

Edgar Filing: IONICS INC - Form 10-K

IONICS INC  
Form 10-K  
March 31, 2003

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 02549

FORM 10-K

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

For the fiscal year ended: December 31, 2002

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 1-7211

IONICS, INCORPORATED  
(Exact name of registrant as specified in its charter)

Massachusetts  
(State of incorporation)

04-2068530  
(IRS Employer Identification Number)

65 Grove Street  
Watertown, Massachusetts  
(Address of principal executive offices)

02472-2882  
(Zip Code)

Registrant's telephone number, including area code: (617)926-2500

Securities registered pursuant to Section 12(b) of the Act: Common Stock,  
\$1.00 par value

Name of each exchange on which registered: New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act).

Yes  No

The aggregate market value of the Common Stock of the registrant held by

## Edgar Filing: IONICS INC - Form 10-K

non-affiliates as of June 28, 2002 was \$415,244,560 (17,123,487 shares at \$24.25 per share) (includes shares owned by a trust for the indirect benefit of a non-employee director, and by a trust for the indirect benefit of a spouse of a non-employee director).

As of March 21, 2003, 17,555,046 shares of Common Stock, \$1.00 par value, were issued and outstanding.

### DOCUMENTS INCORPORATED BY REFERENCE

The Registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended December 31, 2002. Portions of such proxy statement are incorporated by reference into Item 5 and Part III of this Annual Report on Form 10-K.

-1-

### IONICS, INCORPORATED

ANNUAL REPORT ON FORM 10-K  
FOR YEAR ENDED DECEMBER 31, 2002

### TABLE OF CONTENTS

PART I.....	
ITEM 1.	BUSINESS.....
ITEM 2.	PROPERTIES.....
ITEM 3.	LEGAL PROCEEDINGS.....
ITEM 4.	SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.....
PART II.....	
ITEM 5.	MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.....
ITEM 6.	SELECTED CONSOLIDATED FINANCIAL DATA.....
ITEM 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS O.....
ITEM 7A.	QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK.....
ITEM 8.	CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.....
ITEM 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL.....
PART III.....	
ITEM 10.	DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.....
ITEM 11.	EXECUTIVE COMPENSATION.....
ITEM 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.....
ITEM 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.....
ITEM 14.	CONTROLS AND PROCEDURES.....
PART IV.....	
ITEM 15.	EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K.....
SIGNATURES.....	
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS.....	

PART I

Except for historical information, the matters discussed in this Annual Report on Form 10-K are forward-looking statements that involve risks and uncertainties. The Company makes such forward-looking statements under the provision of the "Safe Harbor" section of the Private Securities Litigation Reform Act of 1995. Actual future results may vary materially from those projected, anticipated, or indicated in any forward-looking statements as a result of certain risk factors. Readers should pay particular attention to the considerations described in the section of this report entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations - Risks and Uncertainties and Forward Looking Information." Readers should also carefully review the risk factors described in the other documents that we file from time to time with the Securities and Exchange Commission. In this Annual Report on Form 10-K, the words "anticipates," "believes," "expects," "intends," "future," "could," and similar words or expressions (as well as other words or expressions referencing future events, conditions or circumstances) identify forward-looking statements.

ITEM 1. BUSINESS

General

Ionics, Incorporated ("Ionics," or the "Company") is a leading water purification company engaged worldwide in the supply of water and related activities and the supply of water treatment equipment through the use of proprietary separations technologies and systems. Ionics' products and services are used by the Company or its customers to desalt brackish water and seawater, recycle and reclaim process water and wastewater, treat water in the home, manufacture and supply water treatment chemicals and ultrapure water, process food products, and measure levels of waterborne contaminants and pollutants. The Company's customers include industrial companies, consumers, municipalities and other governmental entities, and utilities. Unless the context indicates otherwise, the terms "Ionics" and "Company" as used herein includes Ionics, Incorporated and all its subsidiaries.

Over fifty years ago, the Company pioneered the development of the ion-exchange membrane and the electrodialysis process. Since that time, the Company has expanded its separations technology base to include a number of membrane and non-membrane-based separations processes which the Company refers to as The Ionics Toolbox(R). These separations processes include electrodialysis reversal (EDR), reverse osmosis (RO), ultrafiltration (UF), microfiltration (MF), electrodeionization (EDI), electrolysis, ion exchange, ozonation, carbon adsorption, and thermal processes such as evaporation and crystallization. The Company believes that it is the world's leading manufacturer of ion-exchange membranes and of membrane-based systems for the desalination of water.

The Company's business activities are reported in four business group segments, which the Company put into place in 1998. The business group structure is based upon defined areas of management responsibility with respect to markets, applications and products. The Company believes that each business group segment comprises, and represents, a class of similar products or product lines used in particular water treatment applications. These business group segments are the Equipment Business Group, Ultrapure Water Group, Consumer Water Group, and Instrument Business Group. In 2002, these segments accounted for approximately 49.5%, 30.5%, 11.6% and 8.4%, respectively, of the Company's total revenues. See Note 17 to the Consolidated Financial Statements for additional information regarding the Company's four business segments. On December 31, 2001, the

## Edgar Filing: IONICS INC - Form 10-K

Company sold its Aqua Cool Pure Bottled Water division, constituting the major portion of the assets of the Consumer Water Group. Approximately 40% of the Company's 2002 revenues were derived from foreign sales or operations.

Within the existing business group structure, the Company has instituted a matrix-type organization which became effective at the beginning of 2002. Within each business group, the Company has begun to focus on "centers of excellence," which represent the application of treatment or separation technologies contained in The Ionics Toolbox(R) to solve certain application problems. The Company utilizes its water treatment and liquids separation expertise by employing its own proprietary products and other commodity products in the best integrated combination to solve customers' application problems. These centers of excellence include desalination, reuse, surface water, microelectronics, pharmaceuticals and instruments, among others, and each represents a range of technology solutions to solve a related applications problem. In 2002, no center of excellence accounted for 10% or more of the Company's total revenues. The Company will continue to report its results under the current "business group" segment structure. Starting in 2002, as part of the matrix organization, the

-3-

lease of trailers for the production of ultrapure water is included in the results of the Ultrapure Water Group, rather than the Equipment Business Group, where such results had been included through 2001. In addition, the Company's non-consumer bleach-based chemical supply business, which through 2001 had been included in the results of the Equipment Business Group, is included in the results of the Ultrapure Water Group starting in 2002. The discussion and financial results contained in this Annual Report on Form 10-K reflect these changes for all periods presented.

The Company was incorporated in Massachusetts in 1948. The Company's principal executive offices are located at 65 Grove Street, Watertown, Massachusetts 02472.

Information about Business Segments

Equipment Business Group  
-----

The Equipment Business Group accounted for approximately 49.5% of revenues in 2002. This segment provides technologies, treatment systems and services for seawater desalination, surface water treatment, brackish water desalination, wastewater reuse and recycle, potable water and high purity water. In addition, this segment includes the Company's custom fabrication activities and food processing activities, neither of which are significant activities on which the Company's business, results of operations or cash flows have relied.

Desalination and Related Water Treatment Equipment and Processes  
-----

Opportunities for the sale of desalination and related water treatment equipment and processes arise from changes in the needs of people and municipalities, from industrial shifts and growth, and from environmental concerns. With less than 1% of the total water on the planet fresh and usable, desalination has played an important role in creating new water sources.

The Company sells a wide spectrum of products and systems to serve this market, which utilize technologies including EDR, ion exchange, EDI, RO, UF, ozonation and carbon adsorption. Depending on the customers' needs, the Company provides standardized versions of systems utilizing one or more of the technologies

## Edgar Filing: IONICS INC - Form 10-K

mentioned, or can supply complete turnkey plants that may include standardized models as well as peripheral water treatment equipment, complete engineering services, process and equipment design, project engineering, commissioning, operator training and field service.

As examples of the Company's activities in this market, during 2002 the Company received an order from Mason City, Iowa for the sale of EDR-based equipment to desalinate ground water used by the municipality for drinking water. In addition, the Company booked an order from the Foss Reservoir Conservancy District in Oklahoma for the sale of EDR-based equipment to desalinate surface water used by the District for drinking water.

The Company has also been participating in a growing market for surface water treatment equipment as municipalities are being required to meet increasingly stringent regulations for ensuring safe drinking water quality. For example, in late 2001 the Company received an order for equipment from the City of Minneapolis for the sale of UF-based water treatment equipment to treat surface water used by the city for drinking water, and construction of this facility was well underway by the end of 2002. The Company believes that this facility will be the largest ultrafiltration water treatment plant in the United States.

### Wastewater Treatment Equipment and Processes

-----

The market for the treatment, recycle and reuse of wastewater has shown significant growth as world demand for water of specified quality continues to increase and as regulations limiting waste discharges to the environment continue to mount. The wastewater market is increasingly driven by the concept of what Ionics calls "Ionics Total Water Management (R)," which involves the recognition that the water streams which enter, leave or become part of a process can be treated for use, recycle or discharge to achieve overall economic efficiencies. Ionics services the wastewater market with proprietary brine concentrators and crystallizers, traditional wastewater treatment equipment, and special EDR membrane-based concentrators for recycle and reuse.

-4-

The Company designs, engineers and constructs brine concentrators, evaporators and crystallizers which are used to clean, recover and recycle wastewater, particularly in "zero liquid discharge" (ZLD) industrial uses. Such systems may also incorporate EDR membrane systems as preconcentrators, and EDI membrane systems for further treatment of wastewater. A representative example in 2002 was the selection of the Company by the Orlando Utilities Commission in Florida to supply a brine concentrator and crystallizer ZLD system for the Stanton Energy Combined Cycle Unit A Power Plant.

Ionics also designs, engineers and constructs customized systems for industrial wastewater customers which may include conventional treatment systems as well as advanced separation technologies such as EDR, RO, UF and MF. Typical industrial customers are power stations, chemical and petrochemical plants, manufacturers and a variety of other industrial applications. The Company also provides custom and packaged sewage treatment systems for municipalities and advanced membrane systems that treat waste from conventional sewage treatment plants so that the treated wastewater can be recycled and reused for irrigation and process water needs.

As an example of the Company's activities in membrane-based wastewater treatment, during 2002, Utilities Development Company W.L.L. (UDC), a Kuwaiti project company in which the Company has a 25% ownership interest, commenced

## Edgar Filing: IONICS INC - Form 10-K

activities under a contract to construct, own and operate the largest membrane-based water reuse facility in the world. The Company is also serving as a membrane equipment supplier to UDC under an \$85 million supply contract awarded in 2002. For further discussion regarding UDC, see Item 7 of this Annual Report on Form 10-K under the caption "Financial Condition" and Note 8 to the Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.

### Water Supply for Drinking and Industrial Use

-----

Ionics' position as a seller of purified or treated water has evolved from its traditional role as a supplier of water treatment equipment. In certain situations, opportunities are available for the Company to supply the water itself through the ownership and operation of the water purification facility. In these situations, the Company is responsible for the financing, construction, operation and maintenance of the water treatment facilities. For large-scale water treatment projects, the Company has been utilizing a business model for participating in such projects using a project company in which the Company typically will hold a minority equity interest.

As an example, during 2002, a three-member team, including the Company, was selected by the Ministry of Finance and the Ministry of Infrastructure in Israel to supply 30 million cubic meters per year of potable water under a 24 year and 11 month build-own-operate (BOO) contract. The team has formed a project company which is currently seeking financing for the project. For further discussion regarding this project see Item 7 of this Annual Report on Form 10-K under the caption "Financial Condition" and Note 8 to the Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.

