phase, Advanced Sciences plans to follow market demand into remediation services. After an environmental problem is identified, Advanced Sciences offers alternative remediation approaches that may involve providing on-site waste containment or management of on-site/off-site remediation and waste removal. Advanced Sciences can also redesign its customers' ongoing production processes and develop technical specifications to minimize or eliminate the generation of hazardous waste. The Company believes that Advanced Sciences' integration of environmental skills, plus its access to innovative technologies, provide Advanced Sciences with a competitive advantage in redesigning production processes.

Technical Services: New technologies play a critical role in both the remediation of existing waste sites and in the reduction of waste generated by ongoing production processes. Advanced Sciences has access to the SET technology and all its derivatives. Advanced Sciences has at its disposal, on a per project basis, what it believes are some among the most qualified professionals in the environmental consulting business. Advanced Sciences' scientists have participated on national boards for risk assessment and quality assurance, were instrumental in the development of environmental regulations for the DOE and the DOD, and have served as expert witnesses before the U.S. Congress and the Nuclear Regulatory Commission. To maintain its competitive position, Advanced Sciences intends to continue to develop viable remediation technologies and attract and retain qualified personnel.

Contracts

Environmental Data Acquisition and Management (EDAM) Contract: Advanced Sciences was awarded an Environmental Data Acquisition and Management contract (EDAM) by Bechtel Jacobs Company LLC of Oak Ridge, TN (BJC) in September 2004. This sampling program is continuously monitored and audited for safety, quality, productivity, efficiency, and value to BJC and Department of Energy-Oak Ridge (DOE-OR) and has received high marks and awards in all phases of the contract.

Sampling activities under the EDAM contract include collection of multiple sample types from hundreds of monitoring locations and packaging and shipping of samples to appropriate analytical laboratories for analysis. Locations and environments include abandoned burial grounds and hazardous waste sites, fields and forests, streams, lakes, and ponds. Sampling tasks support a variety of ongoing monitoring programs, including the Water Resource Restoration Program (WRRP) to determine the effectiveness of remedial actions conducted under Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the ETTP Environmental Monitoring Program. Regulatory compliance data acquisition and management projects include Resource Conservation and Recovery Act (RCRA) and National Pollution Discharge Elimination System (NPDES) permit compliance, the Biological Monitoring and Abatement Program, and Stormwater Pollution Prevention Program (SWPPP) activities. All of these compliance sampling programs are closely monitored by regulators, stakeholders, BJC, and DOE-OR.

The Company believes the EDAM contract may attract more DOE client groups than are contemplated in the base scope of the contract. The Company is seeking to extend its environmental monitoring service capabilities to other DOE sites, such as Los Alamos, NM, Portsmouth, OH and Paducah, KY. The EDAM contract is for approximately $2.5 million per year and is reflected in the Company s backlog.

Energy Solutions: Advanced Sciences was awarded a one-year, annually renewed contract from Duratek Federal Services, Inc. (now Energy Solutions) beginning in January 2005, which was has been renewed annually in January since 2006 for additional one-year periods, to perform environmental monitoring services at two engineered landfills on the Oak Ridge Reservation. Environmental monitoring services include sample collection, packaging and shipping to offsite analytical laboratories. Samples are collected from surface water, groundwater, and landfill leachate collection locations on storm event, weekly, monthly, and quarterly bases.

American Aquatics: Advanced Sciences was contracted by American Aquatics under the terms of an asset purchase and sale agreement executed in January 2007 to provide fish and aquatic insect sampling collection, taxonomy, and enumeration. As a result of the asset purchase agreement, Advanced Sciences acquired an outstanding staff of aquatic biologists who have extensive experience in evaluation of aquatic ecosystems and collection and identification of benthic macro-invertebrates. Advanced Sciences has the only benthic laboratory in the eastern United States that is licensed and capable of handling aquatic samples that are potentially contaminated with radioactivity, while simultaneously processing uncontaminated samples. The financial commitments to the Company under the asset purchase contract with American Aquatics were completed in the first quarter of 2008, and the Company continues to perform the sampling under that agreement. The largest contract acquired from American Aquatics, benthic laboratory services for Oak Ridge National Laboratory, managed by the University of Tennessee-

Battelle, was opened for competitive bids in December 2008. Advanced Sciences was awarded the new contract in February 2009, for a one-year base period with four one-year option periods including annual price escalators.

Chatfield Watershed Authority: Advanced Sciences was contracted annually since 1986 to implement the Chatfield Water Quality Monitoring Program that involves sample and data collection, laboratory subcontract management, and data management for the entire Chatfield Basin watershed located southwest of Denver. The contract was terminated in December 2008 when the client obtained similar monitoring services at no charge from Denver Water.

Legacy Management: In 2007, a team lead by the Stoller Corporation was awarded the DOE s Legacy Management Program contract, an approximately $200 Million effort over the following four years. Commodore is on that team, and while specific scope assignments are being pursued with Stoller, we expect that Commodore s presence on the team may further enhance the Company s position as an industry leader in environmental services. The Legacy Management Program embraces the DOE sites that have been decommissioned and decontaminated (over 94 sites so far).

Commodore Sales Solutions

A division of Applied Sciences, Commodore Sales Solution (CSS), sold finished goods used in environmental remediation services, hazardous materials disposal and construction materials during portions of the years ended December 31, 2008 and 2007. CSS delivered protective coverings and clothing, breathing systems, filtration systems, safety products, construction materials and other items to customers in and around the Company s Oak Ridge, TN office. CSS was started in the second quarter of 2007 when the Company acquired all of the inventory on hand of one of the Company s main suppliers. CSS was unable to achieve a sufficient level of sales and gross profit margin to justify continued operation by management. In the third quarter CSS ceased operations and the remaining inventory was liquidated in the fourth quarter of 2008.

