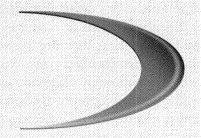


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Washington, DC 125



# Dynasil

Innovating Science, Research & Technology

### A Letter from the President

Dear Dynasil Investor,

Over more than 30 years of leading technology-based organizations, one of the enduring lessons I've learned is that no element of business success surpasses innovation. Present a great idea, and you will attract talented people eager to help develop it. Invent a new technology, patent a new process or create a new product that fulfills an unmet need, and the capital to commercialize it will follow.

Technology leadership and innovation drives our economy and fuels America's competitiveness in the global market. It is what pushes us to strive and grow. The same is true of our organization. One of the hallmarks of Dynasil is its strong business model built on innovating science, research and technology, and its successful track record of bringing technology to market.

Fiscal 2011 was a year of innovation for Dynasil. In the seven months since I joined the Company, we have made progress on a number of key operational and product initiatives that will enhance the Company's long-term value for our stockholders. These initiatives include:

- Building a strong leadership team that combines business and marketing expertise;
- Upgrading existing product lines and advancing new technologies to propel the Company to its next level of growth;
- Strengthening our technology and product pipeline by expanding business development talent and enhancing our intellectual property estate; and
- Continuing to explore strategic acquisition opportunities that can add to our product portfolio or provide complementary capabilities for technologies coming from our research organization.

For those of you who may be new to Dynasil, our business is comprised of two segments — contract research and products and technology. The research segment is the science behind our technology. Because we typically retain the rights to the technologies we invent, our contract research business serves as an incubator to expand our patent portfolio and transition our technology from development to commercialization.

The products segment of our business, previously known as "Optics/Photonics Products and Instruments," has been renamed the *Products and Technology* segment as of January 1, 2012. This

rebranding more accurately reflects the role of Products and Technology as the commercialization engine behind Dynasil, where we bring the technology to market. The segment provides specialized precision instruments, optical materials, components, coatings, and synthetic crystals for medical, industrial and homeland security applications.

The largest business unit within the Products and Technology segment — previously called RMD Instruments — has been renamed *Dynasil Products*. This is indicative of — and in keeping with — the broader role that the business unit will take in accelerating the pace of commercialization though organic programs, cross-licensing and acquisitions. Dynasil Products is the business unit where we expect to generate the majority of our future growth and income.

#### **FY 2011 Financial Summary**

We are pleased to report that Dynasil delivered a record top-line in fiscal 2011, increasing net revenues by 9 percent to \$47 million. Equally important, we continued to invest in products, technology and people. These investments are designed to accelerate our commercialization efforts and expand our pipeline of products for the security, medical and industrial markets.

In our Contract Research segment, new contract awards from customers including the Department of Homeland Security and the Department of Energy helped to drive revenue higher by \$1.8 million to approximately \$25 million. The quality and reliability of our research programs enabled us to conclude the year with a strong contract backlog of approximately 17 months as we moved into fiscal 2012.

Revenues in our Products and Technology segment grew by \$2.2 million for the year to \$22.1 million. The increase reflected our 2010 acquisition of UK-based Hilger Crystals, one of the leading manufacturers of high performance scintillation crystals for the security, medical and industrial markets. We expect the specialized radiation detection technology developed by our Research segment and produced at Hilger, will represent an important part of our product portfolio in the years ahead.

See inside of back cover >>>

#### U. S. SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

#### **FORM 10-K**

(Mark One)	
[x] ANNUAL REPORT PURSUANT TO SECTION 13 0F OF 1934 for the fiscal year ended September 30, 201	
[] TRANSITION REPORT PURSUANT TO SECTION 1: ACT OF 1934 for the transition period from	
Commission file num	ber: 000-27503
DYNASIL CORPORATI (Exact name of registrant as	
Delaware (State or other jurisdiction of incorporation or organization)	22-1734088 (I.R.S. Employer Identification No.)
50 Hunt Street, Watertown, MA (Address of principal executive offi	02472 ces) (Zip Code)
Registrant's telephone number, including area code: (61	7) 668-6855
Securities registered pursuant to Section 12(b) of the Ac	t:
Title of each class	Name of each exchange on which registered
Common Stock, \$0.0005 par value	The NASDAQ Stock Market LLC (NASDAQ Global Market)
Securities registered pursuant to Section 12(g) of the Ac	t: none
Indicate by check mark if the registrant is a well-known Securities Act. Yes [] No [x]	n seasoned issuer, as defined in Rule 405 of the
Indicate by check mark if the registrant is not required to fithe Act. Yes [] No [x]	ile reports pursuant to Section 13 or Section 15(d) o
Indicate by check mark whether the registrant (1) has fil 15(d) of the Securities Exchange Act of 1934 during the p the registrant was required to file such reports), and (2) hast 90 days. Yes [x] No []	receding 12 months (or for such shorter period that
Indicate by check mark whether the registrant has sub Website, if any, every Interactive Data File required to Regulation S-T during the preceding 12 months (or for she and post such files.) Yes [X] No []	be submitted and posted pursuant to Rule 405 o
Indicate by check mark if disclosure of delinquent filer contained herein, and will not be contained, to the best of information statements incorporated by reference in Part 10-K []	of the registrant's knowledge, in definitive proxy or
Indicate by check mark whether the registrant is a lar accelerated filer, or a smaller reporting company.  Large accelerated filer [ ] Accelerated filer [ ]  Non-accelerated filer [ ] Smaller reporting cor	

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act.) Yes [] No[x]

As of March 31, 2011, the aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately \$29,364,388.

As of December 19, 2011 there were 15,582,893 shares of common stock, par value \$.0005 per share, outstanding.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the proxy statement for the Annual Meeting of Stockholders scheduled to be held on February 16, 2012 are incorporated by reference into Part III of this report.

#### **PART I**

This annual report on Form 10-K contains or incorporates by reference not only historical information, but also forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and are subject to the safe harbor created by those sections. We refer you to the information under the heading "Forward-Looking Statements."

As used in this annual report on Form 10-K, references to "Dynasil," the "Company," "we," "our" or "us," unless the context otherwise requires, refer to Dynasil Corporation of America and our subsidiaries.

All trademarks or trade names referred to in this report are the property of their respective owners.

#### ITEM 1. BUSINESS

#### General

Dynasil Corporation of America was founded as a New Jersey corporation in 1960 and incorporated in the state of Delaware through a migratory merger in March 2008. Our corporate headquarters are located at 50 Hunt Street, Watertown, MA 02472, and our corporate website is <a href="www.dynasil.com">www.dynasil.com</a>. You can access, free of charge, our filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K, our quarterly reports on Form 10-Q, current reports on Form 8-K and any other amendments to those reports, through a link at our website, or at the Commission's website at <a href="www.sec.gov">www.sec.gov</a>.

We develop and manufacture detection, sensing and analysis technology, precision instruments and optical components for the homeland security, industrial and medical markets. Current and future potential products include dual-mode radiation detection solutions, probes for medical imaging and sensors for non-destructive testing.

Beginning with this annual report, our Optics/Photonics Products & Instruments segment has been renamed the Products & Technology segment to better reflect the operations of the segment. The name of our other reporting segment remains Contract Research. The Products & Technology segment encompasses six business units that manufacture commercial products including precision instrumentation for medical and commercial applications, optical crystals for sensing in the security and medical imaging markets, and optical components, coatings and materials for scientific instrumentation and other applications. The Contract Research segment consists of the Radiation Monitoring Devices, Inc. ("RMD Research") business unit, which is among the largest small business participants in U.S. government-funded research.

Our principal business strategy is to employ our contract research, product development and technological capabilities to establish leading positions for our technologies in markets including homeland security, industrial and medical. We believe that we have the ability to achieve this strategy through: development and expansion of our research portfolio; investment in the commercialization of our technologies originating from our Contract Research segment; organic growth of existing products; acquisition of technologies that align with our core competencies, or provide complementary capabilities, such as pathways to market, to help accelerate product commercialization.

#### **Growth through Acquisitions**

Through a series of acquisitions beginning in March 2005, Dynasil has evolved from a single-product line optics company to a company focused on commercializing its own products, patenting its own innovations and advancing its own technologies. Our revenue has increased from \$2 million in FY 2004 to nearly \$47 million in FY 2011, representing compound annual growth of 53.9 percent.

The acquisitions we completed during this period included:

- Optometrics: In March 2005, we acquired Optometrics LLC ("Optometrics"), a worldwide supplier of
  optical components and instruments including diffraction gratings, interference filters, laser optics,
  monochromators and specialized optical systems.
- Evaporated Metal Films: In October 2006, we acquired Evaporated Metal Films Corporation ("EMF"), an optical thin-film coatings company with a broad range of application markets including solar energy, display systems, dental photography, optical instruments, satellite communications and lighting.
- RMD: In July 2008, we acquired RMD Research, a contract research company, and RMD Instruments, LLC ("RMD Instruments"), a precision instruments company that manufactures and sells instruments in the medical imaging and industrial markets which include hand-held analyzers for lead paint and medical probes for cancer surgery.
- Hilger Crystals: In July 2010, we acquired Hilger Crystals, Ltd., ("Hilger) a manufacturer of synthetic
  crystals applicable to a wide range of industrial, medical, and homeland security applications with a
  long history of supplying high-quality synthetic crystals for infrared spectroscopy, X-ray and gamma
  ray detection.
- Biomedical technologies: In April 2011, we acquired the rights to six biomedical technologies from Dr.
  Daniel Ericson, a former hematologist at the Mayo Clinic, which jointly owns rights to certain of the
  technologies acquired. We will seek opportunities to license these technologies as well as obtain
  research grants with the Mayo Clinic to advance several of the development-stage technologies for
  various therapeutic applications.

We are focused on continuing to acquire businesses, advanced technologies and assets in the homeland security, industrial and medical markets. Our goal is to make acquisitions that enable us to expand our Products and Technology portfolio, or to gain complementary capabilities, such as manufacturing and distribution, for technologies originating from our contract research business.

#### Contract Research - the Science Behind our Technology

Our Contract Research business unit, RMD Research, is among the largest small business participants in U.S. government-funded research, performing research and development activities for government agencies including Department of Energy, Department of Defense, Department of Homeland Security, Domestic Nuclear Detection Office, National Institutes of Health, and NASA.

RMD Research develops advanced technology in materials, sensors and prototype instruments that detect, use or measure radiation, light, magnetism or sound for use in security, medical and industrial applications. RMD Research has technology practices in material science, radiation detection, digital imaging technology, magnetic imaging, laser optics and photonics. As of September 30, 2011, our Contract Research segment had a total of 92 employees, including 44 Ph.D. level scientists. RMD Research serves as an incubator to expand our patent portfolio allowing the opportunity to advance our technology from development to commercialization using government funded research. As of September 30, 2011, RMD Research had a portfolio of 40 issued U.S. patents and 40 pending patent applications, compared with 35 issued patents and 25 pending patent applications at the same point in 2010.

For more than 25 years, RMD Research has successfully conducted government research under the auspices of the Small Business Innovation Research ("SBIR") program. In recent years, RMD Research has augmented its SBIR research with larger, competitively bid government research and development contracts. To grow our research portfolio within the federal government, we are broadening our relationships within key federal funding agencies and the U.S. military. Our research initiatives are aligned with our focus on the

homeland security, medical and industrial markets. As of September 30, 2011, RMD Research had a contract backlog of approximately 17 months.

RMD Research competes for contract research work against a variety of small and large businesses that submit research proposals based on specific government solicitations. We believe that RMD Research's reputation for conducting state-of-the art research and development, as well as the quality of its proposals, are significant competitive advantages. In addition, RMD Research maintains strong working relationships with universities, government agencies, national laboratories, research hospitals and corporations. However, some of our competitors may have greater financial, technical and human resources than we have and may be better able to operate large, well-funded research and development programs.

We believe that research projects provide an important source for new commercial products in areas such as medical imaging, industrial sensors, critical care and point of care diagnostics and homeland security. For example, precision instrumentation in our Products & Technology segment, including our lead paint analyzer and a medical probe for cancer surgery, emanated from the RMD Research portfolio. Our government-funded research work also has spawned programs such as our dual-mode radiation detection technology.

#### **Products & Technology – Our Commercialization Engine**

Our Products & Technology segment includes six business units that manufacture specialized precision instruments, optical materials, components, and coatings for various applications in the medical, industrial, and homeland security/defense sectors.

The largest business unit within our Products & Technology segment manufactures precision instruments such as handheld lead paint analyzers, medical probes that help surgeons detect cancer tracers, thereby enabling more effective surgical procedures, and a radiation imaging camera system. Previously referred to as RMD Instruments, this business unit has been renamed Dynasil Products.

Dynasil Products also is focused on expanding its product line and accelerating the pace of commercialization through organic programs, acquisitions and cross-licensing opportunities. This business unit also will manage our portfolio of biomedical technologies recently acquired from Dr. Daniel Ericson.

#### Biomedical Technologies

On April 14, 2011, we announced the incorporation of Dynasil Biomedical Corp. located in Rochester, Minnesota as a new business unit to pursue opportunities in the biomedical field. Dr. Ericson joined Dynasil Biomedical as Scientific Lead with responsibility for research and development.

Dynasil Biomedical completed the purchase of Dr. Ericson's rights to six technologies invented or co-invented by him. Dr. Ericson previously worked at Mayo Clinic and several of the technologies purchased by Dynasil Biomedical are jointly owned with that institution. Additionally, he previously invented several biomedical technologies that are in commercial use or being developed for commercial use by unrelated parties.

The six purchased technology rights include a method that could significantly extend the storage time for red blood cells as well as enhancing the quality of those cells, a tuberculosis test with the potential to provide a rapid (one hour) test, a high tensile strength tissue sealant developed for both topical and internal bleeding that could accelerate clot formation, and a set of technologies focused on point of care diagnostics for assessing hemophilia, blood coagulation and cardiovascular risk. The Dynasil Biomedical technology portfolio will be managed by and become part of our Dynasil Products business unit which already has a presence and a proven track record in medical diagnostics.

The blood storage enhancement project is being developed in collaboration with Mayo Clinic. It addresses the problem of shortages in the blood supply. Because of the short shelf life of blood products, blood centers have to throw away approximately 5% of their product due to expiration. Additionally, throughout the shelf life, the effectiveness of the product decreases leading to suboptimum patient results. This technology has the potential to maintain the effectiveness of blood products thereby extending the shelf life, which we believe will be of great interest to hospitals, blood banks and the military.

All of these technologies are in the early-stage and may require significant investment to support further development, regulatory approval and commercialization. While Dynasil currently believes that these technologies represent exciting opportunities, there can be no assurances that any of these technologies will be successfully commercialized.

#### Other Products & Technology Business Units

The four other business units in the Products & Technology segment supply synthetic crystals, optical materials, components, and coatings that are used for baggage scanners, medical imaging systems, optical instruments, lasers, analytical instruments, semiconductor/electronic devices, automotive components, spacecraft/aircraft components, advertising displays, and in devices for the solar energy industry.

We compete for business for these applications primarily with fabricators of industrial optical materials, other optical components manufacturers, other optical crystal manufacturers and other optical coaters as well as other analytical instruments manufacturers and synthetic crystal manufacturers. We believe our proprietary processes, reputation, novelty of our current products and products in development and the price at which we offer our products enable us to successfully compete in these markets. However, several of our competitors have greater financial, sales and marketing resources than we do which may enable them to develop and market products which would compete against those developed by us.

Our products are distributed through a direct sales and marketing staff of 20 people and through other channels, including manufacturer's representatives and distributors in various foreign countries for international sales and U.S. manufacturer's representatives for certain product lines. Marketing efforts include direct customer contact through sales visits, advertising in trade publications and attendance at trade shows.

#### Strategy to Commercialize our Advanced Technology

Our principal business strategy is to employ our contract research, product development and technological capabilities to establish leading positions in markets including homeland security, industrial and medical. We believe that we can achieve this strategy by: 1) developing and expanding our research portfolio; 2) commercializing the technologies coming from our Contract Research segment; 3) growing organically through investment in existing products; 4) acquiring new technologies or pathways to market to help accelerate commercialization of our technologies into our primary security and medical markets; and 5) identifying and investing in those technologies with the greatest revenue and growth potential in the market.

To achieve our strategy we are focusing on:

- Building a strong team of business and marketing leadership;
- Increasing our effectiveness across the organization through a series of operational initiatives, enabling us to expand into new product lines and penetrate new markets;
- Further strengthening our technology pipeline by expanding business development and by enhancing our intellectual property estate; and
- Executing a focused acquisition strategy that leverages our research and technology expertise and aligns acquisition dollars with projects closest to field readiness.

#### **Intellectual Property**

From October 2010 through September 2011, we have been granted five new U.S. patents and have filed 25 new patent applications. Our current portfolio is 40 issued and 40 pending applications. We believe that intellectual property represents an important strategic advantage for us. As a result, we recently established a patent committee to help broaden the value of our intellectual property estate. The committee is strengthening the identification of intellectual property within the Company by implementing a broad based vetting process to specifically understand product definition, technical maturity, the value proposition, competition, and market size to ensure that we develop IP that maximizes the market value of our research. This is consistent with our strategy and will allow us to protect selected technologies that we believe have commercial potential – either through product offerings or licensing agreements.

#### **Lead Commercial Program – Dual Mode Radiation Technology**

Our lead current commercialization program is our dual mode radiation detection technology. Our dual mode nuclear detector technology was developed under a program for the Department of Homeland Security for use in locating nuclear bombs or nuclear materials at our nation's ports and borders. This technology is of critical importance to our national security, as well as other radiation detection applications, such as nuclear power plant safety.

Our dual mode detector technology is designed to be a single detector that replaces two detector subsystems – the gamma radiation detector and also the helium-3 detectors for neutrons. Increasing our value proposition is the fact that the stockpile of the chemical element helium-3, a byproduct of nuclear weapons production, is in critically short supply. The stockpile of helium-3 has been drawn down over the past ten years, as the federal government has increased its use in neutron detectors to help prevent nuclear and radiological material from being smuggled into the U.S.

In order to accelerate the pace of this technology to market, and to establish manufacturing capacity, in July 2010 we acquired Hilger Crystals, a leading manufacturer of scintillation crystals based in Margate, Kent, U.K. During the 2011 fiscal year, our specialized furnaces began pilot production of our proprietary scintillation crystals. Additional furnaces have been fabricated and tested and we plan to install and commission them in the first half of 2012.

Potential applications for our synthetic crystals include homeland security, baggage scanning, medical imaging, oil exploration and military. During the fourth quarter of 2011, we made progress during developing commercial relationships with lead original equipment manufacturer ("OEM") customers to make the dual mode technology available to several markets. We expect to deliver our dual mode detectors to OEM customers for beta testing with early adopters and begin to produce revenue in fiscal year 2012.

#### **Bringing Technology to Market**

During the fiscal year ended September 30, 2011, we continued investments in our pipeline of commercial product opportunities in homeland security and medical technology. Our Products & Technology businesses are helping to fund the commercial launch of our dual mode detector as well as evaluation, development and testing of certain assets within our biomedical technology portfolio.

We have begun to implement a Product Realization Process designed to support the evaluation, assessment, development and commercialization of our technologies. Concurrently, we will be screening technologies with this tool to develop Dynasil's pipeline of commercial technology opportunities. This process also will serve to identify licensing or acquisition opportunities to help speed our offerings to market.

