IONICS INC
Form 10-K405
March 29, 2002

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 02549

FORM 10-K

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

For the fiscal year ended: December 31, 2001

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)	4-2068530 (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 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 X No
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Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

The aggregate market value of the Common Stock of the registrant held by non-affiliates as of March 22, 2002 was $530,069,032 (17,093,487 shares at $31.01 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 22, 2002, 17,533,242 shares of Common

Stock, $1 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, 2001. Portions of such proxy statement are incorporated by reference into Part III of this Annual Report on Form 10-K.

IONICS, INCORPORATED

ANNUAL REPORT ON FORM 10-K
FOR YEAR ENDED DECEMBER 31, 2001

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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 services and 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, to treat water in the home, to manufacture and supply water treatment chemicals and ultrapure water, to process food products, recycle and reclaim process water and wastewater, and to 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. The current reporting reflects this business group structure, which the Company put into place in the latter part of 1998. The business group structure is based upon defined areas of management responsibility with respect to markets, applications and products. These business group segments are the Equipment Business Group, Ultrapure Water Group, Consumer Water Group, and Instrument Business Group. In 2001, these segments accounted for approximately 44%, 23%, 27% and 6%, respectively, of the Company's total revenues. On December 31, 2001, the Company sold its Aqua Cool Pure Bottled Water division, constituting the major portion of the assets of the Consumer Water Group. Approximately 44% of the Company's 2001 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, a number of product and service lines (centers of excellence) have been identified, including desalination, reuse, surface water, microelectronics, pharmaceuticals and instruments, among other products and services. 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 lease of trailers for the production of ultrapure water will be 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, will be 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 do not reflect these changes.

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 44% of revenues in 2001. 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 and chemical processing activities.

Desalination and Related Water Treatment Equipment and Processes

Opportunities for the sale of desalination and related water treatment equipment 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 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 2001 the Company began construction of a one million gallon-per-day seawater desalination plant in the United Arab Emirates utilizing RO and UF membrane technology; commissioned a 7.5 million gallon per day RO facility in Santa Ana, California for color removal to produce clean drinking water; and received an order from a customer for additional EDR units to expand brewing operations capacity in

Mexico.

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 booked an order 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. This award is expected to generate approximately $17 million in revenues to the Company.

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.

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. A representative example in 2001 was the award to the Company of a contract to design and supply a ZLD system for a new 2,250 megawatt natural gas-fueled power plant near Gila Bend, Arizona. This system will be designed to operate at a flow rate of nearly 3.5 million gallons per day.

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, metalworking and automobile factories, textile 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 2001, the Company completed a waste treatment system which included a comprehensive integrated membrane system incorporating MF and RO for the Luggage Point municipal sewage plant in Brisbane, Australia. Also in 2001, a Kuwaiti project company, in which the Company has a 25% equity interest, entered into a concession agreement in Kuwait under which the project company has entered into a contract to construct, own and operate the largest membrane-based water reuse facility in the world (see "Foreign Operations" under this Item I).

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 provide a complete service package under which the Company will own and operate the water purification facility. In these situations, the Company is responsible for the financing, construction, operation and maintenance of the water treatment facilities.

Ionics, through its wholly owned subsidiary, Ionics Iberica, S.A., owns and operates a 5.5 million gallon per day capacity brackish water EDR facility and a 3.6 million gallon per day RO seawater facility on Grand Canary Island, Spain. Under long-term contracts, the Company is selling 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 a 600,000 gallon per day EDR brackish water desalting plant 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.

During 2001, the Company signed an agreement with the government-owned public utility in Curacao to expand the size of the Company's existing membrane-based seawater desalination plant from 2.6 million gallons per day to over 4.5 million gallons per day. This expansion will permit the utility to provide fresh drinking water to up to one-third of the island's population. On the island of Anguilla, Ionics completed the expansion of an existing desalination plant owned by the Company by 50% to 900,000 gallons per day in 2001.