COMMODORE SOLUTION TECHNOLOGIES, INC. - DECONTAMINATION

The Company, through Commodore Solutions, Inc. (Solutions), has developed and has commercialized its patented process known as SET. Based on the results of its extensive testing and commercial processing activities, the Company believes that SET is capable of effectively treating and decontaminating soils and other materials, including sludges, sediments, oils and other hydrocarbon liquids, metals, clothing and porous and non-porous structures and surfaces by destroying PCBs, pesticides, dioxins, chlorinated substances and other toxic contaminants to an extent sufficient to satisfy current federal environmental guidelines. The Company also believes that, based on the results of additional tests, SET is capable of neutralizing substantially all known chemical weapons materials and warfare agents, explosives and concentrating certain radioactive wastes for more effective disposal.

The Company believes that SET is the only patented, non-thermal, portable and scalable process that is currently available for treating and decontaminating soils, liquids and other materials containing PCBs, pesticides, dioxins, chemical weapons and warfare agents and other toxic contaminants.

SET Contracts

The Company was awarded an Advanced Remediation Demonstration contract by the Department of Energy's Office of Environmental Management (DOE-EM) for the Company's technology for the separation of radioactive (surrogate) and RCRA heavy metals from sludges and other waste matrices.

The DOE-EM awarded 12 contracts totaling $3.3 million, of which the Company s demonstration was a part, to support the development of technologies that have the potential to reduce cleanup costs and increase the safety and efficiency of treating and disposing of various waste streams, including radioactive waste at such sites as Hanford, Idaho, Savannah River, and others.

The Company s Phase I contract was performed over a six month period, concluding in January 2007. Phase I activities included: laboratory/pilot-scale test results, developing a technical approach for demonstration, scale-up and implementation schedule, detailed system design, and a detailed cost estimate for implementation in Phase II. We reported successful results upon which a $300,000 Phase II of the contract has been proposed, and is awaiting approval and funding. We do not know when or if this Phase will be awarded. The Company has submitted a bid with Environmental Solutions for treatment of certain materials at the Idaho National Laboratory, and is awaiting an imminent Request for Proposal for mixed waste treatment services across all DOE sites.

The SET Technology

The Company, its subsidiaries and predecessors have researched, developed, acquired, tested and proven the SET technology, including its processes and equipment, over several years.

The process is based upon a chemical phenomenon discovered by Sir Humphrey Davy in 1865, shown below for the liquid phase of a sodium and potassium solution:

$$Na^{0} + K^{0} \qquad Na^{+} + K^{+} + 2e^{-} \text{ (the solvated solution)}$$

The solution has been called solvated electrons since the dissolved metal releases electrons to the solution in huge numbers. These electrons, also know as free radicals, are the most powerful reducing agents known, quickly reacting with many compounds. Most of the alkali metals readily dissolve in anhydrous ammonia releasing their valance electrons into the ammonia in a relatively rare but stable state unassociated with any atom. In this state, both the electrons and the metal atoms are available to react with other elements and compounds.

The SET technology, which is based upon solvated electron chemistry, mixes anhydrous liquid ammonia and/or other similar solvents with reactive metals and contaminated elements to effect the selective destruction or neutralization of organic compounds (such as PCBs, pesticides and dioxins). The Company has demonstrated that SET can achieve consistently high levels of contaminant destruction when working with PCBs, dioxins and pesticides. SET has treated soils containing up to 10,000 parts per million (ppm) of contaminants, and oils containing up to 250,000 ppm, leaving residual soils and oils with contamination levels of less than one ppm. In addition, SET has been successfully applied to other PCB-contaminated surfaces such as concrete. The SET process can be used in conjunction with selected post-treatment processes such that no hazardous or toxic residues will result from the use of SET, nor will there be any toxic emissions into the air, water, soils or other surfaces. For example, most contaminated soils treated with SET can (subject, in some instances, to re-blending the soil with organic matter) be used subsequently for planting or for any other use for which non-contaminated soils are appropriate.

Equipment utilized in the SET process consists of tanks, pumps and piping to handle anhydrous ammonia and other solvents in liquid and vapor forms, and treatment vessels for holding contaminated materials and for the introduction of solvating solutions. The system can be transported to field sites and configured in numerous sizes.

The SET process requires placing the contaminated materials into a treatment vessel where they are mixed with a solvent and charged with a base metal (e.g. sodium). The chemical reaction produces metal salts such as calcium chloride, calcium hydroxide and non-halogenated inert organics. The ammonia within the treatment vessel is then removed to a discharge tank for later reuse. The materials are removed, sampled for residual traces of PCB or other

halogenated organic compounds, and placed in storage for disposal. In many cases, the decontaminated soil and metals can be replaced in their original location, recycled or reused. The solvents do not enter the chemical reaction, but merely serve as dissolving liquids for the solvated electron solution.

Operational Characteristics: Substantially all existing systems in use for the destruction of PCBs and other halogenated compounds involve incineration or other thermal processes, and either the permanent installation of highly complex and expensive incinerators and waste disposal equipment at the affected site, or the removal of contaminated materials to off-site facilities. The Company believes that SET represents an approach to resolving serious environmental remediation issues that does not create or entail the safety risks of air pollution and transportation of hazardous materials. The Company believes that SET is more effective than incineration and other destruction processes for toxic substances in that:

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SET does not emit toxic fumes into the atmosphere, as is sometimes the case with thermal or incineration methods;

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SET is portable and can be moved directly to the contaminated site, thereby reducing the risk of off-site contamination;

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SET equipment can be customized and configured for various treatment applications;

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SET's reaction time is substantially less than that of alternative processes, such as thermal destruction and other forms of chemical treatment;

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SET equipment can be installed and operated inside industrial plant facilities to treat hazardous wastes on-line as a continuation of the manufacturing process;

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SET, when used to treat soils, yields nitrogen-enriched soils that can be reused on-site, avoiding replacement and the post-treatment costs of off-site disposal; and

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SET has been shown to neutralize or destroy all chemical weapons material and warfare agents in the United States stockpile, and Lewisite (the primary chemical weapons material and warfare agent of the former Soviet Union), in tests conducted by an independent, federally certified surety laboratory.