In conjunction with our Product Realization Process, we are building the foundation for an enhanced product development, engineering and management capability within Dynasil for those technologies that we choose to commercialize. This process also effectively provides a single resource to evaluate our design for manufacturability, contract manufacturing pathways, cost of goods and pricing, as well as our launch and distribution strategies.

These initiatives will be managed within our Dynasil Products business unit as it will be the commercial engine for the company generating income through organic programs and technology licensing opportunities.

Dynasil is also investing in organic product development in 2012. Guided by our product realization process, our product development team is undertaking simultaneous and extensive product line updates to improve features and functionality on our lead paint analyzer, medical probe and radiation imaging camera.

#### **Product Pipeline**

As part of our product pipeline review, we are continuing our efforts to evaluate additional promising technologies with commercial potential in the security, medical and industrial markets as we put our product realization process in place. Three early stage opportunities currently under evaluation are dosimeters, thin film digital x-rays, and sensors for non-destructive testing.

- Dosimeters: We are developing compact, low cost radiation badges (dosimeters) for potential
  military, industrial, medical and consumer applications. The project is being funded by the DOD's
  Defense Threat Reduction Agency. We have partially completed shipments of 150 prototypes for field
  evaluation. The Company is researching the potential customer base and marketability of this
  potential product. According to Introductory Profile 2010 on dosimetryimaging.com, the total
  dosimeter market size is currently about \$500 million.
- Thin film digital X-rays: RMD Research is developing a family of thin film scintillators that as a component – make possible digital X-ray detectors with higher image resolution and faster rates of

image capture, all at a lower effective X-ray dose to the patient. Thicker variations of these films offer promise of lower-cost, higher-performance substitutes for use in CT, SPECT and PET imaging system detectors for medical, industrial and domestic security applications. An August 2011 report by Nanomarkets LC indicated that the area of thin film scintillators used is expected to grow from 72 million cm² in 2011 to 258 million cm² in 2018. According to the PET/SPECT Report dated November 10, 2010 from the firm Markets and Markets, the market for PET/SPECT imaging systems – of which our technology is a component -- is expected to grow from \$6.8 billion in 2010 to \$10.3 billion in 2015.

Sensors for non-destructive testing: We are developing a product with an enhanced capability to detect cracks in high value components such as aircraft wings and jet engine turbine blades at a higher rate of speed. Unlike conventional probes that use hand wound coils, our advanced technology uses solid state sensors with high sensitivity to magnetic fields and low noise characteristics. When fully developed, this emerging technology could dramatically improve the ability and speed to inspect high value components. During the fourth quarter of 2011, we reached agreement to co-develop and evaluate the advanced technology on aircraft engine applications with an early adopter customer.

All of these technologies are in early stages of development and may require significant investment to support further development, regulatory approval and commercialization. While Dynasil currently believes that these technologies represent exciting opportunities, there can be no assurances that any of these technologies will be successfully commercialized.

#### **Strategic Acquisition Targets**

We are focused on completing new acquisitions in the homeland security, medical and industrial markets, where the Company has core competencies. Future acquisition targets will include businesses that enable us to acquire advanced products or technologies to expand our product portfolio, or to gain complementary capabilities, such as manufacturing and distribution, for our current businesses and for technologies originating from the Company's research engine.

#### Customers

We have more than 1,157 customers, with approximately 56% of our business concentrated in our top 10 customers. Our five largest customers accounted for approximately 18.1%, 12.6%, 10.8%, 4.0% and 2.4%, respectively, of our revenues during fiscal year 2011. The loss of any of these top five customers would likely have a material adverse effect on our business, financial condition and results of operations. Generally, our customers provide purchase orders for a specific part and quantity or they provide a contract for research projects. Product orders are normally filled over a period ranging from one to six weeks. We have blanket orders that call for monthly deliveries of predetermined amounts. Contract research projects generally run for a one to two year period.

#### **Employees**

As of September 30, 2011, we had a total of 237 employees, of which 221 are full-time. Of the total, 31 of our employees are engaged in administration, 20 are engaged in sales, 106 are engaged in research and/or engineering and 81 are engaged in manufacturing. The Company has a total of 46 Ph.D. level employees. Our operations are non-union except for a two-person union in one location.

#### **Suppliers**

Our largest supplier for materials and components is Corning Incorporated, which is a primary supplier of the fused silica material that is fabricated and sold by our New Jersey facility. We believe that we have excellent relationships with our suppliers. If any of our suppliers should become unavailable to us for any reason, we believe that there are a number of potential replacements, although we might incur some delay in identifying such replacements.

#### **Research and Development**

Our research and development ("R&D") activities include government funded research which totaled \$24.9 million for fiscal year 2011 and \$20.6 million for fiscal year 2010. R&D for our historical businesses has primarily involved new product development, changes to our manufacturing processes and the introduction of improved methods and equipment. Improvements to our processes are ongoing and related costs are

incorporated into our manufacturing expenses. Substantially all of our research and development costs noted above relate to research contracts performed by RMD Research, and are in turn billed to the contracting party.

#### **Government Regulation**

Other than federal, state and local environmental and safety laws as well as International Traffic in Arms Regulation ("ITAR") and FDA requirements, our operations are not subject to direct governmental regulation, although RMD Research must comply with the government contracting rules contained in the federal acquisitions register. We do not have any pending notices of environmental or government contract violations and are aware of no potential violations. There are no known buried storage tanks on our properties. Environmental compliance costs for fiscal year 2011 were \$17,128.

#### **ITEM 2. PROPERTIES**

We own a manufacturing and office facility consisting of a one-story, masonry and steel building containing approximately 15,760 square feet in West Berlin, New Jersey. We lease a 10,000 square foot manufacturing and office building in Ayer, MA from a related party with a lease that expires in March 2013. We own a two-story, 44,000 square foot manufacturing and office facility in Ithaca, New York. We own a two-story, 17,000 square foot manufacturing and office facility in Margate, Kent, in the U.K. We lease a 40,000 square foot manufacturing, research, and office building in Watertown, MA for our RMD Research and Dynasil Products business units from a related party with leases that expire in June 2013. We also lease 15,038 square feet of office and research space in buildings within close proximity in Watertown and Waltham, MA with leases that expire in May 2013 and February 2014. The Watertown locations are the primary location for our corporate offices and contract research segment. Manufacture of precision instruments and optics/photonics products are conducted at all five locations. We believe that the properties are in satisfactory condition and suitable for our purposes. The New Jersey, New York, and U.K. properties are collateral against notes payable to banks.

#### **ITEM 3. LEGAL PROCEEDINGS**

None.

#### ITEM 4. (Removed and Reserved)

#### **PART II**

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

#### **Market Information**

Effective December 17, 2010, the Company's Common Stock has been listed on the NASDAQ Global Market under the symbol "DYSL". Prior to December 17, 2010, the Company's Common Stock was quoted on the NASD-OTC Bulletin Board under the symbol "DYSL.OB".

The following table sets forth, during the fiscal year quarters presented, (i) the high and low sale prices of our common stock for the period our common stock was listed on NASDAQ and reported by NASDAQ and (ii) the high and low bid information as reported by the OTC Bulletin Board for periods prior to our listing on NASDAQ. The "high" and "low" bid information reflect inter-dealer prices without retail mark-up, mark-down, or commissions, and may not necessarily represent actual transactions.

		ears ended S	September 30	,
	20	11	20	10
	High	Low	High	Low
First quarter	\$ 6.00	\$ 4.73	\$ 3.10	\$ 1.80
Second quarter	7.48	3.71	2.70	2.00
Third quarter	4.64	3.20	2.90	2.00
Fourth quarter	3.71	2.50	4.30	0.51

As of December 19, 2011 there were 15,582,893 shares of the Company's common stock outstanding held by

approximately 1,025 holders of record.

The Company has paid no cash dividends on its common stock since its inception. The Company intends to retain any future earnings for use in its business and does not intend to pay cash dividends on its common stock in the foreseeable future. There are no restrictions on dividend payments unless the Company is in default under the loan documents with Sovereign/Santander Bank.

#### ITEM 6. SELECTED FINANCIAL DATA

Dynasil, a smaller reporting company, is not required to complete this item.

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

The following management's discussion and analysis should be read in conjunction with our financial statements and the notes thereto appearing elsewhere in this Form 10-K.

#### Overview

Dynasil develops and manufactures detection, sensing and analysis technology, precision instruments and optical components for the homeland security, industrial and medical markets. Our current and potential future products include dual-mode radiation detection solutions, probes for medical imaging and sensors for non-destructive testing. Our strategy is to grow our businesses by applying our contract research expertise to develop and commercialize new products, enhancing product lines, acquiring complementary technologies and companies in our core markets and entering into technology licensing agreements. A complete description of our strategy is included in Item 1 of this Form 10-K.

#### **Business Drivers in Fiscal 2011**

Fiscal year 2011 was marked with moderate revenue growth during less than ideal economic conditions. When compared to fiscal year 2010, revenues increased 9.3% from \$43.0 million to \$47.0 million. Income from Operations was \$2.2 million compared to \$4.8 million in 2010. Net Income was \$1,351,645 or \$0.08 earnings per share compared to \$3.2 million or \$0.22 per share in 2010. During fiscal 2011, significant investments continued in several areas and new initiatives were begun in support of future growth including: 1) organic product development in our Dynasil Products unit; 2) dual mode nuclear detector technology; 3) acquisition of a biomedical technology portfolio (Dynasil Biomedical) to enhance our product pipeline; and 4) evaluation and assessment of additional technologies with commercialization potential. We anticipate the dual mode detector business will produce revenue beginning in fiscal year 2012. Commercialization of technology from our extensive research and development portfolio, organic product development and acquisitions are expected to be the key drivers of our future growth and we plan to continue to invest in these opportunities. At the current time, the Company is actively exploring commercialization opportunities in thin film digital x-rays, sensors for nondestructive testing and radiation dosimeters based on technologies developed at Radiation Monitoring Devices, Inc. ("RMD Research"). No determination has been made as to the Company's entry into these market segments; however, we anticipate decisions will be made on these opportunities, as well as opportunities within Dynasil Biomedical within fiscal year 2012.

Our Contract Research segment had increased revenues of 7.6% with continued engagement from major large customers such as the Department of Homeland Security, Department of Energy and the National Institutes of Health. Our Contract Research segment derived about 60% of revenues from the U.S. government sponsored Small Business Innovations Research ("SBIR") program over the year. As recently as 2009, 94% of the segment funding came from the SBIR program. The revenue backlog for contract research is approximately \$35 million and contains about 60% SBIR grants. The Company is actively pursuing alternative funding avenues to further reduce the percentage of work through the SBIR program.

Our Products and Technology segment had sales growth of 11.2%. Included in our Products and Technology segment are sales derived from our acquisition of Hilger Crystals on July 19, 2010. Hilger provided revenues of \$3.45 million in 2011 and \$687,850 in 2010. Sales would have declined 2.9% in fiscal 2011 in this segment absent the acquisition. Dynasil Products' sales declined by 14% and product revitalization efforts are underway. Results from other business units within the segment partially offset this shortfall. Various growth initiatives are being undertaken within this segment. These include the Dynasil Biomedical technologies that are being managed and developed within our Dynasil Products unit. The Company has determined that this

business unit is best reported within the Products and Technology segment rather than the Contract Research segment since the unit will focus on developing products and technologies for sale or licensing rather than on contract research. Dynasil Biomedical results were reported within the Contract Research segment for the quarter ended June 30, 2011, at which time, Dynasil Biomedical had no revenues.

We remain focused on internal growth through business unit initiatives coupled with commercialization opportunities from technologies originating out of our contract research segment. We also continue to seek acquisitions that may enhance and augment future results.

#### **Results of Operations**

Results of Operations for the Year Ended September 30,

	2011				2010	
	Contract	Products &		Contract	Products &	
	Research	Technology	Total	Research	Technology	Total
Revenue	\$24,874,088	\$22,077,578	\$46,951,666	\$23,109,847	\$19,859,915	\$42,969,762
Gross Profit	\$10,339,990	\$8,927,947	\$19,267,937	\$9,445,339	\$8,318,463	\$17,763,802
SG&A	\$9,149,838	\$7,871,353	\$17,021,191	\$7,758,445	\$5,213,195	\$12,971,640
Operating Income	\$1,190,152	\$1,056,594	\$2,246,746	\$1,686,894	\$3,105,268	\$4,792,162

Overall, revenues for the fiscal year ended September 30, 2011 were \$46,951,666. This represents an increase of 9.3% over revenues for the fiscal year ended September 30, 2010 of \$42,969,762. Contract Research revenues increased by 7.6% with new contract awards from Homeland Security, Department of Energy and others. Products and Technology achieved an increase of 11.2% including the addition of the Hilger revenue of \$3,454,725 in 2011 and \$687,850 for the short period in 2010. New customer and new product growth initiatives are in process throughout this segment.

Gross profit for fiscal year 2011 increased by 8.5% from the prior year period to \$19,267,937. Therefore, given our 9.3% increase in revenues, gross profit as a percentage of sales fell from 41.3% to 41.0%. Gross profit margin from Contract Research improved from 40.9% to 41.6%. Products and Technology saw gross profit margin decline from 41.9% to 40.4% as a result of higher materials cost combined with a less favorable product mix.

Selling, general and administrative ("SG&A") expenses increased as a result of continued investment in acquisitions, development of a new technology portfolio, the full year of Hilger Crystals results and increases in corporate costs. Total SG&A expenses increased to \$17,021,191 or 36,3% of sales for fiscal year 2011 from \$12,971,640 or 30.2% of sales for fiscal year 2010, a 6.1% of sales increase in costs. Higher SG&A costs were in both segments reflecting higher corporate costs including the costs associated with the management transition that occurred with the departure of Craig T. Dunham and the appointment of Steven K. Ruggieri as President of the Company. Total transition costs, including legal expenses, recruiting, severance and signing bonuses were \$336,000. In addition, higher corporate SG&A expenses included the full costs of the successful application and registration for Dynasil's stock listing on NASDAQ. The costs of entry, annual fees and legal expenses were approximately \$200,000. Future benefits to stockholders from the NASDAQ listing are expected to include greater visibility for the Company and greater liquidity for the stock. Also included in corporate SG&A expenses were the costs associated with the search, investigation and due diligence efforts toward various acquisition opportunities. Legal costs were included in the recorded total costs of more than \$180,000. An additional SG&A corporate cost was approximately \$175,000 in external costs to complete an analysis of the Company's prior years' and current year qualified costs and activities for R&E tax credits' qualifications. These efforts resulted in substantial tax credits of approximately \$1,045,000 for prior years and an estimate of \$500,000 in tax credits for current year activities and contracts. Directors' fees increased by \$181,000 over the prior year, partially due to the CEO/President transition period. At the business segment level, SG&A costs for the year ended September 30, 2011 included \$1.8 million from the Hilger acquisition completed in July 2010 as compared to \$522,000 in the prior year. The Company continued to invest in growth initiatives at the business unit level with investment in our dual mode nuclear detector technology and beginning investments with Dynasil Biomedical. Investment in Dynasil Biomedical was \$447,000 for the year ended September 30, 2011. This was primarily composed of salaries and consulting costs while the various acquired technologies were more fully explored and the relationship with the Mayo Clinic was more fully developed. Dynasil Products recorded \$98,000 in restructuring costs and has begun product revitalization. All business units have invested in resources to enhance selling efforts.

Net Interest Expense decreased to \$601,903 in fiscal 2011 from \$628,120 in fiscal 2010. This decrease came from continued debt reduction with regular periodic payments to Sovereign/Santander Bank under the Term

Loan and the Acquisition Line of Credit. Total interest-bearing debt declined by \$1,858,943 over the prior year.

For fiscal year 2011, the Company had an income tax expense of \$293,198 as compared to an income tax expense of \$929,661 for fiscal year 2010. The significant difference is primarily due to the result of state and federal Research and Experimentation ("R&E") tax credits in the U.S. of approximately \$1,545,000 and Research and Development ("R&D") tax credits in the U.K. of approximately \$202,000. The tax credits were partially offset by the required deferred tax liability recorded for the tax effects of book/tax differences related to Property, Plant and Equipment, Goodwill, and Intangible Assets. Fiscal year 2010 had higher net taxable income, offset when the Company was awarded \$1.2 million in federal tax credits associated with the Qualifying Therapeutic Discovery Project (QTDP), enacted as part of the Patient Protection and Affordable Care Act of 2010, which reduced taxes by \$603,400.

The Company had net income of \$1,351,645 for the year ended September 30, 2011 compared to net income of \$3,234,381 for the fiscal year ended September 30, 2010, as a primary result of high SG&A expenses in corporate costs, investment in growth initiatives offset by R&E tax credits (U.S.) and R&D tax credits (U.K.)

#### **Liquidity and Capital Resources**

Net cash as of September 30, 2011 was \$4,479,840 which was an increase of \$367,874 as compared to \$4,111,966 at September 30, 2010.

Net cash provided by operating activities was \$3,892,646 for fiscal year 2011 versus \$3,109,026 for fiscal year 2010. Fiscal year 2011 net income was \$1,351,645, depreciation/amortization added back \$1,272,985, and stock compensation expense added \$563,443. A reduction in accounts receivables provided \$497,337. Days sales outstanding (DSO) improved to 46.1 days from 51.8 in the prior year period. Inventories had a slight increase of \$153,320 and inventory turns remained at 4.0 times. Accounts payable and accrued expenses added \$750,859 to cash flow with the higher business volume and concentration on working capital management.

Cash flows used in investing activities were \$1,843,262 for fiscal year 2011 compared to \$4,366,423 for fiscal year 2010. Cash paid for the Hilger Crystals acquisition in 2010 totaled \$4,002,946. Capital expenditures to purchase machinery and equipment in the current year were \$1,543,262 for fiscal year 2011 compared to \$363,406 for 2010. To support the initiative for the dual mode nuclear detection technology, \$463,410 was spent on capital equipment and infrastructure. An additional \$627,284 was spent to upgrade and expand the physical plant for contract research. Cash paid to acquire biomedical technologies by the newly created Dynasil Biomedical Corp. was \$300,000.

Cash flows from financing activities used \$1,803,411 of cash in fiscal year 2011 and provided \$2,247,810 in fiscal year 2010 when new financing was completed. Current year cash use was primarily for regularly scheduled payments to Sovereign/ Santander Bank under the five year term debt and acquisition line of credit. Finally, in 2011, net common stock issuance provided \$135,302 and \$79,770 was paid for preferred stock dividends. There are currently no shares of preferred stock outstanding.

Cash added from financing activities for fiscal year 2010 included borrowings of \$9,000,000 under the new Term Loan with Sovereign/Santander Bank. These proceeds were used to repay indebtedness to Susquehanna Bank of \$5,415,300; Tompkins Trust of \$985,015 and RMD Instruments LLC of \$2,000,000. An additional \$4,000,000 was borrowed under the Acquisition Line of Credit to fund the acquisition of Hilger Crystals. Cash was used to make periodic payments against long term debt of \$2,058,892 both before and after the debt refinancing. Cash was received from the issuance of common stock in the amount of \$271,255 and preferred stock dividends of \$445,183 were paid in cash.