Construction has been nearly completed in Trinidad for what will be the largest seawater desalination plant in the Western Hemisphere and the second largest in the world. The seawater reverse osmosis (SWRO) desalination plant will provide 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 will be operated by a joint venture between the Company and its local partner, Hafeez Karamath Engineering Services Ltd. The plant began to produce water in the first quarter of 2002 and will be phased in to its design capacity of 26.4 million gallons per day. It is anticipated that the plant will begin water deliveries by mid-2002. When requested by WASA, the plant can be expanded to a capacity of 28.8 million gallons per day.

The Company also owns and operates more than 35 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 between Ionics and its local partner, Williams Industries.

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. The Company's wholly owned

Australian subsidiary, Elite Chemicals Pty. Ltd. (Elite), utilizes Cloromat systems to produce sodium hypochlorite on-site in Brisbane for the industrial, commercial and janitorial supply of bleach products, and to supply sodium

hypochlorite to treat the City of Brisbane's drinking water supply. Elite also distributes bleach products to the Sydney area. The Company also owns sodium hypochlorite generating facilities in Ludlow, Massachusetts and Acapulco, Mexico.

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 receives a processing fee 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.

Fabricated Products

At its Bridgeville and Canonsburg, Pennsylvania facilities, the Company fabricates products for industrial and defense-related applications. The Company's experience and expertise in design, welding, machining and assembly to meet exceptionally fine tolerances have been utilized to fabricate products ranging from intricate small parts to large multi-ton assemblies. The Company has entered into contracts for the fabrication of storage systems to contain spent nuclear fuel from U.S. nuclear power plants.

Ultrapure Water Group

The Ultrapure Water Group accounted for approximately 23% of the Company's 2001 revenues. This segment provides equipment and services for specialized industrial users of ultrapure water, such as companies in the life sciences, microelectronics and power industries. Ultrapure water is water that has been purified by a series of processes to the degree that remaining impurities are measured in parts per billion or trillion. The microelectronics industry has 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 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 grown 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 2001, six Ionics EDI systems were started up in Taiwan and in China for printed circuit board and semiconductor manufacturing operations.

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 industries. In 2001, among its other activities, this division was awarded a contract to provide a turnkey ultrapure water system for a validated water-for-injection system to a Florida-based leader in the orthobiologics industry.

Ultrapure Water Supply

In industries such as power generation, semiconductors, pharmaceuticals and biotechnology, ultrapure water is critical to product 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 2001, Company-owned or operated equipment for the production of ultrapure water and other purified process water under contract with companies in various industries had a total capacity of approximately 25,000 gallons per minute.

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

One of the Company's important ultrapure water service activities is ion-exchange regeneration services, which are provided at four U.S. locations and one foreign location. The Company conducts regeneration activities in the U.S. at a 66,000 square foot building in San Jose, California which contains resin regeneration, manufacturing and service facilities. The Company also provides system sanitization and high-flow deionization services at customer sites.

Consumer Water Group

This business group segment accounted for approximately 27% of the Company's 2001 revenues. The Company's consumer water products currently serve the home water purification and consumer bleach-based product market areas. On December 31, 2001, the Company completed the sale of its five-gallon bottled water production and delivery business conducted in the United States, United Kingdom, and France, to affiliates of Perrier Vittel S.A., a subsidiary of Nestle S.A. The Company received total proceeds of approximately $220 million in the transaction, of which $10 million is being held in escrow pursuant to the terms of the divestiture agreement. The purchase price is subject to final adjustment based on the number of customers and working capital levels, as defined in the agreement. The Company retains equity ownership interests in joint ventures in Bahrain, Kuwait and Saudi Arabia 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.

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.

The Company expanded its bacteriostatic home water conditioning system distribution activities to Ireland in 1999 and Portugal in 2000. In the first quarter of 2002, the Company made a decision to restructure these European distribution activities.