Ionics, through its wholly-owned subsidiary, Ionics Iberica, S.A., owns and operates an EDR facility with capacity to treat 5.5 million gallons per day of brackish water and an RO seawater facility with capacity to treat 3.6 million gallons per day on Grand Canary Island, Spain. Under long-term contracts, the Company sells the desalted water from both facilities to the local water utility for distribution.

The Company's wholly owned subsidiary, Ionics (Bermuda) Ltd., owns and operates an EDR brackish water plant with capacity to treat 600,000 gallons per day on the island of Bermuda. This plant supplies fresh water under a long-term contract with Watlington Waterworks Ltd., a Bermuda corporation partially owned by Ionics.

In the second quarter of 2002, construction was completed with respect to the first four out of five phases of what the Company believes will be the largest membrane-based seawater desalination plant in the Western Hemisphere, which is located in Trinidad. The seawater reverse osmosis (SWRO) desalination plant provides the Water and Sewerage Authority of Trinidad and Tobago (WASA) and the industries of the Point Lisas Industrial Estate with a high quality water supply for industrial requirements. This \$120 million project is owned and operated by a joint venture between the Company (which has a 40% equity ownership interest in the venture) and its local partner, Hafeez Karamath Engineering Services Ltd. The plant began to produce and deliver water during 2002 and has a current design capacity of 26.4 million gallons per day, which will be expanded to 28.7 million gallons per day. For further discussion regarding the Trinidad project see Item 7 of this Annual Report on Form 10-K under the caption "Financial Condition" and Note 8 to the Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.

## Edgar Filing: IONICS INC - Form 10-K

The Company also owns and operates more than 40 desalination plants on a number of Caribbean islands, which provide drinking water to hotels, resorts and governmental entities. Drinking water on these islands is usually supplied pursuant to water supply contracts with terms ranging from five to ten years. On the island of Barbados, a 7.9 million gallon per day brackish water RO plant which started up successfully in the first quarter of 2000, is providing fresh potable drinking water to about one-fifth of the island's population. Desalinated water is being provided to the Barbados Water Authority on a build, own, operate (BOO) basis by a joint venture (in which the Company has a controlling ownership interest) between Ionics and its local partner, Williams Industries.

The Equipment Business Group also carries out the following business activities:

a) Fabricated Products

At its Bridgeville and Canonsburg, Pennsylvania facilities, the Company fabricates products for industrial and defense-related applications.

b) Food Processing

Under an agreement with a major U.S. dairy cooperative, the Company oversees whey-processing activities at two plants owned by the cooperative, and earns revenue based on the production of demineralized whey for its services. Included in the equipment being utilized at these plants are its Electromat(R) electrodialysis systems.

### Ultrapure Water Group

-----

The Ultrapure Water Group accounted for approximately 30.5% of the Company's 2002 revenues. This segment provides equipment and other related products for specialized industrial users of ultrapure water, such as companies in the life sciences, chemical, microelectronics and power industries. With the Company's acquisition of Enchem(R) wastewater treatment technology in July 2002, the Ultrapure Water Group is now able to provide equipment that treats certain semiconductor industry wastewater streams. Ultrapure water is purified by a series of processes to the degree that remaining impurities are measured in parts per billion or trillion. The microelectronics industry has historically been a significant source of the revenues of the Ultrapure Water Group, and softness in the microelectronics industry negatively affected the performance of the Ultrapure Water Group in 2002 and 2001.

### Ultrapure Water Equipment

-----

The demand for technologically advanced ultrapure water equipment and systems has increased as the industries which use ultrapure water have become more knowledgeable about their quality requirements and as such requirements have become more stringent. Ultrapure water needs are particularly important in the semiconductor, pharmaceutical, petroleum and power generation industries. The semiconductor industry in particular has increasingly demanded higher purity water as the circuits on silicon wafers have become more densely packed.

The Company supplies sophisticated ultrapure water systems, which utilize a combination of ion-exchange, EDI, RO and UF technologies. These systems are either trailer-mounted or land-based and vary from standardized modules to large multimillion dollar systems, depending on the customer's requirements.

The Company has been pursuing customers in the developing microelectronics market in the Far East. For example, during 2002, Ionics was awarded contracts

## Edgar Filing: IONICS INC - Form 10-K

with Corning and Chungwa Picture Tube (CPT) for supply of water systems to manufacturing companies in the flat panel market. In addition, Ionics has supplied new systems to Taiwan Semiconductor Mfg. Corp. (TSMC) for wastewater reuse. Ionics has established a subsidiary in China for the manufacture of water systems to serve the China market and for export.

The Company established the Ionics Life Sciences division at the beginning of 1999 to expand its delivery of ultrapure water equipment and services to the pharmaceutical and biotechnology markets. In 2002, Ionics has developed and supplied systems in the U.S., Singapore, and Europe. In addition, Ionics has introduced standardized systems for these markets.

-6-

### Ultrapure Water Supply

-----

In industries such as power generation, semiconductors, pharmaceuticals and biotechnology, ultrapure water is critical to product volume, quality and yield. Depending on the composition and quantity of the impurities to be removed or treated, any one of several membrane separations methods can be utilized to provide ultrapure water to the customer. Ionics has pioneered in the application of three membrane technologies (EDR, RO and UF) combined together in a mobile system called the "triple membrane" trailer (TMT) for use in the commercial processing of ultrapure water. Ionics provides ultrapure water services and the production and sale of ultrapure water from trailer-mounted units at customer sites (until 2002, this activity had been included in the Equipment Business Group).

The Company's EDI technology is becoming increasingly utilized in the production of ultrapure water. EDI is a continuous, electrically driven, membrane-based water purification process, which produces ultrapure water without the use of strong chemical regenerants, such as sulfuric acid and caustic soda, which are commonly required. The Company's TMT-II trailers utilize a combination of EDI, RO and UF technologies and represent what the Company believes to be the most advanced technology used in the commercial processing of ultrapure water.

At the end of 2002, Company-owned or operated equipment for the production of ultrapure water and other purified process water under contracts with companies in various industries had a total capacity of approximately 29,000 gallons per minute.

One of the Company's important ultrapure water activities is ion-exchange regeneration, which is provided at four U.S. locations and two foreign locations. The Company also provides system sanitization and high-flow deionization services at customer sites.

The Company has been expanding its ultrapure water activities in the Asian market. The Company established an ultrapure water sales, service and regeneration facility in Singapore in 1998, opened an office in Taiwan in 1999, and commenced operation of the first resin regeneration facility in Taiwan in 2002.

### Chemical Supply

-----

The Company uses its Cloromat(R) electrolytic membrane-based technology to produce sodium hypochlorite and related chlor-alkali chemicals for industrial, commercial and other non-consumer applications. These activities are carried out



## Edgar Filing: IONICS INC - Form 10-K

by the Company's wholly owned Australian subsidiary, Elite Chemicals Pty. Ltd. (Elite), and the Company's wholly-owned Mexican subsidiary, Ionics Acapulco Ltd. (until 2002, this activity had been included in the Equipment Business Group).

### Consumer Water Group

-----

This business group segment accounted for approximately 11.6% of the Company's 2002 revenues. The Company's consumer water products currently serve the home water purification and consumer bleach-based product market. On December 31, 2001, the Company completed the sale of its Aqua Cool Pure Bottled Water business conducted in the United States, United Kingdom, and France, to affiliates of Perrier Vittel S.A., a subsidiary of Nestle S.A. In this transaction, the Company received total proceeds of approximately \$207 million, following finalization of contractual purchase price adjustments in the first quarter of 2003. See Note 16 to the Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K. The Company retains equity ownership interests in certain joint venture entities in Bahrain, Kuwait and Saudi Arabia which are engaged in the bottled water business.

### Home Water Purification Systems

-----

#### Point-of-Entry Devices

Ionics' point-of-entry water products include ion-exchange water conditioners to "soften" hard water, and chemicals and media for filtration and treatment. The Company sells its products, under the General Ionics and other brand names, through both independent distributorships and wholly owned sales and service dealerships.

-7-

#### Point-of-Use Devices

The Company participates in the "point-of-use" market for over- and under-the-sink water purifiers through the sale of RO and activated carbon-based filtering devices, and through the manufacture and sale of HYgene(R), a proprietary, EPA-registered, silver-impregnated activated carbon filtering medium. The Company incorporates HYgene, which is designed to prevent bacterial build-up while providing the capability of removing undesirable tastes and odors from the water supply, into its own bacteriostatic water conditioners and also sells HYgene to manufacturers of household point-of-use water filters.

#### Other Products

The Company's Elite Consumer Products division operates a Cloromat(R) facility in Ludlow, Massachusetts to produce and distribute bleach-based products for the consumer market, primarily one-gallon bleach products under private label or under the Company's own "Elite(R)", "Super ValueTM" and "UltraPureTM" brands, and methanol-based automobile windshield wash solution.

### Instrument Business Group

-----

The Company's Instrument Business Group accounted for approximately 8.4% of the Company's 2002 revenues. This segment designs and manufactures analytical instruments that serve the pharmaceutical, microelectronic, chemical, power generation, environmental, municipal water, food and beverage, and medical

## Edgar Filing: IONICS INC - Form 10-K

research industries. The Instrument Business Group derives more than 40% of its revenues from service, consumables, spare parts, and training products from its installed base of more than 8,000 units. During 2000, the Ionics Instrument Division, which was located in Watertown, Massachusetts, was moved and consolidated with Ionics Sievers Instruments, located in Boulder, Colorado. This business group also includes Ionics Agar Environmental, located in Herzlia, Israel. The Company is a leading manufacturer of instruments that measure total organic carbon (TOC) across the water "spectrum" from ultrapure water to wastewater. The Sievers(R) Model 400ES TOC analyzer, introduced at the end of 2001, is designed specifically to comply with United States Pharmacopoeia (USP) and European Pharmacopoeia (EP) requirements for determining water quality in the pharmaceutical industry. Ionics' Instrument Business Group offers TOC analyzers sensitive to the parts-per-trillion range, designed specifically for ultrapure water measurement in the semiconductor and power generation industries. In the fourth quarter of 2001, the Company introduced the first on-line boron analyzer designed specifically for continuous measurement of trace boron contamination, a capability particularly important in the semiconductor and power industries.

In 2002 the Company introduced enhancements to its Model 400ES TOC Analyzer that facilitates pharmaceutical company compliance with FDA electronic record-keeping requirements. Additionally, the Company expanded its consumables and service business capability with a new range of products and services, and an expanded production facility for the manufacture of calibration standards for its pharmaceutical customers.

In addition to the Sievers product line, the Company offers a full line of TOC monitors for process water and wastewater applications, as well as other instruments.

The Company's Ionics Agar Environmental division, acquired in 1999, offers a line of instruments for the detection of thin layers of oil on water. The Company's Leakwise(R) oil-on-water detection systems are used by a range of industries from oil refining to power generation. In 2002, the Company introduced its Leakwise ID-227WL wireless system for remote sensing and satellite/cellular communication of environmental oil spills.

### Other Information Concerning the Business of the Company

#### Foreign Operations

-----

The Company has significant operations outside the United States. The Company's sales to customers in foreign countries primarily involve desalination systems, ultrapure water systems, water and wastewater treatment systems, Cloromat systems, instruments and related products and services. The Company believes that this geographic diversity provides stability to its operations and revenue streams to offset geographic economic trends and offers it an opportunity to expand into new markets for its products. The Company conducts operations outside the United States directly or through its wholly-owned subsidiaries located in Australia, China, Bermuda, the Caribbean, England, France, Ireland, Israel, Italy, Korea, Mexico, Singapore, Spain and Taiwan. In addition, the Company also conducts operations outside the United States through affiliated

companies and joint venture relationships in the Caribbean (including Trinidad), Bahrain, Israel, Japan, Kuwait, Mexico and Saudi Arabia. Of these affiliated company and joint venture operations, the Company believes that the Kuwait, Trinidad and Mexico ventures are material to its business on a consolidated

## Edgar Filing: IONICS INC - Form 10-K

basis.