Management believes that its current cash and cash equivalent balances, along with the net cash generated by operations and credit lines, are sufficient to meet its anticipated cash needs for working capital for at least the next 12 months. As of September 30, 2011, the Company had cash of \$4,479,840 and available bank line of credit borrowings of \$4 million, made up of \$3 million available under a working capital line of credit and an additional \$1 million remaining available under an acquisition line of credit. From July 1, 2010 until September 30, 2012, the former owners of RMD Instruments, LLC may tender up to 1,000,000 shares of Dynasil common stock at a repurchase price of \$2.00 per share which could require the Company to make a cash payment of up to \$2.0 million (see Note 9 to the financial statements contained in this report).

In addition, there are currently plans for capital expenditure of \$2,935,000 in the next twelve months. This

includes investment in the Company's dual mode nuclear detector initiative for Homeland Security applications which would be used to locate nuclear bombs or nuclear material at ports and borders. Also included are capital expenditures necessary to implement expected new business initiatives and to expand research capabilities for the contract research segment. Any other major business expansions or acquisitions will likely require the Company to seek additional debt and/or equity financing.

The current \$3 million working capital line of credit with Sovereign/Santander Bank is scheduled to terminate on July 7, 2012. There are no borrowings under this line of credit and management is in discussions with Sovereign/Santander Bank to extend the termination date. However, there can be no assurance that we will be able to extend the termination on favorable terms, or at all.

On April 1, 2011, the Company amended its Loan and Security Agreement dated July 7, 2010 with Sovereign/Santander Bank by executing the Amendment No. 1 to Loan and Security Agreement ("Amendment"). The amendment addresses changes to its covenant calculations. This amendment provides the Company with greater flexibility to invest in strategic growth initiatives, which may require capital expenditures or acquisition-related costs. The specific changes from the amendment were as follows: (1) The definition of "Consolidated EBITDA" was amended to include the aggregate reasonable transaction costs and expense incurred in connection with the consummation of any Permitted Acquisition as an add back. (2) Unfunded Capital Expenditures shall not exceed \$2.0 million in fiscal year 2011 and shall not exceed \$1.7 million in any subsequent fiscal year. (3) The Company shall maintain minimum cash balances with Sovereign/Santander Bank of not less than \$1.0 million. (4) The definition of Consolidated Fixed Charges was amended to exclude Unfunded Capital Expenditures. The definition now reads: "Consolidated Fixed Charges" shall mean with respect to Borrower and its Subsidiaries on a consolidated basis, without duplication, for any fiscal measurement period, the sum of (a) the cash Interest Expense for such period, plus (b) the aggregate principal amount of scheduled payments on any Indebtedness of Borrower or any Subsidiary (including without limitation all Capital Lease Obligations and the Loans) made during such period. All other terms and conditions of the Loan and Security Agreement remained unchanged.

The Sovereign/Santander Bank Loan Agreement also contains other terms, conditions and provisions that are customary for commercial lending transactions of this sort. The Bank Loan Agreement requires Dynasil to maintain compliance at all times and report at the end of each fiscal quarter a Consolidated Maximum Leverage Ratio (Total Funded Debt to EBITDA, as defined in the Bank Loan Agreement) not to exceed 3 to 1 and a Fixed Charge Coverage Ratio of at least 1.2 to 1. The Bank Loan Agreement also provides for events of default customary for credit facilities of this type, including, but not limited to, non-payment, breach of covenants, insolvency and defaults on other debt.

The Company was in compliance with all covenants under the Sovereign/Santander Bank Loan Agreement at September 30, 2011. The Consolidated Maximum Leverage Ratio was 2.64 and the Fixed Charge Coverage Ratio was 1.38. We believe that the Company will remain in compliance and maintain access to the Bank lines of credit. However, this belief is based upon many assumptions including the general business climate. A reoccurring worldwide economic slow-down could significantly impact the Company's revenues and profits so that a returning recession could cause a cash shortage.

#### "Off Balance Sheet" Arrangements

The Company has no "Off Balance Sheet" arrangements.

#### RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1, "Summary of Significant Accounting Policies" in the Notes to Consolidated Financial Statements for a full description of recent accounting pronouncements, including the respective dates of adoption or expected adoption and effects on our consolidated financial position, results of operations and cash flows.

#### **CRITICAL ACCOUNTING POLICIES**

Our discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America and pursuant to the rules and regulations of the SEC. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial

statements and the reported amounts of revenues and expenses during the reporting period. We have identified the following as the items that require the most significant judgment and often involve complex estimation: revenue recognition, valuation of long-lived assets, intangible assets and goodwill, estimating allowances for doubtful accounts receivable, stock-based compensation and accounting for income taxes.

#### **Revenue Recognition**

Revenue from sales of products is recognized at the time title and the risks and rewards of ownership pass. Revenue from research and development activities is derived generally from the following types of contracts: reimbursement of costs plus fees, fixed price or time and material type contracts. Revenue is recognized when the products are shipped per customers' instructions, the contract has been executed, the contract or sales price is fixed or determinable, delivery of services or products has occurred and the Company's ability to collect the contract price is considered reasonably assured.

Government funded services revenue from cost plus contracts are recognized as costs are incurred on the basis of direct costs plus allowable indirect costs and an allocable portion of the contracts' fixed fees. Revenues from fixed-type contracts are recognized under the percentage of completion method with estimated costs and profits included in contract revenue as work is performed. Revenues from time and materials contracts are recognized as costs are incurred at amounts represented by agreed billing amounts. Recognition of losses on projects is taken as soon as the loss is reasonably determinable. The Company has no current accrual provision for potential losses on existing research projects based on Management expectations as well as historical experience.

The majority of the Company's contract research revenue is derived from the United States government and government related contracts. Such contracts have certain risks which include dependence on future appropriations and administrative allotment of funds and changes in government policies. Costs incurred under United States government contracts are subject to audit. The Company believes that the results of such audits will not have a material adverse effect on its financial position or its results of operations.

#### Goodwill

Goodwill and intangible assets which have indefinite lives are subject to annual impairment tests. Goodwill is tested by reviewing the carrying value compared to the fair value at the reporting unit level. Fair value for the reporting unit is derived using the income approach. Under the income approach, fair value is calculated based on the present value of estimated future cash flows. Assumptions by management are necessary to evaluate the impact of operating and economic changes and to estimate future cash flows. Management's evaluation includes assumptions on future growth rates and cost of capital that are consistent with internal projections and operating plans.

The Company generally performs its annual impairment testing of goodwill during the fourth quarter of its fiscal year, or more frequently if events or changes in circumstances indicate that the assets might be impaired. The Company tests impairment at the reporting unit level using the two-step process. The Company's primary reporting units tested for impairment are RMD Research, which comprises our Contract Research segment, RMD Instruments (also known as Dynasil Products), which is a component of the products and Technology segment, and Hilger Crystals, also a component of Products and Technology.

Step one of our impairment testing compares the carrying value of a reporting unit to its fair value. The carrying value represents the net book value of the net assets of the reporting unit or simply the equity of the reporting unit if the reporting unit is the entire entity. If the fair value of the reporting unit is greater than its carrying value, no impairment has been incurred and no further testing or analysis is necessary. The Company estimates fair value using a discounted cash flow methodology which calculates fair value based on the present value of estimated future cash flows. Estimating future cash flows requires significant judgment and includes making assumptions about projected growth rates, industry-specific factors, working capital requirements, weighted average cost of capital, and current and anticipated operating conditions. Assumptions by management are necessary to evaluate the impact of operating and economic changes. The Company's evaluation includes assumptions on future growth rates and cost of capital that are consistent with internal projections and operating plans. The use of different assumptions or estimates for future cash flows could produce different results. The Company regularly assesses the estimates based on the actual performance of each reporting unit.

If the carrying value of a reporting unit is greater than its fair value, step two of the impairment testing process is performed to determine the amount of impairment to be recognized. Step two requires the Company to

estimate an implied fair value of the reporting unit's goodwill by allocating the fair value of the reporting unit to all of the assets and liabilities other than goodwill. An impairment then exists if the carrying value of the goodwill is greater than the goodwill's implied fair value. With respect to the Company's annual goodwill impairment testing performed during the fourth quarter of fiscal year 2011, step one of the testing determined the estimated fair values of RMD Research and Hilger Crystals substantially exceeded their carrying values by more than 20%. The estimated fair value of the Dynasil Products (formerly known as RMD Instruments) reporting unit narrowly exceeded its carrying value. Therefore, the Company undertook a step two analysis by performing essentially a new purchase price allocation as of the date of the impairment test. Values were determined of both originally recognized assets and any new assets that may have been unrecognized at the time of the original transaction, but were developed between the acquisition date and the test date. The result was confirmation that the new residual value of goodwill is higher than the carrying value. Accordingly, the Company concluded that no impairment had occurred and no further testing was necessary.

#### Impairment of Long-Lived Assets

The Company's long-lived assets include property, plant and equipment and intangible assets subject to amortization. The Company evaluates long-lived assets for recoverability whenever events or changes in circumstances indicate that an asset may have been impaired. In evaluating an asset for recoverability, the Company estimates the future cash flow expected to result from the use of the asset and eventual disposition. If the expected future undiscounted cash flow is less than the carrying amount of the asset, an impairment loss, equal to the excess of the carrying amount over the fair value of the asset, is recognized. The Company reviewed its long-lived assets and determined there was no impairment charge during the year ended September 30, 2011.

#### Intangible Assets

The Company's intangible assets consist of an acquired customer base of Optometrics, LLC, acquired customer relationships and trade names of RMD Instruments, LLC, acquired backlog and know-how of Radiation Monitoring Devices, Inc., and provisionally patented technologies within Dynasil Biomedical Corp. The Company amortizes its intangible assets with definitive lives over their useful lives, which range from 4 to 15 years, based on the time period the Company expects to receive the economic benefit from these assets. No impairment charge was recorded during the years ended September 30, 2011 and 2010.

#### Convertible Preferred Stock

The Company considers the guidance of EITF 98-5, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios" and EITF 00-27, "Application of Issue No. 98-5 to Certain Convertible Instruments", codified in FASB ASC Topic 470-20 when accounting for the issuance of convertible preferred stock. The Company's convertible preferred stock, when issued, is generally convertible to common stock at or above the then current market price of the Company's common stock and therefore, will contain no beneficial conversion feature.

#### **Allowance for Doubtful Accounts Receivable**

We perform ongoing credit evaluations of our customers and adjust credit limits based upon payment history and the customer's current credit worthiness, as determined by our review of their current credit information. We continuously monitor collections and payments from our customers and maintain a provision for estimated credit losses based upon our historical experience and any specific customer collection issues that we have identified. While such credit losses have historically been minimal, within our expectations and the provisions established, we cannot guarantee that we will continue to experience the same credit loss rates that we have in the past. A significant change in the liquidity or financial position of any of our significant customers could have a material adverse effect on the collectability of our accounts receivable and our future operating results.

#### **Stock-Based Compensation**

We account for stock-based compensation using fair value. Compensation costs are recognized for stock options granted to employees and directors. Options and warrants granted to employees and non-employees are recorded as an expense at the date of grant based on the then estimated fair value of the security in question, determined using the Black-Scholes option pricing model.

#### Income Taxes

As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax provision (benefit) in each of the jurisdictions in which we operate. This process involves estimating our current income tax provision (benefit) together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets. We regularly evaluate our ability to recover the reported amount of our deferred income taxes considering several factors, including our estimate of the likelihood of the Company generating sufficient taxable income in future years during the period over which temporary differences reverse. The Company believes that these carryforwards will be realized and adjusts the valuation allowance accordingly.

#### **Forward-Looking Statements**

The statements contained in this Annual Report on Form 10-K which are not historical facts, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements regarding future events and our future results are based on current expectations, estimates, forecasts, and projections and the beliefs and assumptions of our management, including, without limitation, our expectations regarding results of operations, the commercialization of our products including our dual mode detectors, our development of new technologies including at Dynasil Biomedical, the adequacy of our current financing sources, our capital expenditures and the strength of our intellectual property portfolio. These forward-looking statements may be identified by the use of words such as "may," "could," "expect," "estimate," "anticipate," "continue" or similar terms, though not all forward-looking statements contain such words. The actual results of the future events described in such forward-looking statements could differ materially from those stated in such forward-looking statements due to a number of important factors. These factors that could cause actual results to differ from those anticipated or predicted include, without limitation, our ability to develop and commercialize our products, the size and growth of the potential markets for our products and our ability to serve those markets, the rate and degree of market acceptance of any of our products, general economic conditions, costs and availability of raw materials and management information systems, our ability to obtain and maintain intellectual property protection for our products, competition, the loss of key management and technical personnel, litigation, the effect of governmental regulatory developments, the availability of financing sources, our ability to identify and execute on acquisition opportunities and integrate such acquisitions into our business, and seasonality, as well as the uncertainties set forth in this Annual Report on Form 10-K and from time to time in the Company's other filings with the Securities and Exchange Commission. The Company disclaims any intention or obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

#### ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders Dynasil Corporation of America and Subsidiaries Watertown, Massachusetts

We have audited the accompanying consolidated balance sheets of **DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES** (the "Company") as of September 30, 2011 and 2010, and the related consolidated statements of operations and comprehensive income, changes in stockholders' equity, and cash flows for the years then ended. **DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES'** management is responsible for these financial statements. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of **DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES** as of September 30, 2011 and 2010 and the consolidated results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

HAEFELE, FLANAGAN & CO., p.c.

Moorestown, New Jersey December 29, 2011

# DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS SEPTEMBER 30, 2011 and 2010 ASSETS

	2011	2010
Current assets		
Cash and cash equivalents	\$4,479,840	\$4,111,966
Accounts receivable, net of allowance for doubtful accounts of \$182,634		
and \$132,584 and sales returns allowance of \$18,356 and \$24,168		
for September 30, 2011 and September 30, 2010, respectively.	5,837,139	6,360,583
Inventories	3,250,539	3,097,219
Costs in excess of billings	408,240	135,157
Deferred tax asset	1,119,800	1,196,735
Prepaid income taxes	341,825	166,231
Prepaid expenses and other current assets	453,738	453,418
Total current assets	15,891,121	15,521,309
Property, Plant and Equipment, net	4,860,328	3,953,319
Other Assets		
Intangibles, net	6,374,329	6,671,149
Goodwill	13,330,182	13,775,087
Deferred tax asset - non current	694,800	-0-
Deferred financing costs, net	150,656	190,568
Total other assets	20,549,967	20,636,804
Total Assets	\$41,301,416	\$40,111,432
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Current portion of long-term debt	\$1,859,728	\$1,870,779
Accounts payable	2,088,395	1,482,250
Accrued expenses and other liabilities	2,322,459	2,177,743
Contingent consideration	183,713	-0-
Dividends payable	-0-	131,400
Total current liabilities	6,454,295	5,662,172
Long-term Liabilities		
Long-term debt, net	8,985,442	10,833,334
Deferred tax liability	1,619,637	873,300
Contingent consideration	-0-	750,000
Total long-term liabilities	10,605,079	12,456,634

### DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS SEPTEMBER 30, 2011 and 2010 (Continued)

#### LIABILITIES AND STOCKHOLDERS' EQUITY (Continued)

	2011	2010
Temporary Equity		
Redeemable common stock, at redemption value of \$2 per share or		
\$2,000,000; put option on 1,000,000 shares issued and outstanding	\$2,000,000	\$2,000,000
at September 30, 2011 and September 30, 2010, respectively.	\$2,000,000	\$2,000,000
Stockholders' Equity		
Common Stock, \$0.0005 par value, 40,000,000 shares authorized,		
15,393,053 and 12,482,356 shares issued, 14,582,893 and		
and 11,672,196 shares outstanding at September 30, 2011 and		
September 30, 2010, respectively.	7,696	6,241
Preferred Stock, \$.001 par value, 15,000,000 shares authorized, 0 and		
5,256,000 shares issued and outstanding at September 30, 2011		
and September 30, 2010, respectively, 10% cumulative, convertible.	-0-	5,256
Additional paid in capital	17,593,140	15,186,029
Deferred compensation	(1,696,385)	(160,088)
Accumulated other comprehensive income	297,566	150,162
Retained earnings	7,026,367	5,791,368
	23,228,384	20,978,968
Less 810,160 shares of treasury stock - at cost	(986,342)	(986,342)
Total stockholders' equity	22,242,042	19,992,626
		•
Total Liabilities and Stockholders' Equity	<u>\$41,301,416</u>	\$40,111,432

# DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME FOR THE YEARS ENDED SEPTEMBER 30, 2011 and 2010

	2011	2010
Net revenue	\$46,951,666	\$42,969,762
Cost of revenue	27,683,729	25,205,960
Gross profit	19,267,937	17,763,802
Selling, general and administrative expenses	17,021,191	12,971,640
Income from operations	2,246,746	4,792,162
Interest expense, net	601,903	628,120
Income before income taxes	1,644,843	4,164,042
Income taxes	293,198	929,661
Net income	<u>\$1,351,645</u>	\$3,234,381
Net Income Other comprehensive income: Foreign currency translation, net of \$83,318	\$1,351,645	\$3,234,381
and \$77,400 income taxes in 2011 and 2010	147,404	150,162
Total comprehensive income	\$1,499,049	\$3,384,543
Net income	\$1,351,645	\$3,234,381
Dividends on preferred stock	116,646	537,433
Net income applicable to common stockholders Dividend add back due to preferred stock	1,234,999	2,696,948
conversion	-0-	537,433
Net income for diluted income per common share	\$1,234,999	\$3,234,381
Basic net income per common share	\$0.08	\$0.22
Diluted net income per common share	\$0.08	\$0.22
Weighted average shares outstanding		
Basic	14,932,226	12,404,701
Diluted	15,127,004	14,937,575

# DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY FOR THE YEARS ENDED SEPTEMBER 30, 2011 and 2010

	Common	Common	Preferred	Preferred	Additional Paid-in	Deferred Stock	Retained	Accumulated Other Comprehensive	Treasu	ıry Stock	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Compensation	Earnings	Income	Shares	Amount	Equity
Balance, September 30, 2009 issuance of shares of common stock	11,250,257	\$5,625	5,966,000	\$5,966	\$14,364,888	\$0	\$3,094,420	\$0	810,160		\$16,484,557
under employee stock purchase plan Issuance of shares of common stock in	20,546	10	-0-	-0-	43,818	-0-	-0-	-0-	-0-	-0-	43,828
lieu of compensation to directors	81,179	41	-0-	-0-	221,602	(102,314)	-0-	-0-	-0-	-0-	119,329
Issuance of shares of common stock under stock option plan	121,459	61	-0-	-0-	226,469	-0-	-0-	-0-	-0-	-0-	226,530
Compensation costs recognized in connection with employee bonuses	6,500	3	-0-	-0-	18,254	-0-	-0-	-0-	-0-	-0-	18,257
Compensation costs recognized in connection with employment contract	7,500	4	-0-	-0-	22,871	(22,875)	-0-	-0-	-0-	-0-	-0-
Compensation costs recognized in connection with stock options	-0-	-0-	-0-	-0-	166,913	(34,899)	-0-	-0-	-0-	-0-	132,014
Issuance of shares of common stock in lieu of advisor fees	4,484	2	-0-	-0-	10,999	-0-	-0-	-0-	-0-	-0-	11,001
Issuance of shares of common stock for conversion of Series B preferred stock	946,431	473	(710,000)	(710)	237	-0-	-0-	-0-	-0-	-0-	-0-
Foreign currency translation adjustment	-0-	-0-	-0-	-0-	-0-	-0-	-0-	150,162	-0-	-0-	150,162
Issuance of shares of common stock in lieu of Series C preferred stock dividends	44,000	22	-0-	-0-	109,978	-0-	-0-	-0-	-0-	-0-	110,000
Preferred stock dividends	-0-	-0-	-0-	-0-	-0-	-0-	(537,433)	-0-	-0-	-0-	(537,433)
Net income	-0-	-0-	-0-	-0-	-0-	-0-	3,234,381	-0-	-0-	-0-	3,234,381
Balance, September 30, 2010	12,482,356	\$6,241	5,256,000		\$15,186,029		\$ 5,791,368	\$150,162	810,160	(\$986,342)	
Issuance of shares of common stock			4,244,44	<del></del>	V.011001020	(4.00,000)	<del>* 0,701,000</del>	\$150,102	010,100	(\$500,542)	Ψ13,332,020
under employee stock purchase plan	28,758	15	-0-	-0-	95,275	-0-	-0-	-0-	-0-	-0-	95,290
Issuance of shares of common stock in lieu of compensation to directors	48,167	24	~ <b>0-</b>	-0-	228,795	(98,380)	-0-	-0-	-0-	-0-	130,439
Issuance of shares of common stock in lieu of compensation to directors	-0-	-0-	-0-	-0-	61,756	162,843	-0-	-0-	-0-	-0-	224,599
Issuance of shares of common stock under stock option plan	20,000	10	-0-	-0-	39,990	-0-	-0-	-0-	-0-	-0-	40,000
Compensation costs recognized in		_	_								·
connection with employee bonuses Compensation costs recognized in	6,441	3	-0-	-0-	27,496	-0-	-0-	-0-	-0-	-0-	27,499
connection with employment contract Compensation costs recognized in	423,000	211	-0-	-0-	1,701,049	(1,600,760)	-0-	-0-	-0-	-0-	100,500
connection with stock options Issuance of shares of common stock for	-0-	-0-	-0-	-0-	80,405	-0-	<b>-</b> 0-	-0-	<b>-</b> 0-	-0-	80,405
conversion of Series C preferred stock	2,102,400	1,051	(5,256,000)	(5,256)	4,205	-0-	-0-	-0-	-0-	-0-	-0-
Net exercise of options by non-director	15,973	8	-0-	-0-	(8)	-0-	-0-	-0-	-0-	-0-	-0-
Net exercise of options by director Foreign currency translation adjustment	198,650	99	-0-	-0-	(88)	-0-	-0-	-0-	-0-	-0-	11
net of income taxes Issuance of shares of common stock in	-0-	-0-	-0-	-0-	-0-	-0-	-0-	147,404	-0-	-0-	147,404
lieu of Series C preferred stock dividends	67,308	34	-0-	-0-	168,236	-0-	-0-	-0-	-0-	-0-	168,270
Preferred stock dividends	-0-	-0-	-0-	-0-	-0-	-0-	(116,646)	-0-	-0-	-0-	(116,646)
Net income	-0-	-0-	-0-	-0-	-0-	-0-	1,351,645	-0-	-0-	-0-	1,351,645
Balance, September 30, 2011	15,393,053	\$7,696	0		\$17,593,140	(\$1,696,385)		\$297,566	810,160		\$22,242,042

### DYNASIL CORPORATION OF AMERICA AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED SEPTEMBER 30, 2011 and 2010

Cash flows from operating activities:         \$1,351,645         \$3,234,381           Adjustments to reconcile net income to net cash provided by operating activities         563,443         329,686           Stock compensation expense         563,443         329,686           Contingent consideration adjustment         (95,887)         -0-           Provision for doubtful accounts and sales returns         26,110         1,886           Deperciation and amortization         1,272,985         1,040,132           Deferred income taxes         128,471         (294,535)           Net decrease in billings in excess of costs         (273,083)         (195,605)           (Increase) decrease in:         497,337         (1,689,793)           Inventories         (153,320)         198,241           Prepaid income taxes         (175,594)         (295,882)           Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         3,892,646         3,109,026           Accounts payable and accrued expenses         750,859         845,151           Net cash provided by operating activities         3,892,646         3,109,026           Cash flows from investing activities         (1,543,262)         (363,406)           Acquisition costs         (300,000) </th <th></th> <th>2011</th> <th>2010</th>		2011	2010
Adjustments to reconcile net income to net cash provided by operating activities  Stock compensation expense Contingent consideration adjustment Provision for doubtful accounts and sales returns Depreciation and amortization Depreciation and amortization Deferred income taxes Net decrease in billings in excess of costs (Increase) decrease in: Accounts receivable Accounts receivable Prepaid income taxes Prepaid income taxes Prepaid income taxes Prepaid expenses and other current assets Increase (decrease) in: Accounts payable and accrued expenses Accounts payable and accrued expenses Retrains of property, plant and equipment Accounts payable and accrued equipment Acquisition costs Acquisition costs Repayment of long term debt Proceeds from debt refinancing Proceeds from long term debt Proceeds from long term debt Deferred financing activities Preferred stock dividends paid Net cash used in financing activities Actoush used in financing activities Preferred stock dividends paid Net cash used in financing activities Actoush used in financing activities Actoush used in financing activities Actoush flows from financing activities Actoush used in financing activities Activity Activ	Cash flows from operating activities:		
Stock compensation expense   563,443   329,686   Contingent consideration adjustment   (95,887)   -0- Provision for doubtful accounts and sales returns   26,110   1,886   Depreciation and amortization   1,272,985   1,040,132   Deferred income taxes   128,471   (294,535)   Net decrease in billings in excess of costs   (273,083)   (195,605)   (Increase) decrease in:   Accounts receivable   497,337   (1,689,793)   Inventories   (153,320)   198,241   Prepaid income taxes   (175,594)   (295,882)   Prepaid expenses and other current assets   (320)   (64,636)   Increase (decrease) in:   Accounts payable and accrued expenses   750,859   845,151   Net cash provided by operating activities   3,892,646   3,109,026   (363,406)   Acquisition costs   (300,000)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)   (4,002,946)		\$1,351,645	\$3,234,381
Stock compensation expense         563,443         329,686           Contingent consideration adjustment         (95,887)         -0-           Provision for doubtful accounts and sales returns         26,110         1,886           Depreciation and amortization         1,272,985         1,040,132           Deferred income taxes         128,471         (294,535)           Net decrease in billings in excess of costs         (273,083)         (195,605)           (Increase) decrease in:         497,337         (1,689,793)           Accounts receivable         497,337         (1,689,793)           Inventories         (153,320)         198,241           Prepaid income taxes         (175,594)         (295,882)           Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         3,892,646         3,109,026           Accounts payable and accrued expenses         750,859         845,151           Net cash provided by operating activities         3,892,646         3,109,026           Cash flows from investing activities:         1,543,262         (363,406)           Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         135,302         271,255			
Contingent consideration adjustment Provision for doubtful accounts and sales returns         26,110         1,886           Depreciation and amortization         1,272,985         1,040,132           Deferred income taxes         128,471         (294,535)           Net decrease in billings in excess of costs         (273,083)         (195,605)           (Increase) decrease in:         497,337         (1,689,793)           Accounts receivable         497,337         (1,689,793)           Inventories         (153,320)         198,241           Prepaid income taxes         (175,594)         (295,882)           Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         Accounts payable and accrued expenses         750,859         845,151           Net cash provided by operating activities         3,892,646         3,109,026           Cash flows from investing activities:         (1,543,262)         (363,406)           Net cash used in investing activities         (1,543,262)         (363,406)           Net cash used in investing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         135,302         271,255 <t< td=""><td></td><td></td><td></td></t<>			
Provision for doubtful accounts and sales returns         26,110         1,886           Depreciation and amortization         1,272,985         1,040,132           Deferred income taxes         128,471         (294,535)           Net decrease in billings in excess of costs         (273,083)         (195,605)           (Increase) decrease in:         497,337         (1,689,793)           Accounts receivable         497,337         (1,689,793)           Inventories         (153,320)         198,241           Prepaid income taxes         (175,594)         (295,882)           Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         Accounts payable and accrued expenses         750,859         845,151           Net cash provided by operating activities:         3,892,646         3,109,026           Cash flows from investing activities:         (1,543,262)         (363,406)           Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from long term debt         -0<		• .	329,686
Depreciation and amortization         1,272,985         1,040,132           Deferred income taxes         128,471         (294,535)           Net decrease in billings in excess of costs         (273,083)         (195,605)           (Increase) decrease in:         497,337         (1,689,793)           Accounts receivable         497,337         (1,689,793)           Inventories         (153,320)         198,241           Prepaid income taxes         (175,594)         (295,882)           Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         3,892,646         3,109,026           Accounts payable and accrued expenses         750,859         845,151           Net cash provided by operating activities:         3,892,646         3,109,026           Cash flows from investing activities:         (300,000)         (4,002,946)           Net cash used in investing activities         (1,543,262)         (363,406)           Net cash used in investing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         (1,858,943)         (2,058,892)           Proceeds from long term debt         (1,858,943)         <	Contingent consideration adjustment	• • •	_
Deferred income taxes         128,471         (294,535)           Net decrease in billings in excess of costs         (273,083)         (195,605)           (Increase) decrease in:         (153,320)         198,241           Accounts receivable         497,337         (1,689,793)           Inventories         (153,320)         198,241           Prepaid income taxes         (175,594)         (295,882)           Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         3,892,646         3,109,026           Accounts payable and accrued expenses         750,859         845,151           Net cash provided by operating activities         3,892,646         3,109,026           Cash flows from investing activities:         1,543,262         (363,406)           Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         135,302         271,255           Repayment of long term debt         (1,843,262)         (4,366,352)           Cash flows from financing activities         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from long term debt         -0         4,000,000           Deferred	Provision for doubtful accounts and sales returns	26,110	1,886
Net decrease in billings in excess of costs (273,083) (195,605) (Increase) decrease in:   Accounts receivable	Depreciation and amortization	1,272,985	1,040,132
(Increase) decrease in:         497,337         (1,689,793)           Accounts receivable         497,337         (1,689,793)           Inventories         (153,320)         198,241           Prepaid income taxes         (175,594)         (295,882)           Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         750,859         845,151           Net cash provided by operating activities         3,892,646         3,109,026           Cash flows from investing activities:         9urchases of property, plant and equipment         (1,543,262)         (363,406)           Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         (300,000)         (4,002,946)           Net cash used in investing activities         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from long term debt         -0-         626,685           Proceeds from long term debt         -0-         (40,005)           Preferred stock dividends paid         (79,770)         (445,183)           Net cash used in financing activities         (1,803,411)         2,247,810           Effect of exchange rates on cash and cash equivalents <td< td=""><td>Deferred income taxes</td><td>128,471</td><td>(294,535)</td></td<>	Deferred income taxes	128,471	(294,535)
Accounts receivable         497,337         (1,689,793)           Inventories         (153,320)         198,241           Prepaid income taxes         (175,594)         (295,882)           Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         3,892,646         3,109,026           Accounts payable and accrued expenses         750,859         845,151           Net cash provided by operating activities         3,892,646         3,109,026           Cash flows from investing activities:         (1,543,262)         (363,406)           Purchases of property, plant and equipment Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         (300,000)         (4,002,946)           Net cash used in investing activities         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from debt refinancing         0         626,685           Proceeds from long term debt         0         4,000,000           Deferred financing costs incurred         0         (146,055)           Preferred stock dividends paid         (79,770)         (445,183)           Net cash used in financing activities         (1,803,411)         2,24	Net decrease in billings in excess of costs	(273,083)	(195,605)
Inventories	(Increase) decrease in:		
Prepaid income taxes         (175,594)         (295,882)           Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         3,892,646         3,109,026           Net cash provided by operating activities:         3,892,646         3,109,026           Cash flows from investing activities:         1,543,262)         (363,406)           Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         (300,000)         (4,002,946)           Net cash used in investing activities         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from debt refinancing         -0-         626,685           Proceeds from long term debt         -0-         4,000,000           Deferred financing costs incurred         -0-         (146,055)           Preferred stock dividends paid         (79,770)         (445,183)           Net cash used in financing activities         (1,803,411)         2,247,810           Effect of exchange rates on cash and cash equivalents         367,874         1,007,188           Cash and cash equivalents, beginning         4,111,966         3,104,778	Accounts receivable	497,337	(1,689,793)
Prepaid expenses and other current assets         (320)         (64,636)           Increase (decrease) in:         Accounts payable and accrued expenses         750,859         845,151           Net cash provided by operating activities:         3,892,646         3,109,026           Cash flows from investing activities:         (1,543,262)         (363,406)           Purchases of property, plant and equipment Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from debt refinancing         -0-         626,685           Proceeds from long term debt         -0-         4,000,000           Deferred financing costs incurred         -0-         (146,055)           Preferred stock dividends paid         (79,770)         (445,183)           Net cash used in financing activities         (1,803,411)         2,247,810           Effect of exchange rates on cash and cash equivalents         367,874         1,007,188           Cash and cash equivalents, beginning         4,111,966         3,104,778	Inventories	(153,320)	198,241
Increase (decrease) in:   Accounts payable and accrued expenses   750,859   845,151     Net cash provided by operating activities   3,892,646   3,109,026     Cash flows from investing activities:   Purchases of property, plant and equipment   (1,543,262)   (363,406)     Acquisition costs   (300,000)   (4,002,946)     Net cash used in investing activities   (1,843,262)   (4,366,352)     Cash flows from financing activities   135,302   271,255     Repayment of long term debt   (1,858,943)   (2,058,892)     Proceeds from debt refinancing   -0- 626,685     Proceeds from long term debt   -0- 4,000,000     Deferred financing costs incurred   -0- (146,055)     Preferred stock dividends paid   (79,770)   (445,183)     Net cash used in financing activities   (1,803,411)   2,247,810     Effect of exchange rates on cash and cash equivalents   367,874   1,007,188     Cash and cash equivalents, beginning   4,111,966   3,104,778	Prepaid income taxes	(175,594)	(295,882)
Accounts payable and accrued expenses         750,859         845,151           Net cash provided by operating activities         3,892,646         3,109,026           Cash flows from investing activities:         "Cash flows from investing activities."         (1,543,262)         (363,406)           Purchases of property, plant and equipment Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from debt refinancing         -0-         626,685           Proceeds from long term debt         -0-         4,000,000           Deferred financing costs incurred         -0-         (146,055)           Preferred stock dividends paid         (79,770)         (445,183)           Net cash used in financing activities         (1,803,411)         2,247,810           Effect of exchange rates on cash and cash equivalents         367,874         1,007,188           Cash and cash equivalents, beginning         4,111,966         3,104,778	Prepaid expenses and other current assets	(320)	(64,636)
Net cash provided by operating activities         3,892,646         3,109,026           Cash flows from investing activities:	Increase (decrease) in:		
Cash flows from investing activities:       (1,543,262)       (363,406)         Acquisition costs       (300,000)       (4,002,946)         Net cash used in investing activities       (1,843,262)       (4,366,352)         Cash flows from financing activities       135,302       271,255         Repayment of long term debt       (1,858,943)       (2,058,892)         Proceeds from debt refinancing       -0-       626,685         Proceeds from long term debt       -0-       4,000,000         Deferred financing costs incurred       -0-       (146,055)         Preferred stock dividends paid       (79,770)       (445,183)         Net cash used in financing activities       (1,803,411)       2,247,810         Effect of exchange rates on cash and cash equivalents       121,901       16,704         Net increase in cash and cash equivalents       367,874       1,007,188         Cash and cash equivalents, beginning       4,111,966       3,104,778	Accounts payable and accrued expenses	750,859	845,151
Purchases of property, plant and equipment         (1,543,262)         (363,406)           Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from debt refinancing         -0-         626,685           Proceeds from long term debt         -0-         4,000,000           Deferred financing costs incurred         -0-         (146,055)           Preferred stock dividends paid         (79,770)         (445,183)           Net cash used in financing activities         (1,803,411)         2,247,810           Effect of exchange rates on cash and cash equivalents         367,874         1,007,188           Cash and cash equivalents, beginning         4,111,966         3,104,778	Net cash provided by operating activities	3,892,646	3,109,026
Purchases of property, plant and equipment         (1,543,262)         (363,406)           Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from debt refinancing         -0-         626,685           Proceeds from long term debt         -0-         4,000,000           Deferred financing costs incurred         -0-         (146,055)           Preferred stock dividends paid         (79,770)         (445,183)           Net cash used in financing activities         (1,803,411)         2,247,810           Effect of exchange rates on cash and cash equivalents         367,874         1,007,188           Cash and cash equivalents, beginning         4,111,966         3,104,778			
Acquisition costs         (300,000)         (4,002,946)           Net cash used in investing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         135,302         271,255           Issuance of common stock         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from debt refinancing         -0-         626,685           Proceeds from long term debt         -0-         4,000,000           Deferred financing costs incurred         -0-         (146,055)           Preferred stock dividends paid         (79,770)         (445,183)           Net cash used in financing activities         (1,803,411)         2,247,810           Effect of exchange rates on cash and cash equivalents         121,901         16,704           Net increase in cash and cash equivalents         367,874         1,007,188           Cash and cash equivalents, beginning         4,111,966         3,104,778	<u>=</u>		
Net cash used in investing activities         (1,843,262)         (4,366,352)           Cash flows from financing activities         135,302         271,255           Issuance of common stock         135,302         271,255           Repayment of long term debt         (1,858,943)         (2,058,892)           Proceeds from debt refinancing         -0-         626,685           Proceeds from long term debt         -0-         4,000,000           Deferred financing costs incurred         -0-         (146,055)           Preferred stock dividends paid         (79,770)         (445,183)           Net cash used in financing activities         (1,803,411)         2,247,810           Effect of exchange rates on cash and cash equivalents         121,901         16,704           Net increase in cash and cash equivalents         367,874         1,007,188           Cash and cash equivalents, beginning         4,111,966         3,104,778		(1,543,262)	(363,406)
Cash flows from financing activities  Issuance of common stock Repayment of long term debt Proceeds from debt refinancing Proceeds from long term debt Output Deferred financing costs incurred Preferred stock dividends paid Net cash used in financing activities  Effect of exchange rates on cash and cash equivalents  Cash and cash equivalents, beginning  135,302 171,255 (1,858,943) (2,058,892) 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0	•		
Issuance of common stock Repayment of long term debt (1,858,943) (2,058,892) Proceeds from debt refinancing Proceeds from long term debt Proceeds from long term debt Proceeds from long term debt Deferred financing costs incurred Preferred stock dividends paid Net cash used in financing activities  Effect of exchange rates on cash and cash equivalents  121,901 16,704  Net increase in cash and cash equivalents  271,255 (1,858,943) (2,058,892) (2,058,892) (2,058,892) (1,400,000 (146,055) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,4	Net cash used in investing activities	(1,843,262)	(4,366,352)
Issuance of common stock Repayment of long term debt (1,858,943) (2,058,892) Proceeds from debt refinancing Proceeds from long term debt Proceeds from long term debt Proceeds from long term debt Deferred financing costs incurred Preferred stock dividends paid Net cash used in financing activities  Effect of exchange rates on cash and cash equivalents  121,901 16,704  Net increase in cash and cash equivalents  271,255 (1,858,943) (2,058,892) (2,058,892) (2,058,892) (1,400,000 (146,055) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,4	Cash flows from financing activities		
Repayment of long term debt Proceeds from debt refinancing Proceeds from long term debt Proceeds from long term debt Proceeds from long term debt Deferred financing costs incurred Preferred stock dividends paid Net cash used in financing activities  Effect of exchange rates on cash and cash equivalents  Cash and cash equivalents, beginning  (1,858,943) (2,058,892) (2,058,892) (1,400,000 (146,055) (179,770) (146,055) (179,770) (145,183) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,803,411) (1,858,943) (2,058,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892) (1,805,892	· · · · · · · · · · · · · · · · · · ·	135.302	271.255
Proceeds from debt refinancing Proceeds from long term debt Preferred financing costs incurred Preferred stock dividends paid Prefer		•	-
Proceeds from long term debt Deferred financing costs incurred Preferred stock dividends paid (79,770) (445,183)  Net cash used in financing activities (1,803,411) 2,247,810  Effect of exchange rates on cash and cash equivalents 121,901 16,704  Net increase in cash and cash equivalents 367,874 1,007,188  Cash and cash equivalents, beginning 4,111,966 3,104,778	· · ·	•	
Deferred financing costs incurred Preferred stock dividends paid (79,770) (445,183)  Net cash used in financing activities (1,803,411) 2,247,810  Effect of exchange rates on cash and cash equivalents 121,901 16,704  Net increase in cash and cash equivalents 367,874 1,007,188  Cash and cash equivalents, beginning 4,111,966 3,104,778		_	
Preferred stock dividends paid (79,770) (445,183)  Net cash used in financing activities (1,803,411) 2,247,810  Effect of exchange rates on cash and cash equivalents 121,901 16,704  Net increase in cash and cash equivalents 367,874 1,007,188  Cash and cash equivalents, beginning 4,111,966 3,104,778			
Net cash used in financing activities (1,803,411) 2,247,810  Effect of exchange rates on cash and cash equivalents 121,901 16,704  Net increase in cash and cash equivalents 367,874 1,007,188  Cash and cash equivalents, beginning 4,111,966 3,104,778			•
Net increase in cash and cash equivalents  Cash and cash equivalents, beginning  4,111,966  3,104,778	·		
Net increase in cash and cash equivalents  Cash and cash equivalents, beginning  4,111,966  3,104,778	Effect of a change of	101 001	40.704
Cash and cash equivalents, beginning4,111,9663,104,778	Ellect of exchange rates on cash and cash equivalents	121,901	16,704
	Net increase in cash and cash equivalents	367,874	1,007,188
	Cash and cash equivalents, beginning	4,111,966	3,104,778
	Cash and cash equivalents, ending	\$4,479,840	

#### Note 1 - Summary of Significant Accounting Policies

#### **Nature of Operations**

The Company is primarily engaged in the development, marketing and manufacturing of detection, sensing and analysis technology, precision instruments and optical components as well as contract research. The Company's products and services are used in a broad range of application markets including the homeland security, industrial and medical markets sectors. The products and services are sold throughout the United States and internationally.