The Company believes that SET is the only technology currently available that possesses all of these features and is capable of treating a wide variety of contaminants. The above characteristics (non-thermal, no air emissions, mobile) are particularly applicable when dealing with mixed waste. Wastes that contain radioactive material and hazardous waste regulated by RCRA and TSCA are particularly difficult to treat and have extremely limited disposal options. By applying the SET process to remove the RCRA and TSCA components, leaving only radioactive waste material, disposal options expand. SET not only removes the hazardous components but also does so by an efficient, non-thermal process that can control and contain the radioactive material so that it remains in the treated material and does not enter the environment in an uncontrolled fashion.

EPA Nationwide Permit: The Company has previously qualified for a permit from the EPA to enable it to treat PCBs within the United States on all non-Superfund sites. Most EPA permits granted to date for PCB destruction are solely for single-site incineration treatment centers. Commodore s initial EPA Nationwide Permit was the first (and only) to be issued for nationwide use as a totally enclosed, non-thermal, chemical destruction process for PCB contaminated organic material. The permit authorized treatment of soils at contamination levels greater than 1,000 ppm PCBs, and also authorized treatment of miscellaneous metallic materials. The test results, confirmed by EPA s contract program laboratory, indicated organics contaminated with PCBs exceeding 5,000 ppm, were treated to non-detect levels of PCBs. In addition to soil treatment, the Nationwide Permit allows the Company to treat PCB contaminated metallic surfaces and waste oils, as well as wastewater (the wastewater is treated by a non-SET process). The Company has also successfully demonstrated SET as a treatment process for organic materials contaminated with PCBs and radionuclides and has received a draft revised EPA permit for these matrices. This permit revision covers the destruction of PCBs in soils, waste oils, organic materials, water, and on metallic surfaces.

Prior to securing a significant contract which utilizes the SET technology, the Company will be required to renew this permit, which expired in 2001. The renewal process may require the Company to provide additional information to the EPA at the time of renewal.

Based on currently published lists of EPA national operating permits, the Company believes that it possesses the only mobile non-thermal PCB treatment technology for multiple applications permitted under the EPA's Alternate Destruction Technology Program. The EPA's Alternative Destruction Technology Program is designed to encourage remediation technologies as an alternative to incineration. EPA regulations governing permitting have been in effect for more than 15 years, and according to the latest EPA published list of non-thermal destructive processes, only seven companies have met EPA's stringent requirements for commercial operation. Of these, only the Company has been permitted for the chemical destruction of such a wide range of PCB contaminated materials.

Test Results: The Company has performed treatability studies and actual commercial applications of the SET process that have resulted in successful treatment of over 120 regulated compounds. In more than 1,500 tests using SET, various high levels of contaminants, including PCBs, were reduced to levels approaching non-detectable with the destruction process occurring in a matter of minutes.

The Company has performed various treatability studies and processed commercial quantities of waste utilizing the SET process. Additionally, the Company has conducted several hundred tests of the SET technology on limited quantities of contaminated material, and there can be no assurance that SET will be able to replicate any of these test results on a large-scale commercial basis or on any specific project.

Discussions and selected test results are available at the Company s website at www.commodore.com.

MARKETS AND CUSTOMERS

General

The Company markets its services and technologies to governmental and industrial customers throughout the United States. Additionally, the Company s technologies also have application to similar customers in markets abroad, particularly in Eastern Europe and the Middle East. While the Company currently does not actively market outside the United States, it does receive inquiries from time to time from these markets concerning its technologies. A majority of the Company's sales are technical in nature and involve senior technical and management professionals, supported by the Company's corporate management. During the year ended December 31, 2008, a significant portion of the Company s environmental management

services revenue was derived from contracts with federal, state and municipal government agencies. Contracts with governmental customers generally may be terminated at any time at the option of the customer. In 2008 and 2007, one contract with a single customer, BJC, accounted for approximately 70.9% of Advanced Sciences' service revenues. The loss of Bechtel Jacobs as a customer would have a material adverse effect upon the Company.

Demand for our environmental technologies is anticipated to arise principally from the following sources:

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Stricter legislation and regulations mandating new or increased levels of air and water pollution control and solid waste management; and

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the need for alternative environmental treatment and disposal methods for toxic substances (such as the SET technology), which involve limited safety risks with respect to air pollution and transportation of hazardous materials and do not result in large volumes of residual waste that require further treatment prior to disposal.

Our business strategy is to expand our environmental technologies businesses by:

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establishing additional collaborative joint working and marketing arrangements with established engineering and environmental service organizations to pursue commercial opportunities in the public and private sector;

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diversifying the types of service and products offered to clients and potential new customers; and

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implementing the SET technology in selected niche markets within certain strategic environmental market segments, such as government mixed waste remediation and chemical weapons demilitarization.

Decontamination

The Company anticipates that the initial market for commercial applications of SET will be the hazardous and mixed waste and industrial by-products treatment and disposal market. Mixed waste is material that contains both a hazardous and radioactive component. The most common methods of treatment and disposal of hazardous wastes and

industrial by-products include landfilling, chemical and biological treatment and incineration. Most of the current treatment and disposal methods entail air pollution and transportation risks. In a mixed waste, both hazardous and nuclear regulations apply, making disposal difficult, if not impossible. Currently, there exists very limited disposal options and these may not provide a permanent solution. Certain of these treatment and disposal methods result in large volumes of residual waste, which may require further treatment prior to disposal. As a result, a number of these methods are encountering increased public resistance and added regulatory oversight.