Revenues from operations outside the United States totaled \$122.6 million in 2002, \$146.2 million in 2001 and \$151.5 million in 2000, accounting for approximately 36.6%, 31.3% and 31.9% respectively, of the Company's total revenues. No single country outside the United States contributed more than 10% in 2002, 2001 or 2000 of the Company's total revenues.

For a discussion of risks attendant to the Company's foreign operations, see Item 7 of this Annual Report on Form 10-K. In addition, further geographical and financial information concerning the Company's foreign operations appears in Notes 1, 5, 8, 9, 10, 14, 15, 16 and 17 of the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K.

### Raw Materials and Sources of Supply

-----

All raw materials and parts and supplies essential to the business of the Company can normally be obtained from more than one source. The Company produces the membranes required for its equipment and systems that use the ED, EDR, MF, UF, RO and EDI processes. Membranes used for the MF, UF and RO processes are at times also purchased from outside suppliers and are normally available from multiple sources. During 2000, the Company formed a joint venture with Toray Industries, Inc. and Mitsui & Co. to manufacture and market RO membrane modules for the desalination of seawater and brackish water using Toray's proprietary RO manufacturing technology. Ionics has a 43% interest in the joint venture company, Toray Membrane America, Inc. (TMA). In 2001, TMA commenced the manufacture of RO membrane modules in space leased from the Company in Watertown, MA.

### Patents and Trademarks

-----

The Company believes that its products, know-how, servicing network and marketing skills are more significant to its business than trademarks or patent protection of its technology. Nevertheless, the Company has a policy of applying for patents both in the United States and abroad on inventions made in the course of its research and development work for which a commercial use is considered likely. The Company owns numerous United States and foreign patents and trademarks and has issued licenses thereunder, and currently has additional pending patent applications. Of the approximately 87 outstanding U.S. patents held by the Company, a substantial portion involves membranes, membrane technology and related separations processes such as ED and EDR, RO, UF, EDI and instrumentation technology. The Company does not believe that any of its individual patents or groups of related patents, nor any of its trademarks, is of sufficient importance that its termination or abandonment, or the cancellation of licenses extending rights thereunder, would have a material adverse effect on the Company.

### Seasonality

-----

The activities of the Company's businesses are not of a seasonal nature, other than sales of bleach products for swimming pool use which tend to increase during the summer months, and sales of automobile windshield wash solution which tend to increase in the winter months. Together, these products represent less than 5.0% of the Company's total revenues.

### Customers

-----

The nature of the Company's business is such that it frequently has in progress

## Edgar Filing: IONICS INC - Form 10-K

large contracts with one or more customers for specific projects; however, there is no one customer whose purchases accounted for 10% or more of the revenues of any business segment and whose loss would have a material adverse effect on the Company and its subsidiaries taken as a whole.

-9-

### Backlog

-----

The Company's backlog of firm orders was \$377.2 million at December 31, 2002 and \$258.9 million at December 31, 2001. For multi-year contracts, the Company includes in reported backlog the revenues associated with the first five years of the contract. For multi-year contracts which are not otherwise included in backlog, the Company includes in backlog up to one year of revenues. The Company expects to fill approximately 42% of its December 31, 2002 backlog during 2003. The Company does not believe that there are any seasonal aspects to its backlog figures.

The Company has entered into a number of large contracts, which are generally categorized as either "equipment sale" contracts or build, own and operate ("BOO") contracts. The Company believes that the remaining duration on its existing equipment sale contracts ranges from less than one year to three years and the remaining duration on its existing BOO contracts ranges from one year to 25 years. The time to completion of any of these contracts, however, is subject to a number of variables, including the nature and provisions of the contract and the industry being served. Historically, as contracts are completed, the Company has entered into new contracts with the same or other customers. In the past, the completion of any one particular contract has not had a material effect on the Company's business, results of operations or cash flows.

### Government Contracts

-----

The Company does not believe that any of its sales under U.S. Government contracts or subcontracts during 2002 are subject to renegotiation. The Company has not had adjustments to its negotiated contract prices, nor are any proceedings pending for such adjustments.

### Research and Development

-----

The Company's research and development activities are directed toward developing new products for use in water and wastewater purification, processing and measurement, and separations technology. The Company's research and development expenses were approximately \$6.5 million in 2002, \$6.4 million in 2001 and \$8.0 million in 2000.

### Competition

-----

The Company experiences competition from a variety of sources with respect to virtually all of its products, systems and services, however the Company knows of no single entity that competes with it across the full range of its products and services. Competition in the markets served by the Company is based on a number of factors, which may include price, technology, applications experience, know-how, availability of financing, reputation, product warranties, reliability, service and distribution. The Company is unable to state with certainty its relative market position in all aspects of its business. Many of its competitors have financial and other resources greater than those of the Company.

## Edgar Filing: IONICS INC - Form 10-K

With respect to the Company's Equipment Business Group, there are a number of companies, including several sizable chemical companies that manufacture and sell membranes, but not water treatment equipment. There are numerous smaller companies, primarily fabricators, that sell water treatment and desalination equipment, but which generally do not have proprietary membrane technology. A limited number of companies, some of which are larger than the Company, manufacture both membranes and water treatment equipment. The Company has numerous competitors in its conventional water treatment, instrument and fabricated products business lines.

In 2002, the International Desalination Association released a report providing data regarding the manufacturers of desalination equipment. According to the report, which covered land-based water desalination plants delivered or under construction as of December 31, 2001, with a capacity to produce 100 cubic meters (approximately 25,000 gallons) or more of fresh water daily, the Company ranked first in terms of the number of such plants sold from 1992 to 2001, having sold more than the next three manufacturers combined. In addition, the report indicated that the Company ranked first in the total capacity of such plants sold.

With respect to the Ultrapure Water Group business segment, the Company competes with suppliers of ultrapure water services and with other manufacturers of membrane-related equipment on an international, national and regional basis.

-10-

With respect to the Company's Consumer Water Group business segment, most of the Company's competitors in point-of-entry and point-of-use products for use in the home or office are small assemblers, serving local or regional markets. However, there are also several large companies competing nationally in these markets.

### Environmental Matters

-----  
The Company continues to fully comply with federal, state and local government rules and regulations relating to the discharge of materials into the environment or otherwise relating to the protection of the environment. The Company was notified in 1992 that it is a potentially responsible party (PRP) at a Superfund Site, Solvent Recovery Services of New England in Southington, Connecticut ("SRS Site"). Ionics' share of assessments to date for site work and administrative costs totals approximately \$77,000. The United States Environmental Protection Agency ("EPA") has not yet issued a decision regarding clean-up methods and costs. However, based upon the large number of PRPs identified, the Company's small volumetric ranking (approximately 0.5%) and the identities of the larger PRPs, the Company believes that its liability in this matter will not have a material effect on the Company or its financial position, results of operations or cash flows.

By letter dated March 29, 2000, the Company and other PRPs for the SRS Site were notified that they may also have potential liability with respect to the Angelillo Property Superfund Site, also in Southington, Connecticut ("Angelillo Site"), because hazardous materials were allegedly shipped from the SRS Site to the Angelillo Site. In April 2001, the Company and certain other PRPs entered into a settlement agreement with the EPA with respect to the Angelillo Site, under which the Company made a final settlement payment of approximately \$3,300.

The Company has never had a product liability claim grounded in environmental liability, and believes that the nature of its products and business makes such a claim unlikely.

## Edgar Filing: IONICS INC - Form 10-K

### Employees

-----

The Company and its consolidated subsidiaries employ approximately 1,900 persons on a full-time basis. None of the Company's employees are represented by unions or have entered into workplace agreements with the Company, except for the employees of the Company's Australian subsidiary and certain employees of the Company's Spanish subsidiary. The Company considers its relations with its employees to be good.

-11-

### Executive Officers of the Registrant

-----

The names, ages and positions of the Company's Executive Officers are as follows:

Name -----	Age as of March 1, 2003 -----	Positions Presently Held -----
Arthur L. Goldstein	67	President, Chief Executive Officer and Director since 1971; Chairman of the Board since 1990
Edward J. Cichon	48	Vice President, Equipment Business Group since 1998
Alan M. Crosby	50	Vice President, Consumer Water Group since 2000; previously Vice President and General Manager, Elite; and Vice President, Operations
Anthony Di Paola	36	Vice President and Corporate Controller since May 2000
Stephen Korn	57	Vice President, General Counsel and Chief
Daniel M. Kuzmak	50	Vice President, Finance and Chief Financial Officer since January 2001
William J. McMahon	47	Vice President, Ultrapure Water Group since November 2000
Theodore G. Papastavros	69	Executive Vice President since May 2002 since August 2002; Vice President since 2000
Michael W. Routh	55	Vice President, Instrument Business Group since 2000

There are no family relationships between any of the officers or directors. Executive officers of the Company are appointed each year at the meeting of directors held on the date of the annual meeting of shareholders. There are no arrangements or understandings pursuant to which any executive officer was selected.

Except for Messrs. Cichon, Di Paola, Kuzmak, McMahon and Routh, all of the current executive officers have been employed by the Company in various capacities for more than five years.

Prior to joining the Company in July, 1998, Mr. Cichon served as a Senior Vice President of Metcalf & Eddy, Inc., a water and wastewater engineering and services firm, where he was employed for 18 years.

Mr. Di Paola served in various finance and accounting positions with Thyssen-Dover Elevator Company North America from 1997 until he joined the

## Edgar Filing: IONICS INC - Form 10-K

Company, including as Corporate Controller from 1998 to 2000. Prior to 1997, he served as Assistant Controller for Vector Health Systems, Incorporated.

Mr. Kuzmak joined the Company after 15 years with ABB and its U.S. subsidiary, including serving as Chief Financial Officer of ABB Inc. (US) from 1998 to 2000, and Vice President, Finance of ABB Nuclear Operations and ABB Nuclear Business from 1995 to 1998.

Mr. McMahon served as President and Chief Executive Officer of Stone & Webster/Sonat Energy Resources LLC from 1998 until he joined the Company; President of Stone & Webster Energy Services from 1997 to 1998; and General Manager/Environmental Systems of DB Riley Consolidated, Inc. from 1995 to 1997.

Mr. Routh served as President of the Baird Division of Thermo Instrument Systems, Inc. from 1995 to 1997, and General Manager of the Spectroscopy Division of BioRad Laboratories, Inc., from 1998 to March, 2000.

-12-

### Available Information

-----

The Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports are available, without charge, on our website at [www.ionics.com](http://www.ionics.com), as soon as reasonably practicable after they are filed electronically with the Securities and Exchange Commission.