#### **Principles of Consolidation**

The accompanying consolidated financial statements include the accounts of Dynasil Corporation of America ("Dynasil" or the "Company") and its wholly-owned subsidiaries: Optometrics Corporation ("Optometrics"), Dynasil International Incorporated, Hibshman Corporation, Evaporated Metal Films Corp ("EMF"), RMD Instruments Corp ("Dynasil Products"), Radiation Monitoring Devices, Inc ("RMD Research") Hilger Crystals, Ltd ("Hilger") and Dynasil Biomedical Corp ("Dynasil Biomedical"). All significant intercompany transactions and balances have been eliminated.

#### **Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts of assets and liabilities and the disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### **Revenue Recognition**

Revenue from sales of products is recognized at the time title and the risks and rewards of ownership pass. Revenue from research and development activities is derived generally from the following types of contracts: reimbursement of costs plus fees, fixed price or time and material type contracts. Revenue is recognized when the products are shipped per customers' instructions, the contract has been executed, the contract or sales price is fixed or determinable, delivery of services or products has occurred and the Company's ability to collect the contract price is considered reasonably assured.

Government funded services revenues from cost plus contracts are recognized as costs are incurred on the basis of direct costs plus allowable indirect costs and an allocable portion of the contracts' fixed fees. Revenue from fixed-type contracts is recognized under the percentage of completion method with estimated costs and profits included in contract revenue as work is performed. Revenues from time and materials contracts are recognized as costs are incurred at amounts represented by agreed billing amounts. Recognition of losses on projects is taken as soon as the loss is reasonably determinable. The Company has no current accrual provision for potential losses on existing research projects based on Management expectations as well as historical experience.

The majority of the Company's contract research revenue is derived from the United States government and government related contracts. Such contracts have certain risks which include dependence on future appropriations and administrative allotment of funds and changes in government policies. Costs incurred under United States government contracts are subject to audit. The Company believes that the results of such audits will not have a material adverse effect on its financial position or its results of operations.

#### **Allowance for Doubtful Accounts Receivable**

The Company performs ongoing credit evaluations of its customers and adjusts credit limits based upon payment history and the customer's current credit worthiness, as determined by a review of their current credit information. The Company continuously monitors collections and payments from our customers and maintains a provision for estimated credit losses based upon historical experience and any specific customer

#### Note 1 – Summary of Significant Accounting Policies (continued)

#### Allowance for Doubtful Accounts Receivable (continued)

collection issues that have been identified. While such credit losses have historically been minimal, within expectations and the provisions established, the Company cannot guarantee that it will continue to experience the same credit loss rates as in the past. A significant change in the liquidity or financial position of any significant customers could have a material adverse effect on the collectability of accounts receivable and future operating results.

#### **Shipping and Handling Costs**

The Company includes shipping and handling fees billed to customers in sales and shipping and handling costs incurred in cost of revenues.

#### Research and Development

The Company expenses research and development costs as incurred. Research and development costs include salaries, employee benefit costs, department supplies, direct project costs and other related costs. Research and development costs incurred during the years ended September 30, 2011 and 2010 were \$23,985,088 and \$20,600,349, respectively. Substantially all of these research and development costs relate to research contracts performed by RMD Research, and are in turn billed to the contracting party.

#### **Costs in Excess of Billings**

Costs in excess of billings relates to research and development contracts and consists of actual costs incurred plus fees in excess of billings at provisional contract rates.

#### **Convertible Preferred Stock**

The Company considers the guidance of EITF 98-5, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios" and EITF 00-27, "Application of Issue No. 98-5 to Certain Convertible Instruments", codified in FASB ASC Topic 470-20 when accounting for the issuance of convertible preferred stock. The Company's convertible preferred stock, when issued, are generally convertible to common stock at or above the then current market price of the Company's common stock and therefore, contain no beneficial conversion feature.

#### Patent Costs (principally Legal Fees)

Costs incurred in filing, prosecuting and maintaining patents are expensed as incurred. Such costs aggregated approximately \$315,549 and \$367,657 for the years ended September 30, 2011 and 2010, respectively.

#### Inventories

Inventories are stated at the lower of average cost or market. Cost is determined using the first-in, first-out (FIFO) method. Inventories consist primarily of raw materials, work-in-process and finished goods. The Company evaluates inventory levels and expected usage on a periodic basis and records adjustments for impairments as required.

#### Property, Plant and Equipment and Depreciation and Amortization

Property, plant and equipment are recorded at cost or at fair market value for acquired assets. Depreciation is provided using the straight-line method for financial reporting purposes and accelerated methods for income tax purposes over the estimated useful lives of the respective assets

The estimated useful lives of assets for financial reporting purposes are as follows: building and

#### Note 1 - Summary of Significant Accounting Policies (continued)

#### Property, Plant and Equipment and Depreciation and Amortization (continued)

improvements, 8 to 25 years; machinery and equipment, 5 to 10 years; office furniture and fixtures, 5 to 10 years; transportation equipment, 5 years. Maintenance and repairs are charged to expense as incurred; major renewals and betterments are capitalized. When items of property, plant and equipment are sold or retired, the related costs and accumulated depreciation are removed from the accounts and any gain or loss is included in income.

#### Valuation of Long-Lived Assets, Intangible Assets and Goodwill

#### Goodwill

Goodwill and intangible assets which have indefinite lives are subject to annual impairment tests. Goodwill is tested by reviewing the carrying value compared to the fair value at the reporting unit level. Fair value for the reporting unit is derived using the income approach. Under the income approach, fair value is calculated based on the present value of estimated future cash flows. Assumptions by management are necessary to evaluate the impact of operating and economic changes and to estimate future cash flows. Management's evaluation includes assumptions on future growth rates and cost of capital that are consistent with internal projections and operating plans.

The Company generally performs its annual impairment testing of goodwill during the fourth quarter of its fiscal year, or more frequently if events or changes in circumstances indicate that the assets might be impaired. The Company tests impairment at the reporting unit level using the two-step process. The Company's primary reporting units tested for impairment are RMD Research, which comprises the Contract Research segment, Dynasil Products (previously known as RMD Instruments), which is a component of the Products and Technology segment, and Hilger Crystals for the first time, also in the Products and Technology segment.

Step one of the impairment testing compares the carrying value of a reporting unit to its fair value. The carrying value represents the net book value of the net assets of the reporting unit or simply the equity of the reporting unit if the reporting unit is the entire entity. If the fair value of the reporting unit is greater than its carrying value, no impairment has been incurred and no further testing or analysis is necessary. The Company estimates fair value using a discounted cash flow methodology which calculates fair value based on the present value of estimated future cash flows. Estimating future cash flows requires significant judgment and includes making assumptions about projected growth rates, industry-specific factors, working capital requirements, weighted average cost of capital, and current and anticipated operating conditions. Assumptions by management are necessary to evaluate the impact of operating and economic changes. The Company's evaluation includes assumptions on future growth rates and cost of capital that are consistent with internal projections and operating plans. The use of different assumptions or estimates for future cash flows could produce different results. The Company regularly assesses the estimates based on the actual performance of each reporting unit.

If the carrying value of a reporting unit is greater than its fair value, step two of the impairment testing process is performed to determine the amount of impairment to be recognized. Step two requires the Company to estimate an implied fair value of the reporting unit's goodwill by allocating the fair value of the reporting unit to all of the assets and liabilities other than goodwill. An impairment then exists if the carrying value of the goodwill is greater than the goodwill's implied fair value. With respect to the Company's annual goodwill impairment testing performed during the fourth quarter of fiscal year 2011, step one of the testing determined the estimated fair values of RMD Research and Hilger Crystals substantially exceeded their carrying values by more than 20%. The estimated fair value of the Dynasil Products reporting unit narrowly exceeded its carrying value. Therefore, the Company undertook a step two analysis by performing essentially a new purchase price allocation as of the date of the impairment test. Values were determined of both originally recognized assets and any new assets that may have been unrecognized at the time of the original transaction, but were developed between the acquisition date and the test date. The result was confirmation that the new residual

#### Note 1 – Summary of Significant Accounting Policies (continued)

#### Goodwill (continued)

value of goodwill is higher than the carrying value. Accordingly, the Company concluded that no impairment had occurred and no further testing was necessary.

#### **Intangible Assets**

The Company's intangible assets consist of an acquired customer base of Optometrics, LLC, acquired customer relationships and trade names of RMD Instruments, LLC, acquired backlog and know how of Radiation Monitoring Devices, Inc. and provisionally patented technologies within Dynasil Biomedical Corp. The Company amortizes its intangible assets with definitive lives over their useful lives, which range from 4 to 15 years, based on the time period the Company expects to receive the economic benefit from these assets. No impairment charge was recorded during the periods ended September 30, 2011 and 2010.

#### Impairment of Long-Lived Assets

The Company's long-lived assets include property, plant and equipment and intangible assets subject to amortization. The Company evaluates long-lived assets for recoverability whenever events or changes in circumstances indicate that an asset may have been impaired. In evaluating an asset for recoverability, the Company estimates the future cash flow expected to result from the use of the asset and eventual disposition. If the expected future undiscounted cash flow is less than the carrying amount of the asset, an impairment loss, equal to the excess of the carrying amount over the fair value of the asset, is recognized. The Company reviewed its long-lived assets and determined there was no impairment charge during the years ended September 30, 2011 and 2010.

#### **Deferred Financing Costs**

Deferred financing costs, net of \$150,656 and \$190,568 at September 30, 2011 and 2010 include accumulated amortization of \$48,898 and \$8,986, respectively. Amortization expense for the years ended September 30, 2011 and 2010 was \$39,912 and \$20,122. Unamortized debt financing costs of \$106,999 were expensed during the year ended September 30, 2010 due to refinancing.

#### **Advertising**

The Company expenses all advertising costs as incurred. Advertising expense for the years ended September 30, 2011 and 2010 was \$246,426 and \$177,891.

#### **Deferred Rent**

Deferred rent consists of the excess of the allocable straight line rent expense to date as compared to the total amount of rent due and payable through such period. Deferred rent is amortized as a reduction to rent expense over the term of the lease. Deferred rent was \$96,840 and \$103,314 as of September 30, 2011 and 2010 and is included in accrued expenses and other liabilities.

#### **Income Taxes**

Dynasil Corporation of America and its wholly-owned subsidiaries file a consolidated federal income tax return.

The Company uses the asset and liability approach to account for deferred income taxes. Under this approach, deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and net operating loss and tax credit carry-forwards. The amount of deferred taxes on these temporary differences is determined using the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, as applicable, based on tax rates, and tax laws, in the respective tax

#### Note 1 – Summary of Significant Accounting Policies (continued)

#### Income Taxes (continued)

jurisdiction then in effect. Valuation allowances are provided if it is more likely than not that some or all of the deferred tax assets will not be realized. The provision for income taxes includes taxes currently payable, if any, plus the net change during the year in deferred tax assets and liabilities recorded by the Company.

The Company applies the authoritative provisions related to accounting for uncertainty in income taxes. As required by these provisions, the Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority. The Company has applied these provisions to all tax positions for which the statute of limitations remained open. There was no impact on the Company's consolidated financial position, results of operations, or cash flows as of September 30, 2011 and 2010. As of September 30, 2011 and 2010, the Company had no unrecognized tax benefits. The Company's practice is to recognize interest and/or penalties related to income tax matters in income tax expense. As of September 30, 2011 and 2010, the Company had no accrued interest or penalties related to income taxes. The Company currently has no federal or state tax examinations in progress.

#### **Earnings Per Common Share**

Basic earnings per common share is computed by dividing the net income applicable to common shares after preferred dividends paid, if applicable, by the weighted average number of common shares outstanding during each period. Diluted earnings per common share adjusts basic earnings per share for the effects of common stock options, common stock warrants, convertible preferred stock and other potential dilutive common shares outstanding during the periods.

For purposes of computing diluted earnings per share, 194,778 and 2,532,874 common share equivalents were assumed to be outstanding for the year ended September 30, 2011 and 2010, respectively, with the large difference being convertible preferred stock. In addition, as of September 30, 2011, common stock options of 703,753, representing common stock equivalents and preferred stock dividends of \$116,646 have been excluded from the calculation of earnings per common share as their effect is anti-dilutive. The Series C Preferred Stock was converted into 2,102,400 common shares on December 21, 2010 thus is not part of the calculations for the year ended September 30, 2011. The computations of the weighted shares outstanding for the years ended September 30 are as follows:

	2011	2010
Weighted average shares outstanding		
Basic	14,932,226	12,404,701
Effect of dilutive securities		
Stock Options	194,778	430,474
Convertible Preferred Stock	0	2,102,400
Dilutive Average Shares Outstanding	15,127,004	14,937,575

#### **Stock Based Compensation**

Stock-based compensation cost is measured using the fair value recognition provisions of the FASB authoritative guidance, which requires the measurement and recognition of compensation expense for all stock-based awards made to employees and directors, including employee stock options, based on estimated fair values.

We elected to use the modified prospective application transition method as provided by the FASB authoritative guidance. In accordance with the modified prospective transition method, compensation cost is recognized in the consolidated financial statements for all awards granted after the date of adoptions.

#### Note 1 - Summary of Significant Accounting Policies (continued)

#### **Foreign Currency Translation**

The operations of Hilger, the Company's foreign subsidiary, use their local currency as its functional currency. Assets and liabilities of the Company's foreign operations, denominated in their local currency, Great Britain Pounds (GBP), are translated at the rate of exchange at the balance sheet date. Revenue and expense accounts are translated at the average exchange rates during the period. Adjustments resulting from translating foreign functional currency financial statements into U.S. dollars are included in the foreign currency translation adjustment, a component of accumulated other comprehensive income in stockholders' equity. Gains and losses generated by transactions denominated in foreign currencies are recorded in the accompanying statement of operations in the period in which they occur.

#### Comprehensive Income

Comprehensive income is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources, including foreign currency translation adjustments. Accumulated comprehensive income at September 30, 2011 and 2010 represents cumulative translation adjustments related to Hilger Crystals, the Company's foreign subsidiary. The Company presents comprehensive income in the consolidated statements of operations and comprehensive income.

#### **Financial Instruments**

The carrying amount reported in the balance sheets for cash and cash equivalents, accounts receivable and accounts payable approximates fair value because of the immediate or short-term maturity of these financial instruments. The carrying amount for long-term debt approximates fair value because the underlying instruments are primarily at current market rates.

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of accounts receivable. In the normal course of business, the Company extends credit to certain customers. Management performs initial and ongoing credit evaluations of their customers and generally does not require collateral.

#### **Concentration of Credit Risk**

The Company maintains allowances for potential credit losses and has not experienced any significant losses related to the collection of its accounts receivable. As of September 30, 2011 and 2010, approximately \$1,762,872 and \$2,166,759 or 24% and 34% of the Company's accounts receivable are due from foreign sales.

The Company maintains cash and cash equivalents at various financial institutions in New Jersey, Massachusetts and New York. Accounts at each institution are insured by the Federal Deposit Insurance Corporation up to \$250,000. At September 30, 2011 and 2010, the Company's uninsured bank balances totaled \$3,308,182 and \$3,163,714. The Company has not experienced any significant losses on its cash and cash equivalents.

#### **Recently Issued Accounting Standards**

In July 2010, the FASB issued Accounting Standards Update No. 2010-20 (ASU 2010-20), *Receivables (Topic 310)* — *Disclosures about the Credit Quality of Financing Receivables and the Allowance for Credit Losses.* ASU 2010-20 requires disclosures about the nature of the credit risk in an entity's financing receivables, how that risk is incorporated into the allowance for credit losses, and the reasons for any changes in the allowance. Disclosure is required to be disaggregated at the level at which an entity calculates its allowance for credit losses. ASU 2010-20 was effective for the Company beginning March 31, 2011, but was extended to September 30, 2011 per ASU 2011-01. The adoption of this accounting standard did not have a material impact on our financial position, results of operations, cash flows and disclosures.

#### Note 1 - Summary of Significant Accounting Policies (continued)

#### Recently Issued Accounting Standards (continued)

In December 2010, the FASB issued Accounting Standards Update No. 2010-28 (ASU 2010-28), Intangibles—Goodwill and Other (Topic 350), When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts. The amendments in this Update modify Step 1 of the goodwill impairment test for reporting units with zero or negative carrying amounts. For those reporting units, an entity is required to perform Step 2 of the goodwill impairment test if it is more likely than not that a goodwill impairment exists. In determining whether it is more likely than not that a goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that an impairment may exist. The qualitative factors are consistent with the existing guidance, which requires that goodwill of a reporting unit be tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. The amendments in this Update are effective for fiscal years, and interim periods within those years, beginning after December 15, 2010. Early adoption is not permitted. ASU 2010-28 is effective for us beginning October 1, 2011 and is not expected to have a material impact on the Company's financial position, results of operations, cash flows and disclosures.