During 2007 and 2008, the Company worked closely with the DOE site in Portsmouth, OH to demonstrate SET s effectiveness in removing PCB s from samples of mixed waste at that facility. Currently, that facility is relying on the TSCAI incinerator at Oak Ridge, TN to destroy this waste material. However, that incinerator is currently being evaluated for potential shutdown and decommissioning within the next year. Should that occur, the Company believes its SET technology will represent an economical and effective method of neutralizing the millions of pounds of mixed waste at the Portsmouth facility. The Company has completed bench tests which demonstrate the success of the SET process in removing PCB's from Pyrenol™ samples provided by the Portsmouth facility. Phase II of this testing, the timing and accomplishment of which is contingent upon DOE funding of approximately $300,000, will be to move a small SET machine to Portsmouth for larger scale on site testing. With the anticipated successful completion of Phase II, the Company would be prepared to move its large SET machine, and possibly build additional units, to the facility for full-scale operation to neutralize the entire volume of waste over a multi-year contract. The funding for Phase II has been delayed, may not be funded at any point, or may be combined into future system-wide requests for proposal for the treatment and disposal of similar waste materials.

As with any new technology or process, there has been initial resistance to the use of SET on a large scale, especially in connection with a strong vested interest on the part of the U.S. Military (based on substantial expenditures and commitments previously made) to use incineration for the destruction of chemical weapons. In addition, other prospective projects for the Company have already been committed to other forms of destruction technology, including incineration, plasma arc, vitrification, molten metal, molten salt, chemical neutralization, biological treatment, catalytic electrochemical oxidation and supercritical wet oxidation. The Company, and its collaborative partners, have been attempting to overcome such competition by introducing SET in smaller clean-up projects and through feasibility studies demonstrating its applicability to larger projects, such as the Initial Harrisburg Contract during 2000 and 2001, and the WCS Fixed Facility Processing Contract during 2001. The SET process provides a significant advantage by allowing the processed material to be disposed of as a non-mixed waste by destroying the hazardous component.

It may also be anticipated that, over an extended period, the market for decontamination of hazardous materials will continue to decline as past environmental degradation is corrected, and as the private and public sectors limit further pollution

through prohibitions on production and use of a broad range of hazardous materials and through the modification and improved efficiency of various manufacturing processes. The mixed waste market is one of the few areas that shows growth and has limited competition when compared to the general hazardous waste market. The Company believes the SET process brings a unique solution to the problem of remediating mixed waste.

Environmental Management

Based on market data compiled by Advanced Sciences, the largest market for environmental services today within the United States is the U.S. Government. Government-wide spending levels for environmental services exceed $10 billion per year. The DOD and DOE are expected to account for approximately 66% of such expenditures and together expect to spend in excess of $200 billion for environmental work over the next twenty years. Advanced Sciences has a long-term record for providing environmental services to the U.S. Government with the DOD and DOE being its primary customers.

In March 2009, the DOE Office of Environmental Management (EM) committed an additional $755M of additional funding for Oak Ridge Reservation cleanup projects under the American Recovery and Reinvestment Act (ARRA). These funds are targeted to accelerate cleanup work previously planned for completion in outyears 2011-2015, and may increase the need for environmental characterization (sampling) work at all three DOE sites in Oak Ridge. These funds are scheduled to be obligated by September 2009 and mostly spent by October 2010. Because of the accelerated schedule, the DOE is expected to use existing contracts to complete the work. Since Advanced Sciences holds current contracts at all three DOE sites in Oak Ridge, the Company may be the beneficiary of significant increases in contract task orders in fiscal 2009 and 2010 of the DOE budget cycle, which ends in October of each year. Commodore is one of four subcontractors identified by the DOE s operating contractor at Oak Ridge, BJC, through which other subcontractors are encouraged to work with in accomplishing this work.

RAW MATERIALS

With the exception of the SET technology, most of the Company s revenue streams do not require raw materials.

The Company has historically experienced no difficulty in obtaining components used in the SET process for which it relies on a broad range of suppliers. Nevertheless, business disruptions or financial difficulties of such suppliers, shortages or other causes beyond the Company's control, could adversely affect the Company by increasing the cost of goods sold or reducing the availability of such components. If the Company was unable to obtain a sufficient supply of required components, it could experience significant delays in the furnishing of components used in the SET process, which could result in the loss of orders and customers and could have a material adverse affect on the Company's business, financial condition and results of operations. In addition, if the cost of finished components were to increase, there can be no assurance that the Company would be able to pass such increase on to its customers. The use of outside suppliers also entails risks of quality control and disclosure of proprietary information.

BACKLOG

At December 31, 2008, total potential backlog for the Company was approximately $2.3 million as compared with approximately $2.1 million as of December 31, 2007. The total backlog represents work for which the Company has entered into a signed agreement or purchase order with respect thereto or has received an order to proceed with work up to a specified dollar amount. The Company estimates that all of the total backlog represents work that will be completed in the next 12 months. Backlog amounts have historically resulted in revenues; however, no assurance can be given that all amounts included in backlog will ultimately be realized, even if covered by written contracts or work orders.

RESEARCH AND DEVELOPMENT

The Company is not currently undertaking any research and development projects. Management is continually looking for new technologies or new applications for current Company technology. Research and development expenditures for the Company and its subsidiaries were $0 for the years ended December 31, 2008 and 2007.

INTELLECTUAL PROPERTY

The Company currently has sixteen (16) issued U.S. and foreign patents. The average life expectancy for the currently issued patents is 8.7 years. As patents are issued, the U.S. Patent and Trademark Office assigns the Company a twenty (20) year patent-life for each patent issued.

The Company believes that its patent portfolio provides the Company with the proprietary intellectual property to market, distribute, and license the full range of the SET technology and all of its derivatives. Additionally, the Company s strength of its patent portfolio may operate as an effective barrier to entry in several of the markets in which the Company is presently conducting business.