-13-

### ITEM 2. PROPERTIES

The Company's executive offices are located in a Company-owned facility at 65 Grove Street, Watertown, Massachusetts. Manufacturing, assembly, engineering and other operations are carried out in a number of domestic and international locations. The following table provides certain information as to the Company's principal general offices and manufacturing facilities:

Location -----	Business Segment Utilizing the Location -----	Property Interest -----	Appr
Watertown, MA* (headquarters)	Equipment Business Group Instrument Business Group Consumer Water Group Ultrapure Water Group	Owned	
Watertown, MA	Equipment Business Group	Owned	
Bridgeville, PA	Equipment Business Group Consumer Water Group	Owned	
Canonsburg, PA	Equipment Business Group	Leased	
Ludlow, MA	Consumer Water Group	Owned	

## Edgar Filing: IONICS INC - Form 10-K

San Jose, CA	Ultrapure Water Group	Owned
Boulder, CO	Instrument Business Group	Leased
Pico Rivera, CA	Ultrapure Water Group	Owned
Phoenix, AZ	Ultrapure Water Group	Leased
Bellevue, WA	Equipment Business Group	Leased
Brisbane, Australia	Equipment Business Group	Owned
Brisbane, Australia	Ultrapure Water Group	Leased
Milan, Italy	Equipment Business Group	Leased
Dallas, TX	Ultrapure Water Group	Owned
Dallas, TX	Ultrapure Water Group	Leased
Singapore -----	Ultrapure Water Group	Leased

\* Approximately 22,000 square feet of this facility are leased to a joint venture entity engaged in membrane manufacture.

The Company also owns or leases smaller facilities in which its business segments conduct business.

The Company considers the business facilities that it utilizes to be adequate for their intended business purpose.

-14-

### ITEM 3. LEGAL PROCEEDINGS

The Company and its Chief Executive Officer and Chief Financial Officer have been named as defendants in a class action lawsuit captioned Jerome Deckler v. Ionics, Inc., et al., filed in the U.S. District Court, District of Massachusetts in March 2003. Plaintiff alleges violations of the federal securities laws relating to the restatement of the Company's financial statements for the first and second quarters of 2002 announced in November 2002. The Company believes the allegations in the lawsuit are without merit and intends vigorously to defend the litigation. While the Company believes that the litigation will have no material adverse impact on its financial condition, results of operations or cash flows, the litigation process is inherently uncertain and the Company can make no assurances as to the ultimate outcome of this matter.

The Company is involved in the normal course of its business in various other litigation matters, some of which are in the pre-trial discovery stages. The Company believes that none of the other pending matters will have an outcome material to the Company's financial position, results of operations or cash flows.

The Company was notified in 1992 that it is a potentially responsible party



## Edgar Filing: IONICS INC - Form 10-K

(PRP) at a Superfund Site, Solvent Recovery Services of New England in Southington, Connecticut. Ionics' share of assessments to date for site work and administrative costs totals approximately \$77,000. The United States Environmental Protection Agency ("EPA") has not yet issued a decision regarding clean-up methods and costs. However, based upon the large number of PRPs identified, the Company's small volumetric ranking (approximately 0.5%) and the identities of the larger PRPs, the Company believes that its liability in this matter will not have a material effect on the Company or its financial position, results of operations or cash flows.

In 2002, Sievers Instruments, Inc. ("Sievers"), a wholly owned subsidiary of the Company, filed a patent infringement suit in the United States District Court for the District of Colorado against Anatel Corporation and against Anatel's acquiring company, Hach Company ("Anatel"). The suit alleges that Anatel's manufacture and sale of its Model 643 organic carbon analyzer unlawfully copied and interfered with sales of Sievers' TOC 400 total organic carbon analyzer in that the Model 643 infringes certain claims of Sievers' U.S. patents No. 5,976,468 and No. 6,271,043. The suit further asserts that the continuing sale of calibration standards by Anatel constitutes infringement. The defendants have raised certain defenses, withdrawn the accused product from the market, and introduced a redesigned analyzer. Defendants have asked the Court to rule that their redesigned analyzer does not infringe, and the Court has not yet issued its decision. The case is in early stages of discovery.

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

No matters were submitted to a vote of security holders during the fourth quarter of the fiscal year covered by this report.

### PART II

#### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

The Company's common stock is traded on the New York Stock Exchange under the symbol ION. As of March 21, 2003, there were approximately 1,100 shareholders of record. No cash dividends were paid in either 2002 or 2001 pursuant to the Company's current policy to retain earnings for use in its business. The Company currently intends to continue to retain future earnings, if any, for use in its business and does not expect to pay any cash dividends in the foreseeable future.

-15-

During the period January 1, 2001 to December 31, 2002, the range of high and low sales prices of the common stock for each quarterly period was as follows:

	2002		2001	
	High	Low	High	Low
First Quarter	\$33.90	\$28.86	\$30.94	\$23.98
Second Quarter	32.22	24.00	31.57	23.40
Third Quarter	25.21	18.90	31.50	19.27
Fourth Quarter	25.15	17.64	31.85	21.44

## Edgar Filing: IONICS INC - Form 10-K

The information referenced by this item with respect to the Company's stockholder approved plans and non-stockholder approved plans is hereby incorporated by reference from the Company's definitive Proxy Statement for the 2003 Annual Meeting (which will be filed with the Securities and Exchange Commission within 120 days of the close of the Company's fiscal year) under the caption "Equity Compensation Plan Information."

### ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data for each of the five years ended December 31, 2002, 2001, 2000, 1999 and 1998 are derived from the Company's Consolidated Financial Statements. This data should be read in conjunction with the Company's audited financial statements and related notes, and with Item 7 of this Annual Report on Form 10-K.

#### Consolidated Statement of Operations Data

	For the years ended December 31,					
Dollars in Thousands Except Per Share Amounts	2002	%	2001	%	2000	%
Revenues	\$335,371	100.0	\$466,732	100.0	\$474,551	100.0
Income (loss) before income taxes, minority interest, and gain on sale	2,509	0.7	(16,631)	(3.6)	(2,224)	(0.5)
Net income (loss)*	4,792	1.4	44,701	9.6	(1,870)	(0.4)
Earnings (loss) per basic share	0.27		2.61		(0.12)	
Earnings (loss) per diluted share	0.27		2.59		(0.12)	

\*Includes a pre-tax gain on the sale of the Aqua Cool Pure Bottled Water business of \$8.2 million and \$102.8million in 2002 and 2001, respectively.

#### Consolidated Balance Sheet Data

	December 31,			
Dollars in Thousands	2002	2001	2000	1999
Current assets	\$328,740	\$378,791	\$ 252,862	\$ 193,800
Current liabilities	114,168	156,866	173,363	99,470
Working capital	214,572	221,925	79,499	94,330
Total assets	608,013	633,313	585,813	500,900
Long-term debt and notes payable	9,670	10,126	10,911	8,350
Stockholders' equity	438,153	423,353	356,861	361,850

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

#### Overview

The Company is a leading water purification company engaged worldwide in the supply of water and related activities and the supply of water treatment equipment through the use of proprietary separations technologies and systems.

## Edgar Filing: IONICS INC - Form 10-K

The Company's products and services are used by the Company or its customers to desalt brackish water and seawater, recycle and reclaim process water and wastewater, to treat water in the home, to manufacture and supply water treatment chemicals and ultrapure water, to process food products, and to measure levels of waterborne contaminants and pollutants. The Company's

-16-

customers include industrial companies, consumers, municipalities and other governmental entities and utilities. The following discussion and analysis of financial condition and results of operations refers to the activities of the Company's four business groups, which comprise the Company's reportable operating segments. These groups are the Equipment Business Group (EBG), Ultrapure Water Group (UWG), Consumer Water Group (CWG) and Instrument Business Group (IBG). See Note 17 to the Consolidated Financial Statements contained in Item 8 of Part II of this Annual Report on Form 10-K for additional information regarding its four business segments. Within the existing business group structure, the Company has instituted a matrix-type organization which became effective at the beginning of 2002. Within each business group, the Company has begun to focus on "centers of excellence," which represent the application of treatment or separation technologies contained in The Ionics Toolbox(R) to solve certain application problems. The Company utilizes its water treatment and liquids separation expertise by employing its own proprietary products and other commodity products in the best integrated combination to solve customers' application problems. These centers of excellence include desalination, reuse, surface water, microelectronics, pharmaceuticals and instruments, among others, and each represents a range of technology solutions to solve a related applications problem.

The EBG segment provides products and services for seawater and brackish water desalination, water reuse and recycle, surface water treatment, and zero liquid discharge. Significant factors influencing the desalination market include worldwide water shortages, the need for better quality water in many parts of the world, and the reduced cost of operating of modern desalination facilities. These factors have driven a trend toward larger plants, and toward the purchase of water supply and operating and maintenance contracts. Trends impacting the water reuse and recycle market are similar, with membrane technology becoming proven in reuse and recycling applications. The surface water market has been influenced primarily by regulatory pressures to reduce contaminants in water supplies. The use of membrane technology is also becoming more accepted in surface water applications. The zero liquid discharge market, which consists of equipment and services for the minimization of liquid waste through such techniques as evaporation, concentration and crystallization, has been influenced by regulatory pressures on utilities to eliminate discharge of process water. The Company believes that it is positioned to be able to compete successfully in these applications, although it frequently faces substantially larger competitors.

The UWG segment provides equipment and services for the microelectronics, power, and pharmaceutical industries, where high quality ultrapure (i.e. very highly purified) water is required for use in production processes, and is critical to ultimate product quality and yield. The UWG segment has historically been heavily reliant upon the microelectronics industry, and the continued softness in that industry has adversely impacted both revenue and profitability. The UWG segment has been pursuing applications in other markets, such as power, pharmaceuticals and flat panel display, to lessen its reliance upon the microelectronics market.

The CWG segment provides home water units for the treatment of residential water. Prior to the divestiture of the Aqua Cool Pure Bottled Water business in

## Edgar Filing: IONICS INC - Form 10-K

the U.S., U.K. and France on December 31, 2001, it was also engaged in the home and office delivery market for bottled water. The CWG segment also produces bleach-based cleaning products and automobile windshield wash solution. Trends in the consumer water market include increased consumer awareness of and the need for improved water quality, and reduced confidence in the quality of existing water supplies.

The IBG segment manufactures and sells instruments and related products for the measurement of impurities in water. The segment serves the pharmaceutical, microelectronics and power markets where the measurement of water quality, including levels and types of contaminants in process water, is critical to production processes. The IBG segment has established a strong position in the pharmaceutical industry, providing products and services that facilitate compliance with both domestic and foreign regulatory requirements. Like the UWG segment, the performance of the IBG segment has been impacted by the downturn in the microelectronics industry, although to a lesser extent than the UWG segment.

The EBG and UWG segments have historically supplied equipment and related membranes. Starting in the mid-1980's, these groups also began to own and operate facilities that sell desalted or otherwise treated water directly to customers under water supply agreements. The revenues and cost of sales associated with equipment sales are recorded in the revenue and cost of sales lines on the Company's Consolidated Statement of Operations in the periods in which the revenues are realized. Equipment contracts are generally accounted for under the percentage completion accounting method, and the period of time over which costs are incurred and revenues are realized may vary between six months

-17-

and two years, depending on the nature and amount of equipment being supplied. For water supply agreements, with respect to smaller projects, of which the Company is the sole owner, the initial cost of the equipment becomes part of the Company's depreciable fixed asset base, and the revenues and cost of sales recorded by the Company are those that are associated with the supply of water under the water supply agreement. These contracts typically vary in length between 5 and 15 years.

In the EBG segment, which more recently has begun to pursue large-scale, long-term water treatment projects, the Company has been utilizing a business model for participating in such projects typically through joint venture project companies in which the Company will hold a minority ownership interest. Such project companies are formed to own and operate larger scale desalination, reuse, or other projects in which the Company may participate in several ways, including: having an ownership interest (typically a minority interest) in the project company; selling the desalination, reuse, or other treatment system to the project company; and providing operating and maintenance services to the project company once the project facility commences operations. These projects often exceed \$100 million in total cost and may involve multiple equity participants in the project company. The Company's participation in major projects through a minority interest in a project company structure mitigates the risks of engaging in such activities, and also provides the Company with potential long-term equity income from such investments, because these project companies typically enter into long-term concession agreements with the customer entity.

### CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The Company's Discussion and Analysis of Financial Condition and Results of Operations is based on the Company's consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted

## Edgar Filing: IONICS INC - Form 10-K

in the United States of America. The preparation of consolidated financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. On an ongoing basis, the Company evaluates its accounting policies and estimates, including those related to revenue recognition, allowance for doubtful accounts, investments in affiliated entities, income taxes, goodwill and other long-lived assets, pension plans, loss contingencies and derivative instruments. The Company bases its estimates on historical experience and other relevant information and on appropriate assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The Company's significant accounting policies are described in Note 1 to the Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K. The Company has identified the policies discussed below as critical to understanding its business and its results of operations.

### Revenue Recognition

For certain contracts involving customized equipment eligible for contract accounting under American Institute of Certified Public Accountants ("AICPA") Statement of Position No. 81-1, "Accounting for Performance of Construction-Type and Certain Construction-Type Contracts" (SOP 81-1), revenue is recognized using the percentage of completion accounting method based upon an efforts-expended method. The nature of these contracts and the types of products and services provided are considered in determining the proper accounting for a given contract. Long-term, fixed-price and cost plus fixed-fee contracts are recorded on a percentage of completion basis using the cost-to-cost method of accounting where revenue is recognized based on the ratio of costs incurred to estimated total costs at completion. The Company follows this method since reasonably dependable estimates of the costs of the total contract can be made. As a general rule, sales and profits are recognized earlier under the cost-to-cost method of percentage of completion accounting compared to the completed contract method. Contract accounting requires significant judgment relative to assessing risks, estimating contract costs and making related assumptions regarding schedules and technical issues. Due to the size and nature of the Company's long-term contracts, the estimation of cost at completion is complicated and subject to numerous variables. Contract costs include material, labor, subcontracting and other related costs. Assumptions must be made relative to the length of time to complete the contract. With respect to contract change orders, claims or similar items, judgment must be used in estimating related amounts and assessing the potential for realization. Such amounts are only included in the contract value when they can be reliably estimated and realization is reasonably assured, generally upon receipt of a customer-approved change order. Given the significance of the judgments and estimation processes described above, it is likely that materially different amounts could be recorded if different

-18-

assumptions were used or if underlying circumstances were to change. The Company closely monitors compliance and consistency of application of its critical accounting policies related to contract accounting. In addition, reviews of the status of contracts are performed periodically. In all cases, changes to total estimated costs and anticipated losses, if any, are recognized in the period in which determined.

For contracts involving the sale of equipment to a joint venture or other unconsolidated affiliated entity in which the Company has an ownership interest, the extent of revenue and profit recognized while the contract is being

## Edgar Filing: IONICS INC - Form 10-K

performed varies based on the level of equity interest held by the Company. Generally, when the Company's equity ownership in the affiliated customer is less than 20%, and accounts for such interest on a cost basis, no revenue or profit is eliminated as the contract is being performed. When the Company's equity ownership is between 20% and 50%, provided that the Company does not exercise effective control over the affiliated entity, the Company recognizes revenue as the contract is being performed but eliminates a portion of the profit equal to the Company's equity ownership percentage in the entity. After construction has been completed and commercial operations have commenced, the resulting eliminated intercompany profit is amortized over the estimated useful life of the equipment owned by the affiliated entity. When the Company's equity ownership exceeds 50%, or in instances where the Company effectively controls the affiliated entity, no revenue or profit is recognized on the sale of equipment as the contract is executed, and all of the profit on the contract is eliminated and amortized over the estimated useful life of the equipment after construction has been completed and commercial operations have commenced.

With respect to the Company's sale of equipment to Desalcott (the project company) in connection with the Trinidad project (discussed in this Item under "Financial Condition"), where the Company is a 40% equity owner of Desalcott, since the Company is considered to have provided all of the cash equity funding for the project either directly or through a loan to the Company's local majority partner, equipment revenue earned has been recognized to the extent of costs incurred as the contract is executed; however, all of the profit has been eliminated, and will be amortized over the estimated useful life of the equipment after construction has been completed and commercial operations have commenced.

The revenues and cost of sales to affiliated companies included in the Company's Consolidated Statements of Operations reflect the revenue and costs recorded from the sales of equipment to joint ventures or other unconsolidated entities. Revenue is recognized in accordance with SOP 81-1 or with Securities and Exchange Commission's Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" (SAB 101), as appropriate, less the amount of intercompany profit eliminated equal to the Company's ownership interest in the affiliated company. Eliminated intercompany profit, as described above, is amortized over the useful life of the equipment placed in service by the affiliated company (e.g. 23 years of the Trinidad project, and 27 years for the Kuwait project). The Company believes that the amortization of the intercompany profits is not material to the Company's financial statements. The amount of deferred profit at December 31, 2002 was approximately \$4.5 million.

In addition to the construction and sale of customized equipment to its customers, the Company also enters into water and other concession agreements under which the Company "owns and operates" desalination or water treatment facilities to produce and supply water to its customers. Under these contracts, where the Company remains the owner of the facility or equipment, revenue and profit is recognized as water quantities are sold to the customer (or, alternatively, pursuant to a "take or pay" arrangement if minimum quantities are not purchased). More specifically, the revenue derived from these contracts is generally recognized based on actual meter readings and agreed-upon rates in effect during the term of the contract. The constructed equipment is capitalized by the Company, included in property, plant and equipment, and amortized to cost of sales over the shorter of the estimated useful life of the equipment or the contract term.

For sales of standard products and equipment not governed by SOP 81-1, such as the sale of instruments and consumer water products, the Company follows the guidance provided by SAB 101. The Company does not recognize revenue unless there is persuasive evidence of an arrangement, title and risk of loss has passed to the customer, delivery has occurred or the services have been rendered, the sales price is fixed or determinable and collection of the related

## Edgar Filing: IONICS INC - Form 10-K

receivable is reasonably assured. It is the Company's policy to require an arrangement with its customers, either in the form of a written contract or purchase order containing all of the terms and conditions governing the arrangement, prior to the recognition of revenue. Title and risk of loss generally pass to the customer at the time of delivery of the product to a common carrier. At the time of the transaction, the Company assesses whether the sale price is fixed or determinable and whether or not collection is reasonably

-19-

assured. The Company assesses whether the sale price is fixed or determinable based upon the payment terms of the arrangement. If the sales price is not deemed to be fixed or determinable, revenue is recognized as the amounts become due from the customer. The Company does not generally offer a right of return on its products and the products are generally not subject to customer acceptance rights. The Company assesses collectibility based on a number of factors, including past transaction and collection history with a customer and the credit-worthiness of the customer. The Company performs ongoing credit evaluations of its customers' financial condition but generally does not require collateral from its customers. If the Company determines that collectibility of the sales price is not reasonably assured, revenue is deferred until such time as collection becomes reasonably assured, which is generally upon receipt of payment from the customer. The Company includes shipping and handling costs in revenue and cost of sales.

The Company's products are generally subject to warranty, and related costs are provided for in cost of sales when revenue is recognized. While the Company engages in extensive product quality programs and processes, the Company's warranty obligation is based upon historical product failure rates and costs incurred in correcting a product failure. If actual product failure rates or the costs associated with fixing failures differ from historical rates, adjustments to the warranty liability may be required in the period in which determined.

The Company provides lease financing to consumers for the purchase of certain home water treatment systems. Prior to entering into the lease agreement, the Company evaluates the creditworthiness of its customer and generally collateralizes the lease receivable with a security interest in the customer's personal residence. At the time the lease transaction is consummated, the Company recognizes revenue for the full amount of the sales value of the equipment and records a lease receivable on its balance sheet. Interest income is recognized by the Company over the term of the lease based on the interest rate stated in the lease. The Company evaluates the collectibility of its lease receivables based on its historical loss experience and assessment of prospective risk, and does so through ongoing reviews of its receivables portfolio.

The Company provides support services to customers primarily through service contracts and the Company primarily recognizes support service revenue ratably over the term of the service contract or as services are rendered.

The Company also rents equipment to customers under short-term rental agreements. The Company generally invoices customers monthly and recognizes revenue over the rental period based on amounts billed. The rental equipment is capitalized and depreciated to cost of sales over its estimated useful life.

### Allowance for Doubtful Accounts

The Company evaluates the adequacy of its reserve for doubtful accounts on an ongoing basis through detailed reviews of its receivables portfolio. Estimates are used in determining the Company's allowance for bad debts and are based on

## Edgar Filing: IONICS INC - Form 10-K

historical collection experience, current trends including prevailing economic conditions and adverse events that may affect a customer's ability to repay, percentage of accounts receivable by aging category, and other factors such as the financial condition of large customers. The Company makes adjustments to its reserve if the evaluation of reserve requirements differs from the actual aggregate reserve. This evaluation is inherently subjective because estimates may be revised as more information becomes available. Reserves for doubtful accounts are established through a charge to operations included in selling, general and administrative expenses.

### Investments in Affiliated Companies

The Company consolidates the balance sheet and results of operations of all wholly and majority owned subsidiaries and controlled affiliates. The Company also holds minority investments in certain private companies having complementary or strategic operations in different geographical locations around the world. These investments are included in investments in affiliates and include investments accounted for under the equity method of accounting. Under the equity method of accounting, which generally applies to investments that represent a 20% to 50% ownership of the equity securities of the affiliates, the Company's proportionate share of the earnings or losses of the affiliates is included in equity income. With respect to the Company's investment in Desalcott, the Company records 100% of any net loss and 40% of any net income reported by Desalcott. In periods in which Desalcott has an accumulated loss (as opposed to retained earnings), the Company records 100% of any net income of Desalcott up to the amount of Desalcott's accumulated loss, and 40% of any net income thereafter. Realization of the Company's investments in equity securities may be affected by the affiliate's ability to obtain adequate funding and execute its business plans, general market conditions, industry considerations specific to the affiliate's business, and other factors. The inability of an

-20-

affiliate to obtain future funding or successfully execute its business plan could adversely affect the Company's earnings in the periods affected by those events. Future adverse changes in market conditions or poor operating results of underlying investments could result in losses or in an inability to recover the carrying value of the investments that may not be reflected in an investment's current carrying value, thereby possibly requiring an impairment charge in the future. The Company records an impairment charge when it believes an investment has experienced a decline in value that is other-than-temporary.

### Goodwill and Other Long-Lived Assets

On January 1, 2002, the Company adopted Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" (SFAS 144). In accordance with SFAS 144, the Company assesses the potential impairment of identifiable intangibles and other long-lived assets whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors the Company considers important which could indicate an impairment include significant underperformance relative to historical or projected future operating results, significant changes in the manner of the Company's use of the acquired asset or the strategy for its overall business and significant negative industry or economic trends. When the Company determines that the carrying value of intangible and other long-lived assets may not be recoverable, the related estimated future undiscounted cash flows expected to result from the use of the asset and its eventual disposition are compared to the carrying amount of the asset. If the sum of the estimated future cash flows is less than the carrying amount, the Company records an impairment based on the estimated discounted cash flows using a discount rate determined by Company



## Edgar Filing: IONICS INC - Form 10-K

management to be commensurate with the associated risks. Any resulting impairment loss could have a material adverse impact on the Company's results of operations, depending on the magnitude of the impairment.

In 2001, as summarized in Note 6 to the Company's Consolidated Financial Statements, the Company recognized impairment losses of approximately \$13.1 million, which included approximately \$9.2 million to reduce the carrying value of assets held for sale in Malaysia, \$3.1 million of goodwill write-downs, and \$0.7 million associated with the residual value of bleach manufacturing equipment.