Bleach-Based Consumer Products

The Company's Elite Consumer Products division operates a Cloromat(R) facility 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. These operations are conducted in a 129,000 square foot manufacturing facility located in Ludlow, Massachusetts.

Instrument Business Group

The Company's Instrument Business Group accounted for approximately 6% of the Company's 2001 revenues. 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 has become a leading manufacturer of instruments that measure total organic carbon (TOC) across the water "spectrum" from ultrapure water to wastewater. The Sievers(R) Model 400 TOC analyzer is designed specifically to comply with new United States Pharmacopoeia (USP) 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 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 the power industries.

In addition to the Sievers product line, the Company offers a full line of TOC monitors for process water and wastewater applications. The Company's other instrument products, which are used both in the laboratory and on-line, measure and detect, among other things, total carbon, sulfur, nitric oxide, chemical oxygen demand and total oxygen demand. The Company also sells instruments for the measurement of dissolved metals and specific chemical analyzers for ammonia, phosphates, nitrates and chlorine.

With the acquisition of Ionics Agar Environmental in 1999, the Company now also 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.

Other Information Concerning the Business of the Company

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 75 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 and EDI. 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 certain activities of the Consumer Products segment. Bleach products for swimming pool use tend to increase during the summer months, while sales levels for automobile windshield wash solution increase in the winter months.

Customers

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

Backlog

The Company's backlog of firm orders was $258,936,000 at December 31, 2001 and $270,622,000 at December 31, 2000. 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 55% of its December 31, 2001 backlog during 2002. The Company does not believe that there are any seasonal aspects to its backlog figures.

Government Contracts

The Company does not believe that any of its sales under U.S. Government contracts or subcontracts during 2001 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 is actively engaged in research and development directed toward products for use in water purification, processing and measurement, and separations technology. The Company's research and development expenses were approximately $6,420,000 in 2001, $7,980,000 in 2000, and $7,066,000 in 1999.

Competition

The Company experiences competition from a variety of sources with respect to virtually all of its products, systems and services, although 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.

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

In 2000, 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, 1999, 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 cumulative number of such plants sold, having sold more than the next three manufacturers combined. In addition, 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 on an international, national and regional basis, and with other manufacturers of membrane-related equipment.

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 the home are small assemblers, serving local or regional markets. However, there are also several large companies competing nationally in these markets.

In the case of its silver-impregnated activated carbon product lines, the Company knows of two competitors with which it competes on a national basis.

The Company competes with many suppliers of bleach and bleach-based cleaning products and automobile windshield wash for the consumer market, a number of which are much larger than the Company.

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.

Environmental Matters

Continued compliance by the Company and its subsidiaries with federal, state and local provisions regulating the discharge of materials into the environment or otherwise relating to the protection of the environment is expected to have no material effect upon expenditures, earnings or the competitive position of the Company or any of its subsidiaries.

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 (the "SRS Site"). Ionics' share of assessments to date for site work and administrative costs totals approximately $71,000. The United States Environmental Protection Agency ("EPA") has not yet issued a decision regarding clean-up methods and costs. While it is too soon to predict the scope and cost of the final remedy that the EPA will select, 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.

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 (the "Angelillo Site"), because hazardous materials were allegedly shipped from the SRS Site to the Angelillo Site. In April 2001, the Company and other PRPs entered into a settlement agreement 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.

Employees

The Company and its consolidated subsidiaries employ approximately 2,100 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.