To protect its trade secrets and the un-patented proprietary information in its development activities, the Company requires its employees, consultants and contractors to enter into agreements providing for the confidentiality and the Company's ownership of such trade secrets and other un-patented proprietary information originated by such persons while in the employ of the Company. The Company also requires potential collaborative partners to enter into confidentiality and non-disclosure agreements.

There can be no assurance that any patents that may hereafter be obtained, or any of the Company's confidentiality and non-disclosure agreements, will provide meaningful protection of the Company's confidential or proprietary information in the case of unauthorized use or disclosure. In addition, there can be no assurance that the Company will not incur significant costs and expenses, including the costs of any future litigation, to defend its rights in respect of any such intellectual property.

COMPETITION

Environmental Management

In the hazardous waste management market, Advanced Sciences' competitors include such firms as Energy Solutions, Jacobs Engineering, Science Applications International Corp., CH2M Hill and CDM, all of whom have greater financial and other resources than the Company. In providing environmental impact assessment services, Commodore Advanced Sciences' principal competitors in this market sector include RSI, North Wind, Stoller, Weston Solutions, The Earth Technology Corp., Battelle, URS and Woodward-Clyde.

Commodore Advanced Sciences currently occupies a position in the waste management and environmental services arena by virtue of its long-term record for providing environmental services to the United States government. Primary factors affecting Advanced Sciences' competitiveness in this market are its ability to continue to attract and retain qualified technical and professional staff with quality project performance records and to control its costs of doing business.

In an effort to maintain its competitive position, Advanced Sciences believes that it has developed a solid infrastructure, acquired a qualified professional staff, and developed aggressive marketing objectives to provide hazardous waste management and environmental sciences to the United States government and private sector industrial customers. The Company believes its competitive position with the United States government is enhanced by the physical proximity of Advanced Sciences' plants to DOE and DOD sites, its skilled professional staff, prior project experience with the United States government, numerous existing multi-year contracts with the United States government, integrated services and high quality performance.

Decontamination

The Company anticipates that the market for commercial private sector applications of SET will be hazardous and non-hazardous waste and industrial by-products treatment and disposal, in particular the more recalcitrant mixed wastes (wastes containing a radioactive element). Several large domestic and international companies and numerous small companies, many of whom have substantially greater financial and other resources than the Company, compete with the Company in this market. The Company primarily competes in the hazardous waste treatment market in the U.S. The top ten competitors in this market account for over 70 percent of the revenues for this market sector. The dominant companies in this sector include companies with permitted waste treatment and disposal sites, including Energy Solutions, Pacific EcoSolution, and American Ecology, as well as other treatment companies such as PermaFix. The Company s revenues for 2008 account for less than 1 percent of the dollar volume of the hazardous waste market. Any one or more of the Company's competitors or other enterprises not presently known may develop technologies which are superior to the technologies utilized by the Company. To the extent that the Company's competitors are able to offer comparable services at lower prices or of higher quality, or more cost-effective remediation alternatives, the Company's ability to compete effectively could be adversely affected.

The domestic and international governmental public sector of the market is dominated by many large multinational corporations who are presently engaged in providing incineration and other conventional technologies in decontaminating chemical weapons and warfare agents, concentration of nuclear wastes and the decontamination of military vessels and other hardware. These competitors include Raytheon Corporation (the current general contractor for the Johnston Atoll incinerator), EG&G, Inc. (the general contractor for the Tooele Army Depot), Mason and Hanger (the general contractor for the Newport News Naval Facility), Waste Management Corporation (a bidder for domestic "large burial" stockpile weapons decontamination), and others, including Browning-Ferris Industries, Inc., Jacobs Engineering, Inc., Fluor Daniel Corporation and Lockheed Martin Marietta Corporation. All of these corporations have substantially greater financial, personnel and other resources than the Company. In addition, many prospective users of SET have already committed substantial resources to other forms of environmental remediation technology, including incineration, plasma arc, vitrification, bio-remediation, molten salt, chemical neutralization, catalytic electrochemical oxidation and supercritical wet oxidation.

The Company believes that its ability to compete in both the commercial private and governmental public sectors is dependent upon SET being accepted in these sectors as a superior, more cost-effective method to achieve decontamination of a variety of materials.

ENVIRONMENTAL REGULATION

The environmental legislation and policies which the Company believes are applicable to the Company s services in the United States primarily include TSCA, RCRA, and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), as amended by the Superfund Amendments and Reauthorization Act of 1986 ("SARA"), and may include, on a case by case basis, the Clean Air Act of 1970, as amended (the "Clean Air Act"). These laws regulate the management and disposal of toxic and hazardous substances, provide for the protection of land and groundwater resources, and control the discharge of pollutants into the air. Many of these laws have international counterparts, particularly in Europe and elsewhere in North America.

TSCA regulates the manufacture, distribution, and sale of chemical substances, and requires testing of new chemicals and new uses of known chemicals that may present an unreasonable risk of injury to health or the environment. The EPA, through TSCA, has adopted comprehensive regulations for PCB's and other halogenated substances, as part of a vast regulatory program covering thousands of chemicals.

RCRA was enacted in 1976 with the primary objective to protect human health and the environment and to conserve valuable material and energy resources. The most important aspect of RCRA is its establishment of cradle-to-grave management and tracking of hazardous waste, from generator to transporter, to treatment, storage, and disposal.

CERCLA and subsequent amendments under SARA (often referred to collectively as Superfund) impose strict, retroactive liability upon persons who generated, transported, or arranged for the transportation of hazardous substances or owned or operated the vessels or facilities at which such substances were disposed. CERCLA provides

for the investigation and remediation of hazardous substance sites and mandates that any hazardous substances remaining on-site must meet certain regulatory requirements, with a preference for innovative technology. These program regulations may create an incentive to utilize environmental-friendly technologies such as SET, which destroy targeted wastes without creating additional residual waste product. Moreover, to the extent hazardous substances are effectively destroyed, potential liability can be eliminated or significantly reduced.