In December 2010, the FASB issued Accounting Standards Update No. 2010-29 (ASU 2010-29), *Business Combinations (Topic 805)* — *Disclosure of Supplementary Pro Forma Information for Business Combinations.* ASU 2010-29 requires a public entity to disclose pro forma information for business combinations that occurred in the current reporting period. The disclosures include pro forma revenue and earnings of the combined business combinations that occurred during the year had been as of the beginning of the annual reporting period. If comparative financial statements are presented, the pro forma revenue and earnings of the combined entity for the comparable prior reporting period should be reported as though the acquisition date for all business combinations that occurred during the current year had been as of the beginning of the comparable prior annual reporting period. The amendments in this update are effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after October 1, 2011 effective for the Company beginning September 30, 2011. The adoption of this accounting standard is not expected to have a material impact on the Company's financial position, results of operations, cash flows and disclosures.

In May 2011, the FASB issued Accounting Standards Update No. 2011-04 (ASU 2011-04), Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs. ASU 2011-04 clarifies some existing concepts, eliminates wording differences between U.S. GAAP and International Financial Reporting Standards ("IFRS"), and in some limited cases, changes some principles to achieve convergence between U.S. GAAP and IFRS. ASU 2011-04 results in a consistent definition of fair value and common requirements for measurement of and disclosure about fair value between U.S. GAAP and IFRS. ASU 2011-04 also expands the disclosures for fair value measurements that are estimated using significant unobservable (Level 3) inputs. ASU 2011-04 is effective for interim and annual periods beginning after December 15, 2011. The adoption of this accounting standard is not expected to have a material impact on the Company's financial position, results of operations, cash flows and disclosures.

In June 2011, the FASB issued Accounting Standards Update No. ASU 2011-05 (ASU 2011-05), *Presentation of Comprehensive Income*, which requires an entity to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income, or in two separate but consecutive statements. ASU 2011-05 eliminates the option to present components of other comprehensive income as part of the statement of stockholders' equity. ASU 2011-05 is effective for fiscal years and interim periods beginning after December 15, 2011. The adoption of this accounting standard is not expected to have a material impact on the Company's financial position, results of operations, cash flows and disclosures.

In September 2011, the FASB issued ASU 2011-08, Intangibles-Goodwill and Other (Topic 350), Testing Goodwill for Impairment ("ASU 2011-08"). ASU 2011-08 simplifies the goodwill impairment guidance, providing entities with a qualitative assessment option when performing their annual impairment test. An entity

#### Note 1 – Summary of Significant Accounting Policies (continued)

#### Recently Issued Accounting Standards (continued)

will have the option to first assess qualitative factors to determine whether performing the current two-step test is necessary. If an entity believes, as a result of its qualitative assessment, that it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, the quantitative impairment test will be required. Otherwise, no further testing is required. ASU 2011-08 is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011, and early adoption is permitted. The Company will adopt ASU 2011-08 in fiscal 2012. The adoption is not expected to materially impact the Company's consolidated results of operations and financial condition.

#### Statement of Cash Flows

For purposes of the statement of cash flows, the Company generally considers all highly liquid investments with original maturities of three months or less to be cash equivalents.

#### Reclassifications

Certain amounts as previously reported have been reclassified to conform to the current year financial statement presentation.

#### Note 2 – Business Acquisitions – Hilger Crystals / Dynasil Biomedical

Hilger Crystals, Ltd.

On July 19, 2010, Dynasil completed the acquisition of 100% of the issued and outstanding common stock of Hilger Crystals Limited ("Hilger") from Newport Corporation ("Newport"). Hilger, located in Margate, Kent, England, is engaged in the manufacture of synthetic crystals, detectors and arrays for infrared spectroscopy and x-ray and gamma ray detection. Hilger will be the manufacturer for the Company's dual mode detector technology.

Pursuant to the Share Purchase Agreement dated July 19, 2010 by and among Dynasil, Newport, Hilger and Newport Spectra-Physics Limited, Dynasil acquired 100% of the issued and outstanding common stock of Hilger for an initial payment of \$4 million in cash and a possible additional payment of up to \$0.75 million after eighteen months based on Hilger's current business revenues for the eighteen months following the acquisition. In addition, the Company made a payment in the amount of \$2,946 associated with a post-closing balance sheet adjustment based on net working capital. There were associated transaction costs of \$183,627 recorded in selling, general and administrative costs for the period ended September 30, 2010.

The acquisition was funded by borrowing \$4 million from Sovereign/Santander Bank under the Acquisition Line of Credit. This borrowing carries the interest rate of one month LIBOR plus 3.5%. There remains \$1 million available under this Acquisition Line of Credit carrying the rate of 0.25% per annum on the unused portion. The transaction costs were funded from the Company's existing cash balances.

The total purchase price of \$4,752,946 has been allocated to the tangible and identifiable intangible assets acquired and liabilities assumed on the basis of their estimated fair values. The results of operations of Hilger have been included in the consolidated financial statements from July 19, 2010, the effective date of the acquisition.

Purchase price:

 Purchase price
 \$4,000,000

 Contingent consideration
 750,000

 Working Capital Adjustment
 2,946

 \$4,752,946

#### Note 2 - Business Acquisitions - Hilger Crystals / Dynasil Biomedical (continued)

The Allocation of the purchase price is summarized below.

Purchase price allocation:

Accounts receivable	\$ 618,938
Inventories	923,944
Prepaid expenses and other current assets	127,831
Property and equipment	1,111,728
Goodwill	2,513,054
Current liabilities assumed	(542,549)
Net fair value of assets acquired	\$4,752,946

The following is the proforma financial information for the year ended September 30, 2010, assuming the transaction had been consummated at the beginning of the year (i.e., October 1, 2009.)

	For the Year ended September 30, 2010 (Unaudited)
Statement of Operations:	<del></del>
Revenue	\$45,087,896
Cost of revenue	26,468,238
Gross profit	18,619,658
Operating Expense	13,885,262
Income from operations	4,734,396
Interest expense, net	(626,246)
Income before taxes	4,108,150
Income taxes	(986,829)
Net Income	\$3,121,321
Earnings per share:	
Basic	\$0.21
Diluted	\$0.21

#### **Dynasil Biomedical**

On April 14, 2011, Dynasil announced the incorporation of Dynasil Biomedical Corp. as a new business unit to pursue opportunities in the medical field. It is located in Rochester, Minnesota and Dr. Daniel Ericson joined Dynasil Biomedical as Scientific Lead with responsibility for research and development. Dynasil Biomedical completed the purchase of Dr. Ericson's rights to six biomedical technologies invented or co-invented by him for a purchase price of \$300,000, together with certain rights to royalty and milestone payments if these technologies are successfully developed. Dr. Ericson previously worked at Mayo Clinic and several of the assigned technologies are jointly owned with that institution. The total purchase price of \$300,000 was initially allocated to goodwill and then allocated to identifiable intangible assets based on their estimated fair values (See Notes 5 and 6). The acquisition was not material; therefore, no proforma disclosures are presented in the consolidated financial statements. The results of Dynasil Biomedical have been included in the consolidated financial statements from April 14, 2011, the effective date of the acquisition.

#### Note 3 - Inventories

Inventories at September 30, 2011 and 2010 consisted of the following:

	2011	2010
Raw Materials	\$2,149,401	\$2,386,255
Work-in-Process	757,709	416,525
Finished Goods	343,429	<u>294,439</u>
	\$3,250,539	\$3,097,219

#### Note 4 - Property, Plant and Equipment

Property, plant and equipment at September 30, 2011 and 2010 consist of the following:

	2011	2010
Land	\$182,812	\$182,812
Building and improvements	2,843,843	2,387,256
Machinery and equipment	6,892,690	5,982,594
Office furniture and fixtures	264,689	325,155
Transportation equipment	53,419	60,828
	10,237,453	8,938,645
Less accumulated depreciation	(5,377,125)	(4,985,426)
	\$4,860,328	\$3,953,219

Depreciation expense for the years ended September 30, 2011 and 2010 was \$636,253 and \$459,123.

#### Note 5 - Intangible Assets

Intangible assets at September 30, 2011 and 2010 consist of the following:

	Useful	Gross	Accumulated
September 30, 2011	Life (years)	Amount	Amortization
Acquired Customer Base	5-15	\$7,025,413	\$1,579,001
Know How	15	512,000	110,933
Trade Names	15	219,000	47,450
Backlog	4	182,000	126,700
Biomedical Technologies	5	300,000	0-
		\$8,238,413	\$1,864,084

<u>September 30, 2010</u>	Useful Life (years)	Gross Amount	Accumulated Amortization
Acquired Customer Base	5-15	\$7,025,413	\$1,104,648
Know How	15	512,000	76,800
Trade Names	15	219,000	32,850
Backlog	4	182,000	52,966
		\$7,938,413	\$1,267,264

During the year ended September 30, 2010, the Company adjusted the useful life of the Company's Backlog from 15 years to 4 years from the date of acquisition (July 1, 2008). A useful life of 4 years coincides with the corresponding revenues generated from the backlog. The Company determined that amortizing the backlog over 15 years versus 4 years from the date of acquisition did not have a material impact on the current or prior period financial statements. Commencing April 1, 2010, the net book value of the backlog of \$160,767 is

#### Note 5 - Intangible Assets (continued)

being amortized over its remaining useful life of 27 months.

Amortization expense for the years ended September 30, 2011 and 2010 was \$596,820 and \$560,887 respectively. Estimated amortization expense for each of the next five fiscal years is as follows:

_	2012	2013	2014	2015	2016	Total
Acquired Customer Base	\$467,729	\$463,133	\$463,133	\$463,133	\$463,133	\$2,320,260
Know How	73,733	73,733	73,733	73,733	73,733	368,665
Trade Names	14,600	14,600	14,600	14,600	14,600	73,000
Backlog	55,300	-0-	-0-	-0-	-0-	55,300
Biomedical Technologies _	60,000	60,000	60,000	60,000	60,000	300,000
_	\$611,362	\$551,466	\$551,466	\$551,466	\$551,466	\$2,817,226

#### Note 6 - Goodwill

During the year ended September 30, 2011 the following changes were made to goodwill:

- On April 4, 2011, the Company acquired the rights to six biomedical technologies invented or coinvented by Dr. Daniel Ericson for a purchase price of \$300,000, together with certain rights to royalty
  and milestone payments if these technologies are successfully developed. The purchase price of
  \$300,000, paid in cash, was initially recorded as Goodwill while the opportunities were fully assessed.
- At September 30, 2011, the Company completed assessments of the various purchased biomedical technologies and determined that three were most commercially viable for future products or technology licensing. Provisional patents have been filed. Therefore, the Company reallocated the purchase price of \$300,000 from Goodwill to Intangible Assets which will be amortized using a five year estimated useful life.

#### **Prior Activity**

- On July 19, 2010, Dynasil completed the acquisition of 100% of the issued and outstanding common stock of Hilger Crystals Limited from Newport Corporation. The purchase price was composed of \$4 million in cash and a possible additional payment of up to \$750,000 (contingent consideration) after eighteen months based on Hilger's business revenues for the eighteen months following the acquisition. The Company reassessed the expectations regarding the revenue during the eighteen month period based on twelve months of actual revenues and the forthcoming six months of the period. As a result, the Company lowered the estimate for the contingent consideration payment to \$279,600 from the original \$750,000. Goodwill was reduced by \$470,400 as was the recorded liability, which is now carried as a current liability. Following the close of the measurement period, the Company further assessed the contingent consideration as of September 30, 2011. As a result, the contingent consideration was reduced to \$183,713, with an adjustment made of \$95,887, which is included in selling, general and administrative expenses.
- The Company also reassessed the initial carrying valuations of the property and equipment acquired in the Hilger acquisition. As a result, Property, Plant and Equipment was reduced by \$25,495 and Goodwill was increased by the same amount.

#### Note 6 – Goodwill (continued)

The changes to goodwill during the year ended September 30, 2011 are summarized as follows:

Goodwill at September 30, 2010	\$13,775,087
Contingent consideration adjustment	(470,400)
Property, plant & equipment adjustment	25,495
Biomedical Technologies	300,000
Biomedical Technologies allocated to Intangible Assets	(300,000)
Goodwill at September 30, 2011	\$13,330,182

#### Note 7 - Debt

On July 9, 2010, Dynasil completed bank financing with Sovereign/Santander Bank (the "Bank") (the "Sovereign/Santander Credit Facility") which refinanced all outstanding debt and increased Dynasil's line of credit from \$1.2 million to \$8 million by entering into a Loan and Security Agreement with the Bank dated as of July 7, 2010 (the "Bank Loan Agreement"). Dynasil, as Borrower, and all of Dynasil's wholly owned active subsidiaries including: EMF, Optometrics, RMD Instruments and RMD Research, as Guarantors, executed and delivered various supporting agreements dated July 7, 2010 in favor of the Bank. Under the Bank Loan Agreement, the Bank provided Dynasil with three borrowing facilities: a five-year \$9 million term loan (the "Term Loan") at an interest rate of 5.58%; a \$3 million working capital line of credit (the "Working Capital Line of Credit") at an interest rate of Prime or one month LIBOR plus 2.75% and a monthly fee calculated at the rate of 0.25% per annum of the unused Working Capital Line of Credit; and a \$5 million acquisition line of credit (the "Acquisition Line of Credit") at an interest rate of one month LIBOR plus 3.5% and a monthly fee calculated at the rate of 0.25% per annum of the unused Acquisition Line of Credit.

#### Term Loan

The \$9 million proceeds of the Term Loan were used to pay off all of Dynasil's indebtedness with Susquehanna Bank (the "Susquehanna Bank Note"), Tompkins Trust Company (the "Tompkins Trust Bank Note"), and RMD Instruments LLC (the "RMD Instruments LLC Note"), in an aggregate amount of \$8,373,315. The RMD Instruments LLC Note was a note payable to the former owners of RMD Instruments LLC, where a current director of Dynasil has a financial interest. The remaining \$626,685 was used to pay transaction expenses and to increase available working capital. The Term Loan is to be repaid with equal principal payments of \$107,142.85 per month plus interest and matures on July 7, 2015.

#### Lines of Credit

Interest on advances under the Working Capital Line of Credit is payable monthly and such advances are repayable in full on July 7, 2012, unless the Working Capital Line of Credit is renewed by the Bank. The Acquisition Line of Credit is available to Dynasil for future acquisitions under the terms specified in the Bank Loan Agreement. Advances under the Acquisition Line of Credit are repayable monthly based on a 7-year straight line amortization plus interest, with a balloon payment due on July 7, 2015.

The Company borrowed \$4 million under the Acquisition Line of Credit to fund the acquisition of Hilger Crystals in July 2010. The Acquisition Loan is to be repaid with equal principal payments of \$47,619 per month and matures on July 7, 2015.

As of September 30, 2011, the Company has \$3,000,000 and \$1,000,000 available under the Working Capital and Acquisition Lines of Credit, respectively.

#### Other Terms

The Bank Loan Agreement limits Dynasil and its subsidiaries' ability to, among other things: dispose of assets, engage in a new line of business materially different than its current business, have a change in control, acquire another business, incur additional indebtedness, incur liens, pay dividends and make other

#### Note 7 - Debt (continued)

distributions, make investments and redeem (subject to exceptions) any of its equity securities.

The Bank Loan Agreement also contains other terms, conditions and provisions that are customary for commercial lending transactions of this sort. The Bank Loan Agreement requires Dynasil to maintain compliance at all times and report at the end of each fiscal quarter a Consolidated Maximum Leverage Ratio (Total Funded Debt to EBITDA, as defined in the Bank Loan Agreement) not to exceed 3 to 1 and a Fixed Charge Coverage Ratio of at least 1.2 to 1. The Bank Loan Agreement also provides for events of default customary for credit facilities of this type, including, but not limited to, non-payment, breach of covenants, insolvency and defaults on other debt. On April 1, 2011, the Loan and Security Agreement with Sovereign/Santander Bank was amended to address changes to its covenant calculations. All other terms of the Loan and Security Agreement remain unchanged. The Company was in compliance with all covenants under the Bank Loan Agreement at September 30, 2011. The Company believes that they will remain in compliance and maintain access to the Bank lines of credit.

Dynasil's obligations under the Bank Loan Agreement are guaranteed by EMF, Optometrics, RMD Instruments, RMD Research and Dynasil and each of such subsidiaries have granted the bank a security interest in substantially all its personal property. In addition, EMF has granted a mortgage in the Bank's favor as to EMF's leasehold property in Ithaca, New York. Finally, the Company has pledged 65% of the outstanding shares of Hilger as collateral to the Bank.

Long-term debt at September 30, 2011 and 2010 is summarized as follows:

	2011	2010
Note payable to bank in monthly installments of \$107,143 through July, 2015 followed by a balloon payment of the remaining principal amount. The interest rate is fixed at 5.58% for the life of the loan, and the note is secured by substantially all assets.	\$7,500,000	\$8,785,714
Note payable to bank in monthly installments of \$47,619 through July, 2015 followed by a balloon payment of the remaining principal amount. The interest rate is floating based on one month LIBOR plus 3.5%. The rate at September 30, 2011 was 3.76%, and the note is secured by substantially all assets.	3,333,333	3,904,762
Note payable to Ithaca Urban Renewal Agency for Lease of land in Ithaca, New York for 99 years with the options to purchase said land for \$26,640 after May 2008.	11,837 \$10,845,170	13,637 \$12,704,113
Less current portion	1,859,728	1,870,779
	\$8,985,442	\$10,833,334

The aggregate maturities of long-term debt, as of September 30, 2011 are as follows:

For the years ending:	
September 30, 2013	\$1,859,927
September 30, 2014	1,857,143
September 30, 2015	5,261,908
Thereafter	6,464
	\$8,985,442

#### Note 8 - Income Taxes

The Company's income tax expense (benefit) for the years ended September 30, 2011 and 2010 are as follows:

	2011	2010
Current		
Federal	\$459,611	\$1,423,575
State	200,700	404,036
Foreign	(223,284)	-0-
Utilization of tax credits	(272,300)	(603,415)
	\$164,727	\$1,224,196
Deferred		
Federal	176,535	(364,935)
State	(35,400)	70,400
Foreign	(12,664)	0-
	128,471	(294,535)
Income tax expense (benefit)	\$293,198	\$929,661

The reasons for the difference between total tax expense and the amount computed by applying the statutory federal income tax rates to income before income taxes at September 30, 2011 and 2010 are as follows:

	2011	2010
Taxes at statutory rates applied to income before income taxes	\$742,700	\$1,354,300
Increase (reduction) in tax resulting from:		
Depreciation	(221,700)	(22,600)
Amortization	(103,000)	(238,900)
Accounts receivable	8,900	(1,300)
Inventories	(16,000)	(22,700)
Vacation pay	(5,600)	34,600
Deferred compensation	-0-	(3,700)
Unfunded pension liability	16,300	-0-
Effect of permanent differences	(29,100)	18,100
State income taxes(net of federal benefit)	(77,173)	504,650
Net benefit of tax credits	(150,600)	(398,254)
Deferred income taxes	128,471	(294,535)
	\$293,198	\$929,661

Deferred income taxes (benefit) reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and the tax effects of net operating losses that are available to offset future taxable income. Significant components of the Company's deferred tax assets (liabilities) at September 30, 2011 and 2010 are as follows:

#### Note 8 – Income Taxes (continued)

	2011	2010
Deferred tax asset (liability)		
Accounts receivable	\$52,700	\$44,600
Inventory	224,700	239,100
Unfunded pension liability	35,100	20,200
Vacation pay	105,500	110,500
State deferred taxes	56,064	20,900
Federal Credits	969,000	598,335
Intangible amortization	(560,300)	(183,800)
Depreciation	(623,100)	(449,000)
Foreign	(64,700)	(77,400)
Total	\$194,964	\$323,435

As of September 30, 2011, the Company's deferred tax assets and deferred tax liabilities are presented in the accompanying consolidated balance sheets as follows:

	2011	2010
Current deferred tax assets	\$1,119,800	\$1,196,735
Noncurrent deferred tax assets	694,800	-0-
Noncurrent deferred tax liability	(1,619,636)	(873,300)
Net deferred tax asset	\$194,964	\$323,435

The Company has Research and Experimentation ("R&E") tax credits available at both the federal and state levels designed to encourage and reward companies for efforts in areas of research and experimentation. The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, enacted on December 12, 2011, retroactively extended the Research and Experimentation Credits which had lapsed on December 31, 2009. In June, 2011, the Company completed a study encompassing all business activities and contracts in these areas. As a result, the Company claimed tax credits of approximately \$409,000 on its federal and state income tax returns for the year ended September 30, 2010. The Company has also filed amended federal and state income tax returns for the year ended September 30, 2009 claiming tax credits of approximately \$636,000, of which \$436,000 of the credits were utilized. Total prior year Research and Experimentation Tax Credits were approximately \$1,045,000. Based on the current study in process, the Company estimates approximately \$508,000 in tax credits will be claimed on the Company's federal and state income tax returns for the year ended September 30, 2011.