Goodwill represents the excess acquisition cost over the fair value of the net assets acquired in the purchase of various entities. On January 1, 2002, the Company adopted SFAS No. 142, "Goodwill and Other Intangible Assets" (SFAS 142) that requires, among other things, the discontinuance of goodwill amortization. In accordance with SFAS 142, amortization of goodwill was discontinued as of January 1, 2002. Prior to the adoption of SFAS 142, goodwill was amortized on a straight-line basis over its estimated useful life, which generally was a period ranging from 10 to 40 years. SFAS 142 requires the Company to evaluate goodwill for impairment on an annual basis. The Company evaluates the recoverability of goodwill annually in the fourth quarter, or more frequently if events or changes in circumstances, such as declines in sales, earnings or cash flows or material adverse changes in the business climate, indicate that the carrying value of an asset might be impaired. Goodwill is considered to be impaired when the net book value of a reporting unit exceeds its estimated fair value. Fair values are primarily determined using a discounted cash flow methodology. The determination of discounted cash flows is based on the businesses' strategic plans and future forecasts. The revenue growth rates included in the plans are management's best estimates based on current and forecasted market conditions and the profit margin assumptions are projected by each reporting unit based on the current cost structure, as well as any anticipated cost reductions. The Company completed its annual impairment test in the fourth quarter of 2002 using its best estimate of forecasts for future periods. No adjustment was required to the carrying value of goodwill based on the analysis performed. If different assumptions were used in these plans, the related undiscounted cash flows used in measuring impairment could be different potentially resulting in an impairment charge.

### Income Taxes

The Company estimates its income tax liability in each of the jurisdictions in which it operates and which involves an assessment of permanent and temporary differences resulting from differing treatment of items for tax and book accounting purposes. Temporary differences result in deferred tax assets and liabilities, which are included within the consolidated balance sheets. The Company must also assess the likelihood that any deferred tax assets will be recovered, and must establish a valuation allowance to the extent that it believes that it is more likely than not any deferred tax asset will not be utilized from future taxable income. To the extent the Company has established a valuation allowance, income tax expense is recorded in the Company's

-21-

Consolidated Statements of Operations. Taxable income in future periods significantly different from that projected may cause adjustments to the valuation allowance that could materially increase or decrease future income tax expense. At any time, the Company's income tax expense could be impacted by changes in tax laws, or by administrative actions or court rulings.

The Company has taken tax positions in its worldwide corporate income tax

## Edgar Filing: IONICS INC - Form 10-K

filings based on careful interpretations of global statutes, rules, regulations and court decisions that may be applied and interpreted differently by various taxing jurisdictions. These taxing jurisdictions may or may not challenge the Company's application and interpretation of a wide body of tax jurisprudence. However, the Company does not anticipate that any sustained challenge by any taxing jurisdiction could have a material adverse effect on its financial position or net income.

The Company has elected not to provide tax on certain undistributed earnings of its foreign subsidiaries which it considers to be permanently reinvested. The cumulative amount of such unprovided U.S. taxes was approximately \$9.7 million, \$8.2 million and \$5.1 million as of December 31, 2002, 2001 and 2000, respectively.

### Pension Plans

The Company has a qualified defined benefit pension plan covering most of its domestic employees. The Company accounts for its pension plan using Statement of Financial Accounting Standards No. 87, "Employers' Accounting for Pensions" (SFAS 87). The Company's calculation of pension expense are sensitive to changes in several key economic assumptions and in the demographics of its workforce. The Company's pension income or expense for the plan is computed using actuarial valuations. The assumptions made by the Company relate to financial market and other economic conditions. Changes in key economic indicators can result in changes in the assumptions the Company uses. The assumptions made at year-end used to estimate pension income or expense for the following year are the discount rate and the expected long-term rate of return on plan assets. The discount rate states the expected future cash flows necessary to satisfy the pension obligations at a present value. The Company uses judgment in selecting these assumptions giving consideration to current market conditions, future market trends, changes in interest rates and equity market performance. The Company also considers factors such as the timing and amounts of expected contributions to the plans and benefit payments to plan participants. The Company's selection of a discount rate represents the market rate of return on high-quality fixed income investments. A lower discount rate would increase the present value of the pension obligation and increase pension expense.

During 2002, the Company's review of market trends, actual returns on plan assets, and other factors resulted in reducing the expected long-term rate of return on plan assets for its year-end 2002 actuarial calculations from 9.0% to 7.0% at December 31, 2002. This rate is applied to a calculated value of plan assets which results in an amount that is included in pension income or expense in 2003. The Company also reduced the discount rate assumption from 7.0% to 6.5% at December 31, 2002. These changes, together with other factors such as the effects of the actual return on plan assets, results in the Company projecting an increase in pension expense for 2003 of approximately \$1.3 million compared with 2002.

During 2002 and 2001, the Company recorded an adjustment in the stockholders' equity section of its Consolidated Balance Sheets to reflect a minimum pension liability for its pension plan. This adjustment is determined by comparing the accumulated benefit obligation (ABO) for the plan to the fair value of the plan's assets. The amount by which the ABO exceeds the fair value of the plan assets, after adjusting for previously recorded accrued or prepaid pension cost for the plan, must be recorded as a minimum pension liability, with a corresponding increase in an intangible asset, if appropriate, and a reduction to stockholders' equity, consistent with SFAS 87. The after-tax adjustment related to the Company's recording a minimum pension liability in 2002 did not impact earnings, but reduced stockholders' equity by \$1.8 million. This adjustment is computed each year at December 31 and could potentially reverse in the future if financial markets improve and interest rates increase, or could potentially increase if financial market performance and interest rates continue

to decline.

#### Loss Contingencies

The Company is subject to certain claims and litigation including proceedings under government laws and regulations and commercial disputes relating to its operations, including ordinary routine litigation incidental to its business. (See "Note 8. Commitments and Contingencies to the Consolidated Financial Statements"). Management reviews and determines which liabilities, if any, arising from these claims and litigations could have a material adverse effect on the Company's consolidated financial position, liquidity or results of operations. Management assesses the likelihood of any adverse judgments or

-22-

outcomes as well as potential ranges of probable losses. Loss contingency liabilities are recorded for these contingencies based on careful analysis of each matter with the assistance of outside counsel when it is probable that a liability has been incurred and the amount of the loss is reasonably estimable. These liabilities may change in the future due to new developments relating to each matter or changes in approach such as a change in settlement strategy.

#### Derivative Instruments

The Company adopted SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," as amended by SFAS 137 and SFAS 138 in the first quarter of 2001. SFAS 133 requires all derivatives to be recognized on the Consolidated Balance Sheet at fair value. The adoption of SFAS 133 did not have a material impact on the Company's financial position or results of operations. The Company conducts business in a number of foreign countries, with certain transactions denominated in local currencies. The purpose of the Company's foreign currency management is to minimize the effect of exchange rate fluctuations on certain foreign denominated monetary assets and anticipated cash flows. The terms of currency instruments used for hedging purposes are consistent with the timing of the transactions being hedged. The Company does not use derivative financial instruments for trading or speculative purposes. For purposes of presentation within the Consolidated Statement of Cash Flows, derivative gains and losses are presented within cash provided by operating activities.

The Company enters into foreign currency forward contracts to hedge its exposures associated with a portion of its forecasted revenue transactions. These derivative instruments are designated as foreign currency cash flow hedges. All outstanding derivatives are recognized on the Consolidated Balance Sheet at fair value and changes in their fair value are recorded in accumulated other comprehensive income (loss) until the underlying forecasted transaction occurs. Once the underlying forecasted transaction is realized, the gain or loss from the derivative designated as a hedge of the transaction is reclassified from accumulated other comprehensive income (loss) to the statement of operations in the related revenue caption. In the event the underlying forecasted transaction does not occur, the amount recorded in accumulated other comprehensive income (loss) will be reclassified to selling, general and administrative expense in the statement of operations in the then-current period. No amounts were reclassified from accumulated other comprehensive income (loss) to selling, general and administrative expense during 2002, 2001 and 2000. The Company's cash flow hedges generally mature within two years or less.

The Company also enters into foreign exchange forward contracts to hedge its exposures associated with foreign-currency denominated assets and liabilities. These derivative instruments are designated as foreign currency fair value hedges. The derivatives are recognized on the Consolidated Balance Sheet at fair

## Edgar Filing: IONICS INC - Form 10-K

value and period-end changes in fair value are recorded in selling, general and administrative expense in the statement of operations.

Since the Company is using foreign exchange derivative contracts to hedge foreign exchange exposures, the changes in the value of the derivatives are highly effective in offsetting changes in the cash flows of the hedged item. Hedge effectiveness is assessed on a quarterly basis. Any ineffective portion of the derivatives designated as cash flow hedges is recognized in current earnings in "Selling, general and administrative expense." The ineffective portion of the derivatives consists of discounts or premiums on forward contracts and gains or losses associated with differences between actual and forecasted amounts. In any instance in which the designated hedged item matures, is terminated, or, in the case of an anticipated transaction, is deemed unlikely to occur, the related derivative contract is closed and any gain or loss is immediately recognized in the Consolidated Statement of Operations in "Selling, general and administrative expense."

### RESULTS OF OPERATIONS

Comparison of Years Ended December 31, 2002 and December 31, 2001  
-----

The Company reported consolidated revenues of \$335.4 million and net income of \$4.8 million in 2002, compared to consolidated revenues of \$466.7 million and net income of \$44.7 million in 2001. Results for 2001 included the operations of the Aqua Cool Pure Bottled Water business ("Aqua Cool Business"), which was divested on December 31, 2001, as well as the results of the Company's majority-owned Malaysian subsidiary, Ionics Enersave ("Enersave") which was divested in May 2002.

-23-

### Revenues -----

Total Company revenues of \$335.4 million for 2002 decreased \$131.4 million or 28.1% from revenues of \$466.7 million for 2001. The 2001 revenues of the Aqua Cool Business represented \$76.2 million, or 58.0% of the decrease, and the revenues of the Company's majority-owned Malaysian subsidiary represented \$14.8 million, or 11.3% of the decrease.

EBG revenues of \$154.4 million in 2002 decreased \$7.2 million, or 4.4%, compared to revenues of \$161.6 million in 2001. The decrease in revenues is primarily attributable to reduced revenues from the Zero Liquid Discharge ("ZLD") business, primarily as a result of the Company's business strategy to not pursue the civil construction scope on ZLD projects. This decrease was partially offset by increases in EBG's water supply business in Spain, as well as increases in the revenues of the Company's Italian subsidiary.

UWG revenues of \$102.4 million decreased \$31.2 million, or 23.4%, compared to revenues of \$133.6 million for 2001. The revenues associated with the Company's majority-owned Malaysian subsidiary, which was divested in May 2002, amounted to \$19.0 million in 2001 and \$4.2 million in 2002, and accordingly represented 11.1% of the revenue decrease. The additional decrease in revenues relates primarily to the continued downturn in the microelectronics sector.

CWG revenues totaled \$38.7 million in 2002 compared to revenues of \$123.7 million in 2001, representing a decrease of \$85.1 million or 68.7%. The 2001 revenues of the Aqua Cool Business of \$76.2 million represented 89.5% of the

## Edgar Filing: IONICS INC - Form 10-K

decrease in revenues. CWG revenue levels were also adversely impacted by lower sales of automobile windshield wash solution and consumer bleach products due to the loss of several customers. Additionally, CWG experienced lower demand for home water treatment equipment as a result of the general downturn in the domestic economy.