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, 2002	Positions Presently Held
Arthur L. Goldstein*	66	President, Chief Executive Officer and Director since 1971; Chairman of the Board since 1990
William E. Katz	77	Executive Vice President since 1983; Director since 1961
Edward J. Cichon	47	Vice President, Equipment Business Group since July 1998
Alan M. Crosby	49	Vice President, Consumer Water Group since March 2000
Anthony Di Paola	35	Vice President and Corporate Controller since May 2000
Gary W. Groom	51	Vice President, Project Finance and Treasurer since December 2000
Stephen Korn	56	Vice President, General Counsel and Clerk since 1989
Daniel M. Kuzmak	49	Vice President, Finance and Chief Financial Officer since January 2001
William J. McMahon	46	Vice President, Ultrapure Water Group since November 2000
Theodore G. Papastavros	68	Vice President since 1975; Vice President, Strategic Planning since 1990
Michael W. Routh	54	Vice President, Instrument Business Group since April 2000

*Member of Executive Committee

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, Groom, Kuzmak, McMahon and Routh, all of the above 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 Company, including as Corporate Controller from 1998 to 2000. Prior to 1997, he served as Assistant Controller for Vector Health Systems, Incorporated.

Mr. Groom was employed by Raytheon Engineers & Constructors from 1994 until he joined the Company in December 2000. He held the position of Vice President, Project Finance and Development from 1994 to 1998.

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.

Foreign Operations

The Company's sales to customers in foreign countries primarily involve desalination systems, ultrapure water systems, water and wastewater treatment systems, Cloromat systems, products and services related to these foregoing systems, instruments and bottled water. The Company seeks to minimize financial risks relating to its international operations. Wherever possible, the Company obtains letters of credit or similar payment assurances denominated in U.S. dollars. If U.S. dollar payments cannot be obtained, the Company, where appropriate, enters into foreign exchange contracts. The Company also uses foreign sources for equipment parts and may borrow funds in local (foreign) currencies to offset the asset risk of foreign currency devaluation. Net foreign currency transaction (losses)/gains included in income before income taxes and minority interest totaled $(555,000) in 2001, $(782,000) in 2000, and $11,000 in 1999.

The Company engages in certain foreign operations both directly and through the following wholly owned subsidiaries: Aqua Design, Inc. (including its subsidiaries and affiliates); Elite Chemicals Pty. Ltd.; Favourable Trading Ltd.; Global Water Services, S.A.; Ionics Acapulco S.A.; Ionics Agar Environmental Ltd.; Ionics Asia-Pacific Pte Ltd.; Ionics (Bermuda) Ltd.; Ionics Constructors Trinidad, Ltd.; Ionics Foreign Sales Corporation Limited; Ionics France S.A.; Ionics (Korea) Inc.; Ionics Iberica, S.A.; Ionics Italba, S.p.A.; Ionics Nederland B.V.; Ionics Taiwan, Inc.; Ionics (U.K.) Limited; Ionics Ventures Ltd. (U.K.); Ionics Watertec Pty. Ltd.; Resources Conservation Co. International; and Separatech Ltd. In early 2002, the Company entered into a letter of intent providing for the sale by its Spanish subsidiary of its 55% ownership interest in Ionics Enersave Engineering Sdn Bhd, a Malaysian corporation with subsidiary operations in China.

The Company also engages in various foreign operations through investments in affiliated companies and joint venture relationships. The activities include the production, sale and distribution of bottled water through a 40% owned affiliate in Bahrain, a 40% owned affiliate in Saudi Arabia, and a 49% owned affiliate in Kuwait.

In addition, the Company has a 26% ownership interest in Watlington Waterworks, Limited in Bermuda. Watlington collects, treats and distributes water throughout Bermuda for both potable and non-potable uses. The Company also has a 50% ownership interest in Yuasa-Ionics Co., Ltd., Tokyo, Japan, which among its

activities serves as a distributor of certain of the Company's products in Japan; and, through Ionics Iberica, S.A., a 20% interest in Grupo Empresarial de Mejoramiento Ambiental, S. de R. L. de C. V., which provides water treatment services in Mexico. Through its Italian subsidiary, the Company has a 75% ownership interest in Agrinord S.r.l., an Italian company engaged in waste treatment operations. In 1999, the Company acquired a controlling 50% interest in Ionics Freshwater Ltd., a Barbados corporation which owns and operates a major brackish water desalination facility in Barbados. In 2000, the Company formed a joint venture with Toray Industries, Inc. and Mitsui & Co. (U.S.A.), Inc. to manufacture and market RO membranes. The Company has a 43% ownership in the joint venture company, Toray Membrane America, Inc. The Company also holds a 40% interest in Desalination Company of Trinidad and Tobago Ltd., which is constructing and will own and operate a major seawater desalination facility in Trinidad.