The Company has similar Research and Development ("R&D") tax credits in the United Kingdom ("U.K.") also designed to encourage innovation in areas of research and development. In August, 2011, the Company completed a study of all relevant business activities undertaken at Hilger Crystals in the U.K. As a result, the Company claimed R&D tax credits in the U.K. of approximately \$202,000.

In July 2010, the Company applied for the Qualifying Therapeutic Discovery Project tax credit ("QTDP"). The QTDP tax credit allows qualifying businesses to claim a credit for 50% of their qualified investment in qualifying projects for tax years 2011 and 2010. The tax credit covers research and development costs from 2009 and 2010. In October 2010, the Company received notification from the Internal Revenue Service that it was granted the credits of approximately \$1,200,000. During the year ended September 30, 2010, the Company utilized approximately \$603,000 of QTDP tax credits on the Company's September 30, 2010 federal tax return. As of September 30, 2010, the Company recognized a tax benefit from the QTDP credit carryover of \$598,000. As of September 30, 2011, tax credit carryovers related to the QTDP tax credits total \$83,000.

#### Note 8 - Income Taxes (continued)

As discussed above, total R&E tax credits generated through September 30, 2010 totaled approximately \$1,045,000. The Company recorded the benefits of these R&E tax credits during the year ended September 30, 2011 as follows: The Company recognized a benefit of approximately \$609,000, net of \$436,000 of tax credits carried back to September 30, 2009; and the Company recognized a benefit of approximately \$508,000 for the estimated tax credits to be generated for the year ended September 30, 2011. Total R&E tax credits recognized during the year ended September 30, 2011, were \$1,117,000.

During the year ended September 30, 2011, the Company's deferred tax provision includes the tax effects of R&E tax credits totaling approximately \$1,117,000 which are partially offset by the tax effects of the Company's book/tax differences related to property, plant and equipment, goodwill and intangible assets. As of September 30, 2011, the Company has federal and state tax credit carryovers totaling approximately \$1,200,000.

As of September 30, 2011 and 2010, the Company has no net operating loss carryforwards to offset future taxable income for federal income tax purposes. However, the Company has approximately \$490,000 in net operating loss carryforwards to offset certain future state income taxes expiring through 2026.

The Company files its tax returns as prescribed by the tax laws of the jurisdictions in which it operates. The Company's tax filings for federal and state jurisdictions for the years from 2009 to 2011 are still subject to examination.

#### Note 9 - Stockholders' Equity

#### Convertible Preferred Stock

On October 2, 2006 the Company sold 710,000 shares of a Series B 10% Cumulative Convertible Preferred Stock in a private placement. The stock was sold at a price of \$1.00 per share. Total expenses for the stock placement were \$10,000. No underwriting discounts or commissions were paid in connection with the sale.

Each share of preferred stock carried a 10% per annum dividend and was convertible to 1.33 shares of common stock at any time by the holders and was callable after two years by Dynasil at a redemption price of \$1.00 per share. Proceeds of the preferred stock sale were primarily used to acquire the capital stock of EMF and for related acquisition costs. Dynasil called all of these shares for redemption on November 30, 2009 and all of the shares were converted to common stock on November 30, 2009 prior to their redemption.

On July 5, 2008 the Company sold 5,256,000 shares of a Series C 10% Cumulative Convertible Preferred Stock (the "Series C Preferred Stock") in a private placement. The stock was sold at a price of \$1.00 per share. Total expenses for the stock placement were \$0. No underwriting discounts or commissions were paid in connection with the sale. Each share of preferred stock carried a 10% per annum dividend and was convertible to 0.40 shares of common stock at any time by the holders and was callable after two years by Dynasil at a redemption price of \$1.05 per share. Proceeds of the Series C Preferred Stock were primarily used for the acquisition of RMD, for related acquisition costs, and for general working capital. On December 21, 2010, Dynasil converted all these shares into its common stock, \$0.0005 par value per share at a conversion price of \$2.50 per share in a mandatory conversion. Following the conversion, all 5,256,000 of Series C Preferred Stock that had been outstanding was automatically converted into an aggregate of 2,102,400 shares of common stock. There is currently no outstanding preferred stock.

#### **Temporary Equity**

As part of the July 1, 2008 RMD Instruments, LLC acquisition, the Company issued one million Dynasil common stock shares to the members of the Seller. Commencing July 1, 2010, the Seller's members may tender these shares of Dynasil common stock to the Company for repurchase by it at a repurchase price of \$2.00 per share during a two year period ending July 1, 2012, upon no less than ninety (90) days prior notice to the Company. During the year ended September 30, 2010, the Company reclassified the 1,000,000 shares of redeemable common stock valued at its redemption value of \$2.00 per share, or \$2,000,000, from

#### Note 9 - Stockholders' Equity (continued)

## **Temporary Equity (continued)**

permanent equity to temporary equity to properly reflect the repurchase requirement that is not within the Company's control. There is no material impact on the Company's financial position, results of operations or earnings per share. In addition, there is no material impact on liquidity ratios: debt to equity, debt leverage, and return on equity or working capital. The reclassification adjustment resulted in a decrease in common stock of \$500 and additional paid-in-capital of \$1,999,500 and an increase in temporary equity of \$2,000,000.

### **Stock Based Compensation**

The Company adopted Stock Incentive Plans in 1996, 1999 and 2010 which provide for, among other incentives, the granting to officers, directors, employees and consultants options to purchase shares of the Company's common stock. The Plans also allow eligible persons to be issued shares of the Company's common stock either through the purchase of such shares or as a bonus for services rendered to the Company. Shares are generally issued at the fair market value on the date of issuance. The maximum number of shares of common stock which may be issued under the 2010 Stock Incentive Plan is 6,000,000, of which 3,898,719 and 5,819,756 shares of common stock are available for future purchases under the plan at September 30, 2011 and 2010, respectively. Options are generally exercisable at the fair market value or higher on the date of grant over a three to five year period currently expiring through 2014.

A summary of stock option activity for the years ended September 30, 2011 and 2010 is presented below:

	Shares	Exercise Price per Share
Options outstanding at October 1, 2009	1,350,841	\$0.51 - \$4.00
Granted in 2010	671,118	\$3.19 - \$4.06
Exercised in 2010	(121,459)	\$0.51 - \$2.00
Cancelled in 2010	(45,000)	\$1.54 - \$2.93
Options outstanding at September 30, 2010	1,855,500	\$1.40 - \$4.06
Granted in 2011	69,802	\$5.53 - \$7.32
Exercised in 2011	(532,750)	\$1.58 - \$4.00
Cancelled in 2011	(108,556)	\$1.66 - \$3.58
Options outstanding at September 30, 2011	1,283,997	\$1.40 - \$7.32
Options exercisable at September 30, 2011	924,622	\$1.40 - \$6.65

During the year ended September 30, 2011, 69,802 stock options were granted at prices ranging from \$5.53 to \$7.32 per share. Of the options granted in 2011, 30,000 of the granted stock options could not be exercised until 2013, therefore, the stock-based compensation expense will be recognized at that time. During the year ended September 30, 2011, 532,750 options were exercised. Of the options exercised in the year, 20,000 had an exercise price of \$2.00 per share with \$40,000 paid in cash. The remaining 512,750 options exercised had a weighted average exercise price of \$2.78 per share with \$1,427,299 paid through a reduction in the number of shares of common stock issued by 298,127 shares and \$11 paid in cash. During the year ended September 30, 2011, 26,471 unvested options were cancelled, with a weighted average exercise price of \$2.13 and 82,085 vested options expired, with a weighted average exercise price of \$3.25. Additionally, during the year ended September 30, 2011, 423,000 shares of restricted stock were issued, of which 25,000 shares were vested with a compensation expense of \$100,500 and 398,000 shares were unvested with deferred compensation values of \$1,600,760. The stock compensation expense for these

# Note 9 - Stockholders' Equity (continued)

## **Stock Based Compensation (continued)**

shares issued within the year ended September 30, 2011 will be recognized when the shares vest in fiscal years 2012 through 2016 according to the following schedule:

#### **Restricted Stock Vesting Schedule**

Year of Vesting	<u> 2012</u>	<u>2013</u>	<u> 2014</u>	<u>2015</u>	<u>2016</u>
Compensation Value	\$450,661	\$420,460	\$227,139	\$201,000	\$301,500

Also, 54,608 shares of unrestricted common stock were granted as compensation, with a total cost of \$256,318. Of those shares, 48,167 were director compensation which will be expensed over the time period of March, 2011 through January, 2012.

For the year ended September 30, 2011, total stock-based compensation charged to operations amounted to \$563,443. At September 30, 2011, there was \$206,242 of total unrecognized compensation expense related to non-exercisable option-based compensation arrangements under the 2010 Stock Incentive Plan.

During the year ended September 30, 2010, 671,118 stock options were granted at prices ranging from \$3.19 to \$4.06 per share. Of the options granted in 2010, 137,500 of the granted stock options cannot be exercised until 2011, 163,971 of the granted stock options cannot be exercised until 2012, 137,500 of the granted stock options cannot be exercised until 2013 and 34,375 of the granted stock options cannot be exercised until 2014, therefore the stock-based compensation expense will be recognized at that time. During the year ended September 30, 2010, 121,459 options were exercised. Of the exercised options, 2,182 options had an exercise price of \$0.51 per share with \$1,113 paid in cash, 2,134 options had an exercise price of \$0.53 per share with \$1,131 paid in cash, 7,143 options had an exercise price of \$0.60 per share with \$4,286 paid in cash, and 110,000 options had an exercise price of \$2.00 per share with \$220,000 paid in cash. During the year ending September 30, 2010, 45,000 options were cancelled, with a weighted average exercise price of \$2.16.

For the year ended September 30, 2010, total stock-based compensation charged to operations for option-based arrangements amounted to \$329,686. At September 30, 2010, there was approximately \$266,785 of total unrecognized compensation expense related to non-exercisable option-based compensation arrangements under the Plan.

The fair value of the stock options granted was estimated at the date of grant using the Black-Scholes options pricing model. Based on the list of assumptions presented below with numbers shown for the most recent grant, the weighted average fair value of the options granted during the years ended September 30, 2011 and 2010 are \$6.23 and \$0.58 per share, respectively.

	2011	2010
Expected term in years	3 years	3 years
Risk-free interest rate	3.95%	4.23%
Expected volatility	85.21%	68.33%
Expected dividend yield	0.00%	0.00%

The expected volatility was determined with reference to the historical volatility of the Company's stock. The Company uses historical data to estimate option exercise and employee termination within the valuation model. The expected term of options granted represents the period of time that the options granted are expected to be outstanding. The risk-free interest rate for periods within the contractual life of the option is based on the U.S. Treasury rate in effect at the time of grant.

#### Note 9 - Stockholders' Equity (continued)

#### **Employee Stock Purchase Plan**

On September 28, 2010, the Company adopted an Amended and Restated Employee Stock Purchase Plan. The existing plan was amended to extend the termination date to September 28, 2020. The Employee Stock Purchase Plan permits substantially all employees to purchase common stock at a purchase price of 85% of the fair market value of the shares. Under the Plan, a total of 450,000 shares have been reserved for issuance of which 208,783 and 180,038 shares have been issued as of September 30, 2011 and 2010, respectively.

During any twelve month period, employees may not purchase more than the number of shares for which the total purchase price exceeds \$5,000. During the years ended September 30, 2011 and 2010, 28,758 shares and 20,546 shares of common stock were issued under the Plan for aggregate purchase prices of \$95,290 and \$43,828, respectively.

#### Note 10 - Retirement Plans

## 401(k) Plans

The Company has retirement savings plans available to substantially all full time employees which are intended to qualify as deferred compensation plans under Section 401(k) of the Internal Revenue Code (the "401k Plans"). Pursuant to the 401k Plans, employees may contribute up to the maximum amount allowed by the 401k Plans or by law. The Company at its sole discretion may from time to time make discretionary matching contributions as it deems advisable. The Company made contributions to the plans during the years ended September 30, 2011 and 2010 of \$75,042 and \$70,645, respectively.

#### **Defined Benefit Pension Plan**

EMF has a defined benefit pension plan covering hourly employees. The plan provides defined benefits based on years of service and final average salary. As of September 30, 2006, the plan was frozen. Accordingly, accrued benefit costs are classified as a current liability on the consolidated balance sheet. The following relates to the Company's defined pension plan as of September 30, 2011 and 2010:

	2011	2010
Pension benefit obligation as of September 30	\$397,760	\$344,241
Fair value of plan assets as of September 30	(308,089)	(295,468)
	\$89,671	\$48,773
Amounts recognized on the balance sheet as:		
Accrued benefit costs (in accrued expenses)	\$113,344	\$65,395
Discount rate on the benefit obligation - based on		
24-month average segmented rates	6.51%	6.74%
Rate of expected return on the plan assets	5.00%	5.00%
Pension expense (benefit)	\$23,258	-0-
Company contributions	\$26,759	-0-

## Note 11 - Related Party Transactions

During the years ended September 30, 2011 and 2010, building lease payments of \$114,000 and \$114,000 were paid to Optometrics Holdings, LLC in which Laura Lunardo, Optometrics' COO has a 50% interest.

During the years ended September 30, 2011 and 2010, building lease payments of \$829,557 and \$780,433 were paid to Charles River Realty, dba Bachrach, Inc., which is owned by Gerald Entine and family, a director of the Company, and the former President of RMD Research. In addition, real estate taxes, building maintenance and repair costs totaling \$651,437 and \$414,850 for the years ended September 30, 2011 and 2010 were paid to Bachrach, Inc.

On September 30, 2008, a loan for \$2,000,000 was completed with a company in which a director of the Company and the former President of RMD Research, Dr. Gerald Entine, and Vice-President of RMD Instruments Corp., Mr. Jacob Pastor, had greater than a 90% interest. The loan had an interest rate of 9% and a balloon payment of all principal was due on October 1, 2010. Interest expense for the year ended September 30, 2010 was \$138,575. The loan was repaid in full on July 9, 2010.

On September 30, 2011, the Company was due \$52,000 from a director of the Company which was subsequently paid to the Company on November 21, 2011.

#### Note 12 - Leases

The Company has non-cancelable operating lease agreements, primarily for property, that expire through 2014. One of the Company's facilities is leased from a company controlled by the former owner of RMD, who is also a director of the Company and the former President of the RMD Research subsidiary. This lease expires in June 2013. One of the Company's facilities is leased from a company controlled by the former owners of Optometrics, one of whom is also currently the Optometrics' Chief Operating Officer. This lease expires in March 2013. Rent expense for the years ended September 30, 2011 and 2010 amounted to \$1,306,593 and \$1,100,697, respectively. Future non-cancelable minimum lease payments under property leases as of September 30, 2011 are as follows:

Years endin	<u>ig September 30,</u>
2012	\$1,193,873
2013	\$886,458
2014	\$31,750
2015	\$0

## **Note 13 - Vendor Concentration**

The Company purchased \$1,595,367 and \$903,184 of its raw materials from one supplier during the years ended September 30, 2011 and 2010. As of September 30, 2011 and 2010, amounts due to that supplier included in accounts payable were \$246,105 and \$183,952.

## Note 14 - Supplemental Disclosure of Cash Flow Information

Cash paid during the year for:	<u>2011</u>	<u>2010</u>
Interest	\$ 616,516	\$607,080
	=======	======
Income taxes	\$ 541,219	\$1,510,183
	========	=======

Non cash investing and financing activities are as follows.

Acquisition of Stock of Hilger Crystals, Ltd. on July 19, 2010:

Fair market value of current assets acquired	\$1,670,713
Property, plant and equipment	1,111,728
Goodwill	2,513,054
Fair market value of liabilities assumed	(542,549)
Total cost of acquisition	\$4,752,946
less contingent consideration	(750,000)
Net cash paid for Hilger acquisition	\$4,002,946

Issuance of common stock during the year ended September 30, 2011 is as follows:

Issuance of Common Stock	\$2,235,041
Less Deferred Compensation	(1,536,296)
Less Stock Based Compensation	(563,443)
Cash Paid for Common Stock	\$135,302

On November 30, 2009, Dynasil issued an aggregate of 946,431 shares of its Common Stock, \$.0005 par value per share, as a result of the exercise of the conversion rights by holders of 710,000 shares of its Series B 10% Cumulative Convertible Preferred Stock (the "Series B Preferred Shares").

On July 9, 2010, Dynasil refinanced its existing debt by obtaining a \$9,000,000 loan. The proceeds were used as follows: (1) repayment of existing bank debt of \$6,373,315, (2) payment of the related party note payable of \$2,000,000 and (3) the remaining balance of \$626,685 was used for working capital purposes.

During the years ended September 30, 2011 and 2010, preferred stock dividends paid are net of \$83,245 and \$110,000, respectively, for the issuance of common stock in lieu of dividends.