The Clean Air Act empowered the EPA to establish and enforce ambient air quality standards and limitations on emissions of air pollutants from specific facilities. In 1987, the EPA began to enforce stricter standards for incineration emissions. With more stringent regulations on waste reduction technologies, the Company believes that SET could obtain a desired market share since, in most cases, it produces little or no air emissions.

CERCLA imposes strict joint and several liability upon owners or operators of facilities when a release or threatened release of a hazardous substance has occurred, upon parties who generated hazardous substances that were released at such facilities and upon parties who arranged for the transportation of hazardous substances to and from such facilities. The Company's plans to own and operate SET at on-site installations expose the Company to potential liability under CERCLA for releases of hazardous substances at those sites. In the event that off-site treatment, storage or disposal facilities utilized by the Company for final disposition of residues from SET are targeted for investigation and clean-up under CERCLA, the Company could incur liability as a generator of such materials or by virtue of having arranged for their transportation and disposal.

In light of such potential liability, the Company has designed the SET technology to minimize the potential for release of hazardous substances into the environment. In addition, the Company has developed plans to manage the risk of CERCLA

liability, including training of operators, use of operational controls and structuring of its relationships with the entities responsible for the handling of waste materials and by-products. The Company also maintains insurance with respect to environmental claims, although there can be no assurance that such insurance will be adequate.

The Clean Air Act Amendments of 1990 impose strict requirements upon owners and operators of facilities that discharge pollutants into the environment. These amendments may require that certain air emission control technology be installed on the SET systems in the event that there is any discharge of non-recovered gases into the environment. Such additional air emission controls can be costly and require an air permit to construct and operate.

The Company obtained a Nationwide Permit issued by the EPA under the Alternative Destruction Technology Program that allowed it to use SET on-site to treat PCB-contaminated soils and metallic surfaces, although the permit is currently expired. The Nationwide Permit contains numerous conditions for maintaining the Nationwide Permit and there can be no assurance that the Company will be able to comply with such conditions to maintain and/or secure renewal of the Nationwide Permit. In addition, if environmental legislation or regulations are amended, or are interpreted or enforced differently, the Company may be required to meet stricter standards of operation and/or obtain additional operating permits or approvals. Failure to obtain such permits or otherwise comply with such regulatory requirements could have a material adverse effect on the Company and its operations. Various revisions to the equipment and process parameters are being made to the existing permit. The Company believes that the revised permit will be issued pending the final site selection for the full or part-time operation of any SET system for the treatment of PCB wastes. The revised permit will require the Company to fund closure costs associated with the implementation of any SET system for the treatment of PCB wastes. The closure costs are calculated on a site-by-site basis and are funded accordingly by the Company.

EMPLOYEES

As of December 31, 2008, the Company (including its direct subsidiaries) had a total of 27 full-time and 3 part-time employees, of which approximately 18 are engineers, scientists, environmental technicians and other professionals. None of such employees are covered by collective bargaining agreements and the Company's relations with its employees are believed to be good.

All 26 persons on the technical staff are extensively trained in proper procedures for handling waste materials and environmental media. Advanced Sciences technical staff has more than 500 years of combined experience performing environmental and waste sampling tasks. Ten of our personnel hold DOE security clearances.

All Advanced Sciences sampling personnel maintain currency in the following minimum training requirements:

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OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER)

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OSHA 8-hr Annual HAZWOPER Refresher

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OSHA HAZWOPER Supervisor

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Hazard Communication (HAZCOM)/Hazardous Materials Information System (HMIS) training

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Radiation Worker II

.

First Aid/CPR

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Annual Medical Monitoring

.

Respirator Fit Testing

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General Safety

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Hazardous Energy Control (Lockout/Tagout)

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Work Control Process

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Excavation/Penetration Permit

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Construction Equipment Inspection & Maintenance Program

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Hotwork (welding safety)

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Confined Space Program

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Asbestos and Other Fibrous Materials

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Chronic Berylium Disease Prevention

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IATA Dangerous Good Awareness Certificate

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Workplace Substance Abuse Prevention Program participation

ITEM 1A. RISK FACTORS

Not required for smaller reporting companies.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not required for smaller reporting companies.

ITEM 2. PROPERTIES

The Company s principal executive offices are located in Richland, Washington. Advanced Science leases approximately 3,750 square feet of space for rental payments in the amount of $3,500 per month under a yearly lease.

In addition to the Richland, Washington facilities, Advanced Sciences has leased approximately 20,000 square feet of space on five acres in Oak Ridge, TN for its administrative functions, on a three year lease, for a rental payment in the amount of $6,667 per month.

Advanced Sciences also leases approximately 475 square feet of office and storage space in Broomfield, Colorado with an average rental payment of $495 per month over the term of the lease.

The Company leases approximately 1000 square feet of exterior uncovered storage space for the Company s industrial and waste processing equipment in Hobbs, New Mexico for rental payments in the amount of $527 per month, pursuant to a month-to-month lease arrangement.

The Company has established a presence in Los Alamos, NM by opening a one-room office there to pursue business opportunities with Los Alamos National Security (LANS). LANS is the firm responsible for managing Los Alamos National Laboratory and is a joint venture of the University of California and Bechtel- Jacobs.

The Company accruing a liability for a lease of an office from its CEO, Dr. Shelby T. Brewer for $1,700 per month for an office located in Alexandria, VA. No cash was paid for this office lease during the year ended December 31, 2008.

The Company believes that the foregoing properties will satisfy the business and operational needs of the Company and its subsidiaries in the present and in the foreseeable future.

ITEM 3. LEGAL PROCEEDINGS

As of March 15, 2009, no litigation or claim has been filed against the Company, or any of the Company s subsidiaries. The Company and its subsidiaries are involved from time to time in ordinary, routine litigation incidental to the conduct of their business. Management believes that none of this litigation, individually or in the aggregate, is material to the Company's financial condition or results of operations.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

None.