IBG revenues of \$27.7 million in 2002 increased \$1.1 million, or 4.3%, compared to revenues of \$26.6 million in 2001. The increase in revenues primarily resulted from increased sales volume to the pharmaceutical industry driven by regulatory requirements in that industry, as well as continued growth in recurring sales of the Company's after-market products.

Revenues from sales to affiliated companies of \$12.2 million in 2002 decreased \$9.1 million or 42.7% compared to revenues from affiliated companies of \$21.2 million in 2001. The decrease in revenues from affiliated companies primarily resulted from lower equipment sales to the Trinidad joint venture company, Desalination Company of Trinidad and Tobago Ltd. ("Desalcott"), as a result of the substantial completion of the first four out of the five construction phases of the desalination facility in early 2002. The decrease was partially offset by an increase in sales of equipment in the second half of 2002 to the Kuwaiti joint venture company, Utilities Development Company ("UDC"), for the Kuwait reuse project.

The Company has entered into a number of large contracts, which are generally categorized as either "equipment sale" contracts or "build, own and operate" (BOO) contracts. The Company believes that the remaining duration on its existing sale of equipment contracts ranges from less than one year to three years and the remaining duration on its existing BOO contracts ranges from one year to 25 years. The time to completion of any of these contracts, however, is subject to a number of variables, including the nature and provisions of the contract and the industry being served. Historically, as contracts are completed, the Company has entered into new contracts with the same or other customers. In the past, the completion of any one particular contract has not had a material effect on the Company's business, results of operations or cash flows.

### Cost of Sales

-----

The Company's total cost of sales as a percentage of revenue was 71.6% in 2002 and 73.1% in 2001. The resulting gross margin increased to 28.4% in 2002 compared to 26.9% in 2001. Cost of sales as a percentage of revenue decreased in the EBG, UWG, and IBG segments and increased in the CWG segment.

EBG's cost of sales as a percentage of revenue decreased to 74.0% in 2002 from 78.5% in 2001. The improvement in cost of sales as a percentage of revenue from 2001 to 2002 related to the elimination of losses incurred on the civil construction portion of ZLD projects that were incurred in 2001. Additionally,

-24-

the improvement in cost of sales as a percentage of revenue is attributable to a shift in product mix from lower margin capital equipment sales to higher margin water supply and other products.

UWG's cost of sales as a percentage of revenue decreased to 76.6% in 2002 from 80.2% in 2001. The decrease in cost of goods sold as a percentage of revenue primarily reflects the elimination of losses associated with projects in Australia, improved operating results in the group's Asian operations, and the reduction of losses associated with the Company's majority-owned Malaysian

## Edgar Filing: IONICS INC - Form 10-K

subsidiary, which was divested in May 2002.

CWG's cost of sales as a percentage of revenue increased to 64.4% in 2002 from 59.8% in 2001. The increase in the 2001 cost of sales as a percentage of revenue compared to 2002 cost of sales as a percentage of revenue was primarily attributable to the divestiture of the Company's Aqua Cool Business on December 31, 2001, as well as lower margin levels in both the Home Water and Elite Consumer product lines. The Elite Consumer products line continued to face pricing pressure due to increased competition while Home Water product line margins were negatively impacted by the continued decline in the domestic economy.

IBG's cost of sales as a percentage of revenue decreased to 42.2% in 2002 from 48.0% in 2001, primarily reflecting absorption of manufacturing overhead as a result of higher sales volume along with cost reductions in the service businesses.

Cost of sales to affiliated companies as a percentage of revenue decreased to 90.1% in 2002 from 97.4% in 2001. The decrease in 2002 was primarily due to lower revenues from sales to Desalcott, where, for accounting purposes, all profit on sales to Desalcott is being deferred, and the increase in equipment sales to UDC, where the Company defers profit equal to its 25% equity ownership in UDC, and will subsequently recognize the deferred profit over the estimated useful life of the equipment.

### Operating Expenses

-----

Research and development expenses as a percentage of revenue increased slightly during 2002 compared to 2001. The Company currently expects to continue to invest in new products and technologies at approximately the same level as in prior years.

Selling, general and administrative expenses decreased \$28.0 million to \$91.8 million in 2002 from \$119.8 million in 2001. The elimination of 2001 selling, general and administrative expenses relating to the Aqua Cool Business resulting from the divestiture of the business on December 31, 2001, as well as the divestiture of the Company's majority-owned Malaysian subsidiary in the second quarter of 2002, and the cessation of goodwill amortization amounted to approximately \$40.2 million. These decreases in 2002 selling, general and administrative expenses were partially offset by increased operating expenses associated with the Company's European operations, primarily France, higher than normal professional service fees related primarily to the Company's restatement of its interim financial statements for the first and second quarters of 2002, increased provisions for doubtful accounts, and other general increases.

### Interest Income and Interest Expense

-----

Interest income totaled \$3.5 million in 2002 and \$1.0 million in 2001. Interest expense, net of capitalized interest of \$0.3 million, was \$1.2 million in 2002 and \$5.2 million in 2001. The increase in interest income in 2002 compared to 2001 reflects the investment of proceeds resulting from the divestiture of the Aqua Cool Business on December 31, 2001. Additionally, a portion of the proceeds from the disposition of the Aqua Cool Business were utilized to reduce domestic short-term borrowings which resulted in lower interest expense of \$0.9 million in 2002 compared to \$5.2 million in 2001.

### Equity Income

-----

The Company's proportionate share of the earnings and losses of affiliated

## Edgar Filing: IONICS INC - Form 10-K

companies in which it holds a minority equity interest is included in equity income.

-25-

Equity income amounted to \$3.4 million in 2002 and \$1.4 million in 2001. The Company's equity income is derived primarily from its 20% equity interest in a Mexican joint venture company which owns two water treatment plants in Mexico, its 40% equity interest in Desalcott, its equity interests in several joint ventures in the Middle East which engage in bottled water distribution, and to a lesser extent from its other equity investments in affiliated companies. The increase in equity income of \$2.0 million in 2002 compared to 2001 reflects the improved performance of Desalcott (the plant began commercial operation in May 2002) and the improved performance of the Company's investments in several joint ventures in the Middle East.

### Gain on Sale of Aqua Cool -----

On December 31, 2001, the Company completed the sale of its Aqua Cool Business in the United States, United Kingdom and France. Giving effect to reserves established by the Company for purchase price adjustments and direct and incremental costs, the Company recorded a pre-tax gain of \$102.8 million in 2001. As a result of final purchase price adjustments based on the number of customers and working capital levels, and the resolution of certain claims made by Nestle, the Company and Nestle reached final agreement on a purchase price of \$207.0 million in the first quarter of 2003. As a result of such adjustments, the Company realized an additional pre-tax gain of \$8.2 million in 2002, net of direct and incremental costs of the transaction, including approximately \$3.4 million of non-recurring management and employee compensation.

### Income Taxes -----

The Company's effective tax rate for 2002 was 46% compared to 49% in 2001. The Company's 2002 tax rate was primarily affected by losses in certain of its foreign subsidiaries for which the Company may not be able to realize future tax benefits. The 2001 tax rate was primarily impacted by the gain on the sale of the Company's Aqua Cool Business, which included non-deductible goodwill, as well as significant losses by the Company's majority-owned Malaysian subsidiary that were not benefited since realization of those benefits was not likely.

### Net Income -----

Net income amounted to \$4.8 million in 2002 compared to \$44.7 million for 2001. Net income in 2002 and 2001 included pre-tax gains of \$8.2 million and \$102.8 million, respectively, from the sale of the Company's Aqua Cool Business.

### Comparison of Years Ended December 31, 2001 and December 31, 2000 -----

The Company reported consolidated revenues of \$466.7 million and net income of \$44.7 million in 2001, compared to consolidated revenues of \$474.6 million and a net loss of \$1.9 million in 2000. The increase in net income resulted primarily from a pre-tax gain of \$102.8 million on the sale of the Aqua Cool Business in the U.S., U.K. and France.

### Revenues

## Edgar Filing: IONICS INC - Form 10-K

-----  
Total Company revenues were \$466.7 million in 2001, compared to \$474.6 million in 2000. Total revenues for 2001 and 2000 include revenues associated with the Company's Aqua Cool Business which was divested on December 31, 2001, and the Company's majority-owned Malaysian subsidiary which was divested in May 2002.

EBG revenues of \$161.6 million in 2001 decreased slightly compared to 2000 revenues of \$162.1 million. Total equipment revenues decreased slightly, while supply business revenues increased over 2000.

UWG revenues of \$133.6 million in 2001 decreased by \$22.8 million or 14.6% from 2000 revenues of \$156.4 million in 2000. This decrease is primarily the result of continued deterioration, both domestically and internationally, in the Company's microelectronics equipment business, which declined substantially from 2000 levels due to softness in the microelectronics industry generally.

CWG revenues of \$123.7 million in 2001 increased by \$15.8 million or 14.6% from revenues of \$108.0 million in 2000, reflecting increases in the Company's bottled water, home water and bleach-based consumer product businesses.

-26-

IBG revenues of \$26.6 million in 2001 decreased by 6.4% from 2000 revenues of \$28.4 million, also reflecting the further deterioration of the microelectronics sector, which is an important customer for IBG products.

Revenues from affiliated companies of \$21.2 million in 2001 increased \$1.5 million compared to revenues from affiliated companies of \$19.7 million in 2000. The increase in revenues from affiliated companies primarily resulted from increased equipment sales to Desalcott, which was engaged throughout 2001 in the construction of the Trinidad desalination facility.

The Company has entered into a number of large contracts, which are generally categorized as either "equipment sale" contracts or "build, own and operate" (BOO) contracts. The Company believes that the remaining duration on its existing sale of equipment contracts ranges from less than one year to three years and the remaining duration on its existing BOO contracts ranges from one year to 25 years. The time to completion of any of these contracts, however, is subject to a number of variables, including the nature and provisions of the contract and the industry being served. Historically, as contracts are completed, the Company has entered into new contracts with the same or other customers. In the past, the completion of any one particular contract has not had a material effect on the Company's business, results of operations or cash flows.

### Cost of Sales

-----

Cost of sales as a percentage of revenues was 73.1% and 73.8% in 2001 and 2000, respectively, and overall Company gross margin was 26.9% and 26.2% in 2001 and 2000, respectively. Cost of sales as a percentage of revenue decreased in the EBG and CWG segments, and increased in the UWG and IBG segments.

Cost of sales as a percentage of revenue for the EBG segment was 78.5% in 2001 compared to 79.7% in 2000, reflecting a continued high level of equipment revenues, which have lower gross margins than service revenues. The losses incurred on several ZLD equipment contracts with civil construction scope had an adverse impact on EBG's cost of sales as a percentage of revenue in 2001.



## Edgar Filing: IONICS INC - Form 10-K

Cost of sales as a percentage of revenues for UWG increased to 80.2% in 2001 from 79.2% in 2000, reflecting cost increases incurred on projects executed by the Company's majority-owned Malaysian subsidiary and one of the Company's Australian subsidiaries. The continued downturn of the microelectronics industry also had an adverse impact on both sales volume and profitability, as the utilization of capacity decreased with reduced sales volume while certain components of costs of sales remained fixed.

Cost of sales as a percentage of revenue for CWG decreased to 59.8% in 2001 from 61.3% in 2000. Numerous factors impacted the CWG cost of sales percentage in 2001, including the gain on the sale of certain bottled water assets realized earlier in the year offset by costs associated with readying the Aqua Cool Business for sale in the second half of 2001.

IBG cost of sales as a percentage of revenues increased to 48.0% in 2001 from 44.3% in 2000, primarily as a result of reduced sales volume levels caused by the further deterioration of the microelectronics sector.