# Note 15 - Segment, Customer and Geographical Reporting

#### Segment Financial Information

Dynasil's business breaks down into two segments: products and technology ("Products and Technology") and contract research ("Contract Research"). The Products and Technology segment was previously known as Optics/Photonics Products & Instruments segment and was renamed to better reflect the operations of the segment. Within these segments, there is a segregation of reportable units based upon the organizational structure used to evaluate performance and make decisions on resource allocation, as well as availability and materiality of separate financial results consistent with that structure. The Products and Technology segment manufactures optical materials, components, coatings and specialized instruments used in various applications in the medical, industrial, and homeland security/defense sectors. Our recent new business venture, Dynasil Biomedical Corp. ("Dynasil Biomedical") will be reported within this segment. It has been determined that this new business venture will primarily pursue product commercialization of technologies and technology licensing opportunities, though there can be no assurances that any of these opportunities will become successfully commercialized. Dynasil's Contract Research segment is one of the largest small business participants in U.S. government-funded research. The Company's segment information is summarized below:

	Year Ended		
Segment	September 30, 2011	September 30, 2010	
Contract Research			
Revenue	\$24,874,088	\$23,109,847	
Income from Operations	1,190,152	1,686,894	
Income as a percent of revenue	4.8%	7.3%	
Products and Technology			
Revenue	\$22,077,578	\$19,859,915	
Income from Operations	1,056,594	3,105,268	
Income as a percent of revenue	4.8%	15.6%	
Total			
Revenue	\$46,951,666	\$42,969,762	
Income from Operations	2,246,746	4,792,162	
Income as a percent of revenue	4.8%	11.2%	
Goodwill			
Contract Research	\$4,938,625	\$4,938,625	
Products and Technologies	\$8,391,557	\$8,836,462	

## Note 15 – Segment, Customer and Geographical Reporting (continued)

#### **Customer Financial Information**

For the years ended September 30, 2011 and 2010, the top three customers for the Contract Research segment were each various agencies of the U.S. Government. For the years ended September 30, 2011 and 2010, these customers made up 78.1% and 76%, respectively, of Contract Research revenue.

For the Products and Technology segment, there was no customer whose revenue represented more than 10% of the total segment revenues for the years ended September 30, 2011 and 2010.

## **Geographic Financial Information**

Revenues by geographic location in total and as a percentage of total revenue, for the years ended September 30, 2011 and 2010 are as follows:

	2011		2010	
<b>Geographic Location</b>	Revenue	% of Total	Revenue	% of Total
United States	\$38,738,960	82.5%	\$36,488,505	84.9%
Europe	5,003,812	10.7%	3,285,957	7.6%
Other	3,208,894	6.8%	3,195,300	7.4%
	\$46,951,666	100.0%	\$42,969,762	100.0%

## Note 16 - Subsequent Events

The Company has evaluated subsequent events through the date the financial statements were released.

On October 3, 2011, the Company announced the promotion of Kanai S. Shah, Ph.D., RMD Research's Vice President of Research and the leader of the Material Science Group, to President of RMD Research effective January 1, 2012, at which time Gerald Entine, Ph.D., Founder and President of RMD Research will assume the role of President Emeritus.

On November 29, 2011, the Company announced that with respect to Dr. Gerald Entine's previously announced retirement as President of Dynasil's RMD Research subsidiary, on November 22, 2011 Dynasil and Dr. Entine entered into a separation agreement pursuant to which Dr. Entine's employment with Dynasil terminated effective November 30, 2011.

On November 29, 2011, the Company announced that that the board of directors promoted President Steven K. Ruggieri to Chief Executive Officer of the Company and appointed him as a director, effective immediately.

# ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

There were no disputes or disagreements of any nature between the Company or its management and its public auditors with respect to any aspect of accounting or financial disclosure.

#### **ITEM 9A. CONTROLS AND PROCEDURES**

#### **Disclosure Controls and Procedures**

As required by Rule 13a-15(e) under the Exchange Act, our Chief Executive Officer and Chief Financial Officer, with the participation of management, carried out an evaluation of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of the end of the period covered by the report and have determined that such disclosure controls and procedures are effective.

# Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) of the Exchange Act). Internal control over financial reporting is a process designed by or under the supervision of, our principal executive and financial officers, and effected by our board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company, (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures are being made only in accordance with authorizations of management and directors of the Company, and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management, with the participation and supervision of our Principal Executive Officer and Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of September 30, 2011. In making this assessment, the Company's management used the criteria set forth by the Committee of Sponsoring Organizations ("COSO") of the Treadway Commission in "Internal Control – Integrated Framework."

Based upon the Company's assessment, management has concluded that, as of September 30, 2011, the Company's internal control over financial reporting is effective based upon those criteria.

#### CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There has been no change in our internal control over financial reporting identified in connection with our evaluation that occurred during our last fiscal quarter ended September 30, 2011 that materially affected, or is reasonably likely to materially affect our internal control over financial reporting.

## **ITEM 9B. OTHER INFORMATION**

On December 22, 2011, the Company entered into standard indemnification agreements with each member of its Board of Directors, the CEO, the CFO and the Corporate Secretary. Under these indemnification agreements, the Company agrees to indemnify these individuals to the fullest extent permitted by law and public policy for claims arising in their capacity as a director, officer or employee of the Company or any of its subsidiaries. Each of these individuals is only entitled to indemnification to the extent he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the

Company, and, with respect to any criminal proceeding, he or she had no reasonable basis to believe that his or her conduct was unlawful. Subject to the applicable provisions of the Delaware General Corporation Law, the Company will reimburse each individual for expenses covered by the indemnification agreement within thirty days of the individual's request for such payment.

#### PART III

## ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

We have adopted a Code of Conduct that applies to all employees including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. The text of our Code of Conduct is posted in the "Investor Information—Corporate Governance" section of our website, www.dynasilcorp.com.

We intend to disclose on our website any amendments to, or waivers from, our Code of Business Conduct and Ethics that are required to be disclosed pursuant to the disclosure requirements of Item 5.05 of Form 8-K.

#### ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

# ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

# ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item 13 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

# ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item 14 is hereby incorporated by reference to our definitive proxy statement to be filed by us within 120 days after the close of our fiscal year.

#### **PART IV**

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#### ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

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#### 2. Exhibits

#### **Exhibit Number**

- 2.01 Asset Purchase Agreement, dated January 18, 2008 between Precision Optics Corporation, Inc. and Optometrics Corporation, filed as Exhibit 2.1 to Form 8-K filed on January 22, 2008 and incorporated herein by reference.
- 2.02 Asset Purchase Agreement, dated July 1, 2008 between Dynasil Corporation of America, RMD Instruments Corp, RMD Instruments, LLC, Gerald Entine 1988 Family Trust, Fritz Wald and Doris Wald, and Jacob H. Paster, filed as Exhibit 10.1 to Form 8-K filed on July 7, 2008 and incorporated herein by reference.
- 2.03 Plan of Merger, dated July 1, 2008 by and among Dynasil Corporation of America, RMD Acquisition Sub, Inc., Radiation Monitoring Devices, Inc., Gerald Entine 1988 Family Trust, Fritz Wald and Doris Wald, and Jacob H. Paster, filed as Exhibit 10.2 to Form 8-K filed on July 7, 2008 and incorporated herein by reference.
- 2.04 Share Purchase Agreement, dated July 19, 2010 among Hilger Crystals Limited, Newport Spectra-Physics Limited, Newport Corporation and the Company, filed as Exhibit 10.1 to Form 8-K filed on July 23, 2010 and incorporated herein by reference.
- 3.01 Certificate of Incorporation of the Company, filed as Exhibit A to the Definitive Proxy Statement filed on January 4, 2008 and incorporated herein by reference.
- 3.02 Certificate of Merger of Foreign Corporation into a Domestic Corporation, dated February 29, 2008, filed as Exhibit 3.02 to Form 8-A filed on December 15, 2010 and incorporated herein by reference.
- 3.03 Certificate of Amendment of Certificate of Incorporation, dated March 6, 2008, filed as Exhibit 3.03 to Form 8-A filed on December 15, 2010 and incorporated herein by reference.
- 3.04 Certificate of Amendment of Certificate of Incorporation, dated February 26, 2009, filed as Exhibit 3.1 to Form 10-Q filed on May 15, 2009 and incorporated herein by reference.
- 3.05 Certificate of Designation of Preferred Stock of Dynasil Corporation of America, dated March 27, 2009, filed as Exhibit 3.05 to Form 8-A filed on December 15, 2010 and incorporated herein by reference.
- 3.06 Bylaws of the Company, filed as Exhibit B to the Definitive Proxy Statement filed on January 4, 2008 and incorporated herein by reference.
- 10.01\* Employment Agreement of Craig T. Dunham, dated October 1, 2004, filed as Exhibit 10.9 to Form 10-KSB filed on December 21, 2004 and incorporated herein by reference.
- 10.02\* Amendment to Employment Agreement of Craig T. Dunham, dated November 8, 2007, filed as Exhibit 10.1 to Form 8-K filed on November 13, 2007 and incorporated herein by reference.
- 10.03\* Employment Agreement of Gerald Entine, filed as Exhibit 10.3 to Form 8-K filed on July 7, 2008 and incorporated herein by reference.
- 10.04\* Employment Agreement of Richard Johnson, dated November 30, 2009, filed as Exhibit 10.1 to Form 8-K filed on December 1, 2009 and incorporated herein by reference.
- 10.05\* Employment Letter dated April 13, 2011, between the Company and Steven Ruggieri, filed as Exhibit 10.1 to Form 8-K filed on April 19, 2011 and incorporated herein by reference.
- 10.06\* 2010 Stock Incentive Plan, filed as Exhibit 99 to the Definitive Proxy Statement filed on January 5, 2010 and incorporated herein by reference.
- 10.07 Term Loan and Line of Credit Loan Agreement with Susquehanna Bank, dated July 1, 2008, filed as Exhibit 10.7 to Form 8-K filed on July 7, 2008 and incorporated herein by reference.

- 10.08 Subordinated Term Loan Note with RMD Instruments, LLC, dated September 30, 2008, filed as Exhibit 10.1 to Form 8-K filed on October 6, 2008 and incorporated herein by reference.
- 10.09 Amendment to Subordinated Term Loan Note with RMD Instruments, LLC, dated December 19, 2008, filed as Exhibit 10.07 to Form 10K-SB filed on December 30, 2008 and incorporated herein by reference.
- 10.10 Amendment to Subordinated Term Note with RMD Instruments, LLC dated May 11, 2009, filed as Exhibit 10.1 to Form 10-Q filed on May 15, 2009 and incorporated herein by reference.
- 10.11 Change in Promissory Note Terms Agreement with Susquehanna Bank, dated January 1, 2010 filed as Exhibit 10.1 to Form 10-Q filed on February 16, 2010 and incorporated herein by reference.
- 10.12 Loan and Security Agreement between the Company and Sovereign/Santander Bank, dated July 7, 2010, filed as Exhibit 10.1 to Form 8-K filed on July 14, 2010 and incorporated herein by reference.
- 10.13 Amendment No. 1 To Loan and Security Agreement between the Company and Sovereign/Santander Bank, dated April 1, 2011, filed as Exhibit 10.1 to Form 10-Q filed on May 16, 2011 and incorporated herein by reference.
- 10.14 Lease Agreement between Dynasil Corporation of America and Optometrics Holding LLC, dated March 8, 2005, filed as Exhibit 2.2 to Form 8-K filed on May 24, 2005 and incorporated herein by reference.
- 10.15 Lease Agreement between RMD Instruments, Inc and Charles River Realty, dated July 1, 2008, filed as Exhibit 10.5 to Form 8-K filed on July 7, 2008 and incorporated herein by reference.
- 10.16 Lease Agreement between Radiation Monitoring Devices, Inc. and Charles River Realty, dated July 1, 2008, filed as Exhibit 10.6 to Form 8-K filed on July 7, 2008 and incorporated herein by reference.
- 10.17 Form of Dynasil Corporation of America Indemnification Agreement.
- 10.18\* Employee Stock Purchase Plan filed as Appendix A to Definitive Proxy Statement filed December 30, 2010 and incorporated herein by reference.
- 21.1 Subsidiaries of the Company, filed herewith.
- 23.1 Consent of Haefele, Flanagan & Co., p.c., filed herewith.
- 31.1(a) Rule 13a-14(a)/15d-14(a) Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 filed herewith.
- 31.1(b) Rule 13a-14(a)/15d-14(a) Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 filed herewith.
- 32.1 Section 1350 Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished but not filed for purposes of the Securities Exchange Act of 1934) furnished herewith.
- 101\*\* The following materials from Dynasil Corporation of America's Annual Report on Form 10-K for the year ended September 30, 2011, formatted in XBRL (eXtensible Business Reporting Language); (i) Consolidated Balance Sheets as of September 30, 2011 and September 30, 2010, (ii) Consolidated Statements of Operations and Comprehensive Income for the years ended September 30, 2011 and 2010, (iii) Consolidated Statements of Changes in Stockholders' Equity for the years ended September 30, 2011 and 2010 and 2010; (iv) Consolidated Statements of Cash Flows for the years ended September 30, 2011 and 2010, and (v) Notes to Consolidated Financial Statements, tagged as blocks of text.
- \*\* Pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

# **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dynasil Corporation of America

BY: /s/ Steven Ruggieri

Steven Ruggieri, President, CEO (Principal Executive Officer)

DATED: December 29, 2011

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
BY: /s/ Peter Sulick Peter Sulick	Chairman of the Board of Directors, Chairman of the Audit Committee	December 29, 2011
BY: <u>/s/ Craig Dunham</u> Craig Dunham	Director	<u>December 29, 2011</u>
BY: <u>/s/ Gerald Entine</u> Gerald Entine	Director	<u>December 29, 2011</u>
BY: <u>/s/ Lawrence Fox</u> Lawrence Fox	Director	<u>December 29, 2011</u>
BY: <u>/s/ Harvey Goldberg</u> Harvey Goldberg	Director	<u>December 29, 2011</u>
BY: /s/ <u>Michael Joyner</u> Michael Joyner	Director	<u>December 29, 2011</u>
BY: <u>/s/ David Kronfeld</u> David Kronfeld	Director	<u>December 29, 2011</u>
BY: /s/ Steven K. Ruggieri Steven K. Ruggieri	Director, CEO and President (Principal Executive Officer)	<u>December 29, 2011</u>
BY: <u>/s/ Richard A. Johnson</u> Richard A. Johnson	CFO (Principal Financial and Accounting Officer)	December 29, 2011

<sup>\*</sup> Management contract or compensatory plan or arrangement.

EXHIBIT 31.1 (a)
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) and
SECTION 302 OF THE SARBANES-OXLEY ACT

- I, Steven Ruggieri, certify that:
- 1. I have reviewed this Form 10-K of Dynasil Corporation of America;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 29, 2011 //s/ Steven K. Ruggieri Steven K. Ruggieri

President and Chief Executive Officer

EXHIBIT 31.1 (b)
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) and SECTION 302 OF THE SARBANES-OXLEY ACT

- I, Richard A. Johnson, certify that:
- 1. I have reviewed this Form 10-K of Dynasil Corporation of America;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 29, 2011

/s/ Richard A. Johnson Richard A. Johnson Chief Financial Officer

# CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Annual Report of DYNASIL CORPORATION OF AMERICA (the "Company") on Form 10-K for the period ended September 30, 2011 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Steven K. Ruggieri, President and Chief Executive Officer of the Company and Richard A. Johnson, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Steven K. Ruggieri
Steven K. Ruggieri
President and Chief Executive Officer

/s/ Richard A. Johnson Richard A. Johnson Chief Financial Officer

December 29, 2011

## The Science Behind our Technology

In December, Dr. Kanai S. Shah, RMD's Vice President of Research, took the helm as President of RMD Research, our Contract Research business unit. Since joining RMD as a staff scientist more than 25 years ago, Kanai has played a vital role in the success of RMD, helping to build this business into a world-class center for government research and development. His scientific knowledge, customer engagement and management skills are extremely valuable in developing new technologies and leading RMD into the future.

RMD Research provides Dynasil with a consistent and stable source of revenue. In fiscal 2011 about 60 percent of that revenue was generated through the government-sponsored Small Business Innovative Research (SBIR) program. This work has spawned not only commercial products, such as our lead paint analyzer and Navigator medical probe, but also emerging programs including our dual mode radiation detection technology.

During the past several years, we have augmented our SBIR research with larger government contracts, and will continue to do so. In December, for example, we announced that RMD had been awarded contracts totaling \$3.65 million from the Department of Homeland Security's (DHS) Domestic Nuclear Detection Office to advance DHS's nuclear threat detection capabilities.

The projects undertaken by RMD Research will continue to be our incubator, providing an important source of new enabling technologies with commercial potential as well as adding to our intellectual property estate.

#### **Bringing our Technology to Market**

Our Dynasil Products business unit, headed by new general manager Gordon Lewis, is in the process of upgrading the key features and functionality of our existing product lines, all of which emanated from our research activities. We have already identified and invested in product enhancements for our handheld lead paint analyzer, Navigator medical probe and RadCam radiation imaging system planned for release in fiscal 2012. Next generation product concepts also are being developed.

As part of our initiatives in 2012, Dynasil Products will manage the portfolio of the biomedical technologies we acquired in 2011 from Dr. Daniel Ericson and the Mayo Clinic. This places the biomedical assets within the business unit where they can best be evaluated for further development and licensing.

Under Gordon's leadership, Dynasil Products has brought on new talent in engineering, manufacturing, and sales and marketing. He and his team also have begun to implement a Product Realization Process which focuses on the "Voice of the Customer". It is designed to support the evaluation, assessment, development and commercialization of our technologies. The Product Realization Process will also serve as a bridge to our research business, helping identify and screen those opportunities with the greatest potential for commercialization.

# Strengthening our Product and Technology Pipeline

In conjunction with our Product Realization Process, we are building the foundation for an enhanced product development, engineering and management capability for our commercial product lines. This resource will strengthen our ability to evaluate our designs for manufacturability, contract manufacturing pathways, cost of goods and pricing as well as launch and distribution strategies.

Over the past year, we have made significant investments to support future growth, not only in organic product development but also in evaluating and advancing new technology to market.

One such technology is our dual mode radiation detectors for the homeland security market. Several OEM customers are now performance-testing our detectors and making recommendations for product design revisions. This will be followed by qualification and evaluation with early adopters. Our dual mode products are just the first in a planned pipeline of scintillation crystals for radiation detection in security and other applications. We will develop higher performance scintillation crystals as the industry standards and market demand for improved radiation detection continues to advance.

In addition, we are evaluating a number of other promising technologies including low-cost digital radiation badges (dosimeters) for military applications; solid state sensors for non-destructive testing; thin-film scintillators for medical applications; a surgical tissue sealant; and a blood storage enhancement system being developed in collaboration with the Mayo Clinic. The system has the potential to extend the shelf life of blood products, thereby saving U.S. hospitals as much as \$100 million per year.

See back cover >>>

# Continued from inside cover

Another way in which we are enhancing our pipeline is by broadening the value of our intellectual property estate. After joining the Company I established a Patent Committee to strengthen the identification of intellectual property and protect the development of new technologies. These efforts are paying off. Over the past three months, we have filed 11 new patent applications. This brings the total number of issued patents to 40 and the number of pending applications to 40 versus 25 at this time last year. These initiatives help to ensure that our IP estate remains strong.

## **Positioned for Growth**

Looking ahead, we expect to continue to execute on our strategy by capitalizing on our world-class research, organic product opportunities and enabling technologies that will contribute to our future results and build Dynasil's long term value. We look forward to a productive 2012 for Dynasil.

On behalf of our employees and our board of directors, I would like to thank our customers, our suppliers and you, our stockholders, for your support of Dynasil.

Sincerely,

Steven K. Ruggieri

**President and Chief Executive Officer** 

December 30, 2011

# The Dynasil Companies:

RMD Watertown, MA www.rmdinc.com

Dynasil Products
Watertown, MA
www.dynasilproducts.com

Optometrics

Ayer, MA

www.optometrics.com

Hilger Crystals

Margate, Kent, UK

www.hilger-crystals.co.uk

Evaporated Metal Films Ithaca, NY www.emf-corp.com

Dynasil Fused Silica
West Berlin, NJ
www.dynasilfusedsilica.com

Dynasil Corporation
50 Hunt Street
Watertown, MA 02472
www.dynasil.com