PART II

ITEM 5.

MARKET FOR REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

MARKET INFORMATION

Shares of the Company s common stock are quoted on the Over The Counter Bulletin Board of the National Association of Securities Dealers, Inc. (the OTC Bulletin Board or OTCBB) under the symbol CXIA. The following table sets forth, for the fiscal periods shown, the high and low sale prices (rounded to the nearest cent) for the Company s common stock as reported on the OTCBB.

Stock price by quarter	**High**	**Low**
Fiscal year ended December 31, 2008		
First Quarter	$ 0.12	$ 0.06
Second Quarter	0.07	0.03
Third Quarter	0.06	0.03
Fourth Quarter	0.06	0.02
Fiscal year ended December 31, 2007		
First Quarter	$ 0.22	$ 0.12
Second Quarter	0.25	0.13
Third Quarter	0.23	0.15
Fourth Quarter	0.15	0.07

Holders of Record

As of December 31, 2008 there were 83 shareholders of record of our common stock and approximately 3,100 additional shareholders whose shares are held through brokerage firms or other institutions.

Dividends

The issuance of convertible preferred securities limits the Company s ability to pay dividends to common share holders.

Series H Preferred Stock

The holders of the Company s Series H Convertible Preferred Stock, par value ($0.001) per share (the Series H Preferred), are entitled to a dividend rate of 3%. Through December 31, 2008, the Company had not paid cash dividends and the Company has accrued approximately $155 thousand in unpaid dividends. The Company has the option to pay the dividends accrued in all periods in additional shares of Series H Preferred. Series H Preferred is convertible into shares of the Company s common equity.

Series I Preferred Stock

The holders of the Company s Series I Convertible Preferred Stock, par value ($0.001) per share (the Series I Preferred), are entitled to a dividend of 10%. Through December 31, 2008, the Company has accrued approximately $184 thousand in unpaid dividends. The Company has the option to pay the dividends accrued in all periods after March 31, 2006 in the Company s common stock rather than cash. During 2008 the Company has not paid any of the accrued dividends on all of the converted Series I Preferred shares to date. The payment of dividends in the form of common stock is subject to limitation, such that no payment in the form of stock can be made that would result in the holder owning 5% or more beneficial ownership of the Company s common stock. There are zero shares of Series I preferred stock and $184 thousand in accrued dividends outstanding at December 31, 2008. The Company has reserved 5.1 million shares of common stock for the potential conversion of accrued dividends on Series I Preferred into common stock.

Series J Preferred Stock

The holders of the Company s Series J Convertible Preferred Stock, par value ($0.001) per share (the Series J Preferred), are entitled to a dividend of 10%. Through December 31, 2008, the Company has accrued approximately $398 thousand in unpaid dividends. The Company has the option to pay the dividends accrued in all periods after March 31, 2006 in the Company s common stock rather than cash. During 2008, no shares of the Company s Series J Preferred Stock were

converted. The conversion of the Series J Preferred shares into common stock and the payment of dividends in the form of common stock are subject to limitation, such that no conversion or payment in the form of stock can be made that would result in the holder owning 5% or more beneficial ownership of the Company s common stock. The Company has reserved approximately 143.3 million shares of common stock for the potential conversion of the Series J Convertible Preferred Stock and accrued dividends there on. The preferred stockholder has 388,302 shares of Series J Preferred at December 31, 2008.

Common Stock

The Company has never paid cash dividends on its common stock. Any future determination by the Board of Directors of the Company with respect to the payment of cash dividends on the common stock of the Company will depend on the ability of the Company to service its outstanding indebtedness, the Company s future earnings, capital requirements, the financial condition of the Company and such other factors as the Company's Board of Directors may consider. The Company currently intends to retain its earnings, if any, to finance the growth and development of its business, to repay outstanding indebtedness and does not anticipate paying cash dividends on its common stock in the foreseeable future.

Securities Authorized for Issuance under Equity Compensation Plans

The Company issued 75,000 options to each of three directors in November 2008 under the 1998 Stock Option Plan, with a fair value of less than $300, which expired in December of 2008, and so were not outstanding at any reporting period end. The Company did not issue any shares or options to purchase shares of the Company s common stock under the 1998 Stock Option Plan during 2007. The 1998 option plan terminated effective December 15, 2008 at which point all options outstanding under the plan expired. There were no options outstanding under the 1998 Stock Option Plan as of December 31, 2008.

Repurchase of Securities

During 2008, neither the Company nor any of its affiliates repurchased common shares of the Company registered under Section R of the Exchange Act.

Recent Sales of Unregistered Securities

On March 5, 2007, the Company issued 120,000 shares of common stock to a consultant as consideration for the second six months of investor relations services to be provided under an agreement. The Company recorded investor relations expense of approximately $23 thousand in the year ended December 31, 2007, representing the value of the shares issued at the average market price of $0.19 on the date of issue.

The offering of shares was conducted by the Company in a private placement solely to accredited investors pursuant to an exemption from registration available under Rule 506 of Regulation D of the Securities Act.

ITEM 6. SELECTED FINANCIAL DATA

Not required for smaller reporting companies.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

OVERVIEW

The Company generates all of its revenues through Advanced Sciences. Revenues are derived from the sale of environmental services under contracts with various government agencies and private companies in the U.S.

As some government contracts are funded in one-year increments, there is a possibility for cutbacks as these contracts constitute a major portion of Advanced Sciences revenues, and such a reduction would materially affect operations. However, management believes Advanced Sciences existing client relationships will allow the Company to obtain new contracts in the future. The Company has access to technologies related to the separation and destruction of mixed waste, polychlorinated biphenyls (PCBs) and chlorofluorocarbons (CFCs). The Company is currently working on the commercialization of these technologies through development efforts, licensing arrangements and joint ventures.