In 2001, the Company acquired a 25% interest in a Kuwaiti project company, Utilities Development Company W.L.L. (UDC), which has been awarded a concession agreement by an agency of the Kuwaiti government for the

construction, ownership and operation of a major membrane-based water reuse facility in Kuwait. The Company will participate in the project as the membrane system supplier and as a partner in operating the plant, in addition to being an equity participant the Company and its Kuwaiti partner, which owns the majority interest in UDC, anticipate that project financing will be obtained by mid-2002.

Further geographical and financial information concerning the Company's foreign operations appears in Notes 1, 5, 9, 14, 15 and 16 to the Company's Consolidated Financial Statements included as part of this Annual Report on Form 10-K, starting at page 30.

Financial Information about Geographical Areas

Information with respect to this item is contained in Note 16 of Notes to Consolidated Financial Statements at page 51 of this Annual Report on Form 10-K.

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:

App

Business Segment

Location	Utilizing the Location	Property Interest
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
Elkton, MD*	Consumer Water Group	Owned
Ludlow, MA	Consumer Water Group	Owned
San Jose, CA	Ultrapure Water Group	Owned
Boulder, CO	Instrument Business Group	Leased
Pico Rivera, CA	Ultrapure Water Group	Owned
Bellevue, WA	Equipment Business Group	Leased
Sydney, Australia**	Equipment Business Group	Owned
Brisbane, Australia	Equipment Business Group	Owned
Brisbane, Australia	Ultrapure Water Group	Leased
Milan, Italy	Equipment Business Group	Leased
Dallas, Texas	Ultrapure Water Group	Owned
Dallas, Texas	Ultrapure Water Group	Leased
Singapore	Ultrapure Water Group	Leased

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* This facility is not presently utilized by the Company for its operations.
** This facility presently is partially utilized by the Company for its operations, and the balance is leased to a third party.

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 the uses to which they are being put.

ITEM 3. LEGAL PROCEEDINGS

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

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 (the "SRS Site"). Ionics' share of assessments to date for site work and administrative costs totals approximately $71,000. The United States Environmental Protection Agency ("EPA") has not yet issued a decision regarding clean-up methods and costs. While it is too soon to predict the scope and cost of the final remedy that the EPA will select, 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.

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 (the "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 settlement payment of approximately $3,300.

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 22, 2002, there were approximately 1,100 shareholders of record. No cash dividends were paid in either 2001 or 2000 pursuant to the Company's current policy to retain earnings for use in its business. Also, the Company's principal domestic credit facility does not permit the payment by the Company of cash dividends to its shareholders.

During the period January 1, 2000 to December 31, 2001, the range of high and low sales prices of the common stock for each quarterly period was as follows:

	2001		2000	
	High	Low	High	Low
First Quarter	$30.94	$23.98	$37.69	$24.50
Second Quarter	31.57	23.40	30.63	20.63
Third Quarter	31.50	19.27	34.06	20.81
Fourth Quarter	31.85	21.44	29.44	18.19

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data for each of the five years ended December 31, 2001, 2000, 1999, 1998 and 1997, 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 the Item entitled "Management's Discussion and Analysis of Financial

Condition and Results of Operations."