Cost of sales to affiliated companies as a percentage of revenue increased to 97.4% in 2001 from 93.1% in 2000. This increase in 2001 was primarily due to higher revenues from sales to Desalcott, the joint venture company relating to the Company's Trinidad project.

### Operating Expenses

Research & development expenses decreased to \$6.4 million in 2001 compared to \$8.0 million in 2000. Selling, general and administrative expenses increased 5.8% in 2001 to \$119.8 million from \$113.2 million in 2000. The increase is primarily attributable to a significant shift in product mix between UWG, which has a lower operating expense component, and CWG, which has a significantly higher expense component.

### Impairment of Long-Lived Assets

During 2001 and 2000, the Company wrote down approximately \$13.1 million and \$3.4 million, respectively, of impaired long-lived assets. In 2001, the write-downs included approximately \$9.2 million to reduce the carrying value of

-27-

assets held for sale related to the Company's divestiture of its majority-owned Malaysian subsidiary and \$3.1 million of goodwill associated with previous acquisitions.

In late 2001, the Company began negotiations to sell its majority-owned Malaysian subsidiary to the subsidiary's minority shareholders. In early 2002, the Company had signed a term sheet for the disposition of the Malaysian subsidiary and the sale was completed in May 2002. Accordingly, at December 31, 2001, the Company recorded an impairment charge of approximately \$9.2 million, representing the difference between the Company's 55% ownership interest in the net asset value of the Malaysian subsidiary (principally property, plant and equipment and goodwill) and the anticipated net proceeds from the sale of the subsidiary of approximately \$1.0 million.

The Company recorded asset impairment charges related to its decision to abandon plans to commence bleach-manufacturing operations in Elkton, Maryland. In 2001 and 2000, these impairment charges amounted to \$0.7 million and \$2.0 million,

## Edgar Filing: IONICS INC - Form 10-K

respectively. The Elkton plant and equipment were part of a Company strategy to expand bleach manufacturing in the mid-Atlantic market. This strategy included the potential acquisition by the Company of a regional bleach manufacturer, but negotiations relating to the potential acquisition ceased during the fourth quarter of 2000. The impairment charge recorded in 2000 was consequently derived by writing off the net book value of specific equipment for which there was no salvage value or anticipated use within the Company. Due to overcapacity in the bleach manufacturing industry (as evidenced by the exit of other bleach manufacturers in the Northeast), the Company was subsequently unable during 2001 to utilize or otherwise sell the remaining equipment and consequently wrote off the remaining \$0.7 million net book value.

Additionally, \$0.8 million of goodwill impairment was recognized in 2000 relating to an acquisition made by the Company in 1996.

### Interest Income and Interest Expense

-----

Interest income was \$1.0 million in 2001 compared to \$1.3 million in 2000. Interest expense totaled \$5.2 million in 2001 and \$4.9 million in 2000. Interest expense in 2001 reflected higher average borrowings (although at lower prevailing rates) compared to 2000. Increased borrowing levels in 2001 compared to 2000 were primarily attributable to continued investment in, and working capital requirements of, the Company's Trinidad project, as well as other working capital requirements.

### Equity Income

-----

Equity income amounted to \$1.4 million in 2001 and \$1.6 million in 2000. The Company's equity income was derived primarily from its 20% equity interest in a Mexican joint venture company which owns wastewater treatment plants in Mexico, its 40% equity ownership in Desalcott, as well as several joint ventures in the Middle East which engage in bottled water distribution, and to a lesser extent from its other equity investments in affiliated companies.

### Gain on Sale of Aqua Cool

-----

On December 31, 2001, the Company completed the sale of its Aqua Cool Business in the United States, United Kingdom and France. Giving effect to reserves established by the Company for purchase price adjustments and direct and incremental costs, the Company recorded a pre-tax gain of \$102.8 million in 2001.

### Income Taxes

-----

The Company's effective tax rate for 2001 was 49% compared to 34% in 2000. The 2001 tax rate was primarily impacted by the gain on the sale of the Company's Aqua Cool Business, which included non-deductible goodwill, as well as significant losses by the Company's majority-owned Malaysian subsidiary that were not benefited since realization of those benefits was not likely.

### Net Income

-----

Net income was \$44.7 million in 2001 compared to a net loss of \$1.9 million in 2000. In 2001, net income included a net pre-tax gain of \$102.8 million

## Edgar Filing: IONICS INC - Form 10-K

resulting from the sale of the Company's Aqua Cool Pure Bottled Water business in the U.S., U.K., and France.

### FINANCIAL CONDITION

Net working capital decreased \$7.4 million during 2002 to \$214.6 million and the Company's current ratio increased to 2.9 in 2002 from 2.4 in 2001.

At December 31, 2002, the Company had total assets of \$608.0 million, compared to total assets of \$633.3 million at December 31, 2001. Cash and cash equivalents decreased \$42.2 million in 2002, primarily reflecting investments in projects and property, plant and equipment, as well as the paydown of short-term notes payable and current taxes payable. In addition, at December 31, 2002, the Company had \$4.3 million in restricted cash reflecting advance payments for work to be performed on the Kuwait wastewater treatment facility. Net accounts receivable decreased \$15.9 million in 2002, reflecting the decreased revenue levels during 2002 compared to 2001, as well as a reclassification of \$10.0 million from current accounts receivable to receivables from affiliated companies, long-term relating to the Trinidad project. The reclassification is based on the expectation that the Company is obligated to contribute an additional \$10.0 million to Desalcott as an additional source of funds for project completion costs once all bridge loan proceeds have been expended. Net property, plant and equipment increased \$12.9 million during 2002, reflecting capital expenditures of \$33.5 million, primarily for build, own and operate facilities in the EBG and UWG segments, offset by depreciation charges of \$23.8 million. Current income taxes payable decreased \$20.0 million during 2002, primarily reflecting the tax payments made on the gain from the sale of the Aqua Cool Business.

Net cash used by operating activities amounted to \$0.6 million during 2002, reflecting cash used for payments of accounts payable, accrued expenses, and current income taxes, offset by depreciation charges and a reduction in accounts receivable. Net cash used in investing activities amounted to \$33.8 million in 2002, reflecting additions to property, plant and equipment, primarily relating to investments made in the UWG segment for a build, own and operate facility in the power industry and in the EBG segment for the expansion of an existing build, own and operate facility in Curacao. Net cash used by financing activities totaled \$13.9 million during 2002, primarily reflecting the repayment of the Company's short-term borrowings.

From time to time, the Company enters into joint ventures with respect to specific projects, including the projects in Trinidad, Kuwait and Israel described below. Each joint venture arrangement is independently negotiated based on the specific facts and circumstances of the project, the purpose of the joint venture company related to the project, as well as the rights and obligations of the other joint venture partners. Generally, the Company has structured its project joint ventures so that the Company's obligation to provide funding to the underlying project or to the joint venture entity is limited to its proportional capital contribution, which can take the form of equity or subordinated debt. Except in situations that are negotiated with a specific joint venture entity as discussed below, the Company has no other commitment to provide for the joint venture's working capital or other cash needs. In addition, the joint venture entity typically obtains third-party debt financing for a substantial portion of the project's total capital requirements. In these situations, the Company is typically not responsible for the repayment of the indebtedness incurred by the joint venture entity. In connection with certain joint venture projects, the Company may also enter into contracts for the supply and installation of the Company's equipment during the construction of the project, for the operation and maintenance of the facility once it begins operation, or both. These commercial arrangements do not require the Company to

## Edgar Filing: IONICS INC - Form 10-K

commit to any funding for working capital or any other requirements of the joint venture company. As a result, the Company's exposure with respect to its joint ventures is typically limited to its debt and equity investments in the joint venture entity, the fulfillment of any contractual obligations it has to the joint venture entity and the accounts receivable owing to the Company from the joint venture entity.

In the second quarter of 2002, construction was completed on the first four (out of five) phases of the Trinidad desalination facility, in which the Company has a 40% equity interest, and the facility commenced water deliveries to its customer, the Water and Sewerage Authority of Trinidad and Tobago. In 2000, the Company acquired 200 ordinary shares of Desalcott for \$10 million and loaned \$10 million to Hafeez Karamath Engineering Services Ltd. ("HKES"), the founder of Desalcott and promoter of the Trinidad desalination project, to enable HKES to acquire an additional 200 ordinary shares of Desalcott. Prior to those investments, HKES owned 100 ordinary shares of Desalcott. As a result, the Company currently owns a 40% equity interest in Desalcott, and HKES currently owns a 60% equity interest in Desalcott.

-29-

The Company's \$10 million loan to HKES is included in notes receivable, long-term on the Company's Consolidated Balance Sheets. The loan bears interest at a rate equal to 2% above the London Interbank Offered Rate (LIBOR), with interest payable starting October 25, 2002 and every six months thereafter and at maturity. Prior to maturity, however, accrued interest payments (as well as principal payments) are payable only to the extent dividends or other distributions are paid by Desalcott on the ordinary shares of Desalcott owned by HKES and pledged to the Company. Principal repayment is due in 14 equal installments commencing on April 25, 2004 and continuing semiannually thereafter. The loan matures and is payable in full on April 25, 2011. The loan is secured by a security interest in the shares of Desalcott owned by HKES and purchased with the borrowed funds, which is subordinate to the security interest in those shares in favor of the Trinidad bank that provided the construction financing for Desalcott. In addition, any dividends or other distributions paid by Desalcott to HKES must be applied to loan payments to the Company.

In 2000, Desalcott entered into a "bridge loan" agreement with a Trinidad bank providing \$60 million in construction financing. Effective November 8, 2001, the loan agreement was amended to increase maximum borrowings to \$79.9 million. The Company is obligated to lend up to \$10 million to Desalcott as an additional source of funds for project completion costs once all bridge loan proceeds have been expended. However, the bridge loan of \$79.9 million and the \$20 million equity provided to Desalcott (together with the additional \$10 million dollars the Company is obligated to lend to Desalcott) have not provided sufficient funds to pay all of Desalcott's obligations in completing construction and commissioning of the project prior to receipt of long-term financing. Included in Desalcott's obligations is approximately \$30.1 million payable to the Company's Trinidad subsidiary for equipment and services purchased in connection with the construction of the facility. The Company currently intends to convert \$10 million of this amount into a loan to Desalcott to satisfy the Company's loan commitment described above. The terms of this loan are currently being negotiated with Desalcott. Although the Company currently anticipates that Desalcott will pay its remaining outstanding obligations to the Company's subsidiary partially out of cash flow from the sale of water and from the proceeds from new long-term debt financing, Desalcott has disputed certain amounts payable under the construction contract and this matter is now subject to the dispute resolution procedures of the contract. The Company does not believe resolution of these matters will have a material impact on its financial position. Desalcott has received proposals for new long-term debt financing, including a term sheet and a draft term loan agreement from the Trinidad bank

## Edgar Filing: IONICS INC - Form 10-K

which provided the bridge loan, and is currently negotiating the terms of the financing. Such new long-term debt financing may not be completed on terms acceptable to Desalcott, or at all. Moreover, although the Trinidad bank that made the bridge loan to Desalcott has not required repayment of the bridge loan, which matured on September 1, 2002, pending completion of the long-term debt financing, there can be no assurance that the bank will not exercise its rights and foreclose on its collateral, in which event the Company's equity investment in, and receivable from, Desalcott as well as the loan receivables from HKES would all be at risk.

During 2001, the Company acquired a 25% equity interest in a Kuwaiti project company, Utilities Development Company W.L.L. ("UDC"), which was awarded a concession agreement by an agency of the Kuwaiti government