In the second quarter of 2007 Applied Sciences acquired approximately $40 thousand in finished good inventory from a supplier and began selling goods used in the performance of environmental services and hazardous materials handling under the assumed business name Commodore Sales Solution (CSS). In August 2008 management decided to discontinue CSS and completely liquidated the remaining inventory the fourth quarter of 2008.

The Company has identified two reportable segments in which it operates, based on the guidelines set forth in the Financial Accounting Standards Board s Statement of Financial Accounting Standards No. 131. These two segments are as follows: Commodore Advanced Sciences, Inc., which primarily provides various environmental sampling, analysis and data management services to Government agencies on a lump sum and fixed cost basis; and Commodore Solutions, Inc., which is commercializing technologies to treat mixed and hazardous waste.

The Company currently requires additional cash to sustain existing operations and to meet current obligations and ongoing capital requirements. The Company s current monthly operating expenses exceed cash revenues by approximately $48 thousand. Currently, the Company is addressing this cash shortfall through loans from The Shaar Fund, Ltd., but The Shaar Fund, Ltd. is under no obligation to continue to make such advances to the Company. If this lender decided to discontinue advances, the Company would not be able to meet its current obligations. The loan payable to the Shaar Fund, Ltd at December 31, 2008 totaled $9.0 million. The fund managers have been very patient in granting extensions to due dates of principal and interest so that the Company has not been in a default position on this loan. The Company does not expect that patience to continue through future months or years unless Company performance improves as demonstrated by revenue growth, profit improvement and cash generation from company operations. In addition, the Company owes approximately $564 thousand in loans that are currently due or are payable on demand. The Company has been in default on these loans for all of 2008 and 2007 and the lenders have made demand for payment. The Company does not currently have the ability to pay these loans absent additional financing.

The reports of our independent registered public accounting firm on our fiscal 2008 and 2007 consolidated financial statements contain a going concern qualification in which they express substantial doubt about our ability to continue in business. The Company currently requires additional cash to sustain existing operations and to meet current obligations and ongoing capital requirements.

RESULTS OF OPERATIONS

Environmental services provided by Commodore Advanced Sciences:

Environmental service revenues were consistent with the prior year, approximately $2.5 million for the year ended December 31, 2008, compared to approximately $2.6 million for the year ended December 31, 2007. Service revenues in 2008 and 2007 were primarily derived from engineering and scientific services performed for the United States government under two contracts similar to those in place in prior years. Advanced Sciences had one major customer in 2008, which represents more than 10% of annual revenue. Revenue from this customer was approximately $2.2 million or 86.9% of the Company s total 2008 service revenue. In October 2008 BJC awarded

Advanced Sciences with the fiscal year 2009 option on the EDAM contract. In conjunction with the option award Applied Sciences received an increase in billing rates and service fees to be charged under terms of the contract.

Cost of sales for service revenues also remained consistent decreasing from approximately $2.6 million for 2007 to approximately $2.5 million for 2008. The Company s backlog at December 31, 2008 totals approximately $2.3 million, all of which represents work to be completed during calendar year 2009. This compares to a backlog of approximately $2.0 million at December 31, 2007, all of which was performed during calendar year 2008. Revenues and associated expenses in relation to the EDAM contract are expected to be marginally higher for calendar 2009 when compared to 2008 as a result of the increase in billing rates and service fees charged under the EDAM contract.

Contracts of the Company may be subjected to audit by the DCAA. Anticipated losses on contracts are provided for by a charge to income during the period such losses are first identified. During 2008, the Company completed a DCAA audit of a single contract for the period January 1995 through December 1999. The DCAA had asserted that the Company incorrectly overbilled the Government for services rendered under contracts performed during the period under audit. The Company had previously recorded a liability totaling $376 thousand as a reserve to settle any claims or expense that may be incurred as a result of the audit process. The amount recorded was estimated based on an assessment of potential liability using an analysis of available information with respect to pending claims, historical experience and, where available, recent and current trends. During the fourth quarter of 2008, the DCAA completed their audit and a settlement was reached. Contrary to earlier expectations and accruals, the Company recognized additional contract revenues of $86 thousand and subcontractor cost of revenues of $147 thousand were recognized, resulting in a decrease in loss from operations of $315 thousand after eliminating the previous accrual.

Supplies sales provided by Commodore Sales Solutions, a division of Commodore Advanced Sciences, Inc.:

In the third quarter of 2008 management decided to cease operation of Commodore Sales Solutions (CSS). The Company had acquired the existing inventory and hired the existing sales staff of one of the Company s existing vendors, in the second quarter of 2007. Management believed CSS could attain incremental anuual revenues of $1 million or greater, which would provide operating income and cash flows from operations to the consolidated company. After reviewing twelve months of operating results, management determined that CSS would be unable to achieve sufficient annualized sales volume, gross profit margin and resulting cash flows quickly enough to justify continued operation of the business. In the third quarter of 2008 management eliminated two positions with in the Company associated with CSS and liquidated the remaining inventory in the fourth quarter. Net operating income for CSS for the year ended December 31, 2008, was $31 thousand, which includes all expenses associated with the liquidation of the remaining inventory in the fourth quarter.

SET services provided by Commodore Solutions, Inc.:

In the case of Solution, there were no revenues for the years ended December 31, 2008 and 2007. Should the Company be successful in securing contract revenues for its SET technology, Solution would reflect revenues once again.

General and Administrative Expense

Consolidated general and administrative expense decreased from $1.5 million in 2007 to $1.3 million in 2008. General and administrative expense decreased as a result of reduced salary and wage expense associated with Applied. Applied reduced corporate headcount from five employees in 2007 to three in 2008. In addition to a decrease in salary and wage expense the Company was able to reduce other costs including insurance, marketing and consulting expenses. In the case of Advanced Sciences, general and administrative costs decreased to approximately $494 thousand for the year ended December 31, 2008 from approximately $517 thousand for the year end