Consolidated Statement of Operations Data

Dollars in Thousands Except Per Share Amounts	For the Years Ended December 3 2001	%	2000	%	1999	%
Revenues	$466,732	$100.0	$474,551	100.0	$358,217	100.0
(Loss) income before income taxes, minority interest, and gain on sale of business	(16,631)	(3.6)	(2,224)	(0.5)	29,731	8.3
Net income (loss)	44,701	9.6	(1,870)	(0.4)	19,361	5.4
Earnings (loss) per basic share	2.61		(0.12)		1.20	
Earnings (loss) per diluted share	2.59		(0.12)		1.18	

Consolidated Balance Sheet Data

Dollars in Thousands	For the Years Ended December 31, 2001	2000	1999	
Current assets	378,791	252,862	193,802	18
Current liabilities	158,326	173,363	99,475	8
Working capital	220,465	79,499	94,327	10
Total assets	633,313	585,813	500,906	45
Long-term debt and notes payable	10,126	10,911	8,351	
Stockholders' equity	423,353	356,861	361,852	34

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

The Company is a leading water purification company engaged worldwide in the supply of water and related services and of water treatment equipment through the use of proprietary separations technologies and systems. The Company's products and services are used by the Company or its customers to desalt brackish water and seawater, to treat water in the home, to manufacture and supply water treatment chemicals and ultrapure water, to process food products, recycle and reclaim process water and wastewater, and to measure levels of waterborne contaminants and pollutants. The Company's 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 16 to the consolidated financial statements for additional information regarding our four business segments.

The EBG segment provides products and services for seawater and brackish water desalination, water reuse and recycle, surface water treatment, zero liquid discharge and fabricated products. Significant trends influencing the desalination market include worldwide water shortages and the need for better quality water in many parts of the world, as well as the reduced cost of operation of modern desalination facilities. These factors have driven a trend toward larger plants, and toward the purchase of services including operating and maintenance contracts. Trends impacting the water reuse and recycle market are similar, with membrane technology becoming more prevalent in reuse and recycling applications. The surface water market has been influenced by increased consumer awareness of and demand for higher quality water, as well as regulatory pressures to reduce contaminants in water supplies. Membrane technology is also becoming more prevalent in surface water applications. The zero liquid discharge market has been influenced by regulatory pressures on utilities to eliminate discharge of process water, and the fabricated products market served by the Company includes demand for the storage of spent nuclear-fuel rods as spent fuel pools at many nuclear facilities reach capacity. The Company is positioned to be able to compete successfully in these markets, although it faces substantially larger competitors in many of them.

The UWG segment provides equipment and services for the microelectronics, power, and pharmaceutical industries, where high quality ultrapure water is required for use in production processes, and is critical to ultimate product quality and yield. The UWG segment has been heavily reliant upon microelectronics equipment revenues, and the recent downturn in that sector has adversely impacted both revenue and profitability in the UWG segment.

The CWG segment provides home water units for the treatment of water, and, until the divestiture of the Aqua Cool Pure Bottled Water business in the U.S., U.K. and France on December 31, 2001, the home office delivery market for bottled water. CWG also produces bleach-based cleaning products and automobile windshield wash solution. Trends in the home water market in which the Company continues to operate include increased customer awareness of and demand for higher quality water, along with reduced confidence in the quality of their own water supplies.

The IBG segment serves microelectronics, power and pharmaceutical markets where the measurement of water quality, including levels and types of contaminants in process water, is critical to production processes. Similar to that of 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.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The Company's discussion and analysis of its 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 in the United States. 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 estimates, including those related to revenues, reserves for doubtful accounts, income taxes, pensions, intangible assets, contingencies and litigation. The Company bases its estimates on historical experience and on appropriate and customary 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 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 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 through periodic contract status and performance reviews. 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 affiliated entities in which the Company has an equity interest, the extent of revenue and profit recognized during contract execution 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%, no revenue or profit is deferred as the contract is executed. When the Company's equity ownership is between 20% and 50%, provided that the Company does not control the affiliated entity, the Company recognizes revenue as the contract is executed

but defers a portion of the profit equal to the Company's equity ownership percentage in the entity. Upon completion of the contract, the resulting deferred profit is amortized into revenue over the estimated useful life of the equipment. 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 as the contract is executed, and all profit on the contract is deferred and amortized over the estimated useful life of equipment upon completion of the contract. Regarding 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 equity funding for the project either directly or through a loan to the Company's local majority partner, the full amount of the equipment revenue earned has been recognized as the contract is executed; however, all of the profit has been deferred, and will be amortized over the estimated useful life of the equipment upon completion of construction.

In addition to the construction and sale of customized equipment to its customers, the Company also enters into contracts for desalination or water treatment facilities which it "owns and operates" on behalf of its customers. Under these contracts, where the Company remains the owner of the equipment, revenue and profit is recognized as water quantities are sold to the customer. The equipment constructed 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 the Securities and Exchange Commission's Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" (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 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 passes 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 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, 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's products are generally subject to warranty, and related costs are provided for in cost of revenues 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 recognizes support service revenue primarily 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 revenues over its estimated useful life.

Reserve 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 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.

Accounting for Income Taxes

As part of the process of preparing consolidated financial statements, the Company is required to estimate income taxes in each of the jurisdictions in which it operates. This process involves the estimation of the Company's actual tax liability in each jurisdiction together with an assessment of temporary differences resulting from differing treatment of items for tax and book accounting purposes. These differences result in deferred tax assets and liabilities, which are included within the consolidated balance sheet. The Company must also assess the likelihood that any deferred assets will be recovered, and must establish a valuation allowance to the extent that it believes any recovery to be unlikely. To the extent the Company establishes a valuation allowance, an expense will be recorded within the provision for income taxes line in the statement of operations. At any time, the Company's provision for income taxes could be impacted by changes in tax laws, or by administrative actions or court rulings.

Testing for the Impairment of Goodwill and Long-Lived Assets

The Company assesses the impairment of identifiable intangibles, long-lived assets and related goodwill 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 intangibles, long-lived assets and related goodwill may not be recoverable based upon the existence of one or more of the above indicators of impairment, the Company measures any impairment based on a projected discounted cash flow method using a discount rate determined by Company management. 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 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 associated with previous acquisitions, and $0.7 million associated with the residual value of bleach manufacturing equipment. On January 1, 2002, the Company adopted SFAS No. 142, "Goodwill and Other Intangible Assets"(FAS 142) that requires, among other things, the discontinuance of goodwill amortization. At December 31, 2001, the Company had $19.3 million of goodwill that will cease to be amortized. The Company is required to complete a transitional goodwill impairment test by June 30, 2002.

Principles of Consolidation

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. 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 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.

RESULTS OF OPERATIONS

Income from Operations - 2001 Compared to 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 Pure Bottled

Water business in the U.S., U.K. and France. The results for 2001 were also impacted by numerous other factors, which are further described by business segment below.

In the EBG segment, income from operations was $6.0 million in 2001, compared to $8.3 million in 2000. The decrease in earnings was primarily attributable to an increase in completion cost estimates on several equipment contracts in the Company's Ionics RCC division that had substantial civil construction scope. The Company subsequently made a decision to minimize civil construction scope on new contracts.

The UWG segment reported a loss of $8.8 million in 2001, compared to income from operations of $3.2 million in 2000. The loss in 2001 was primarily attributable to the operating losses of certain foreign subsidiaries and affiliates, including our Malaysian affiliate (which is currently being held for sale), and one of our Australian subsidiaries, which incurred operating losses as well as impairment charges relating to goodwill of approximately $1.4 million. The UWG segment was also significantly impacted by the continued downturn of the microelectronics industry.

The CWG segment reported a loss from operations of $1.5 million in 2001 and 2000. The CWG segment includes the results of operations of the Aqua Cool Pure Bottled Water business, which accounted for approximately $76.2 million in revenues in 2001, and was sold by the Company to affiliates of Perrier on December 31, 2001 (with the exception of the Company's interest in joint ventures in Saudia Arabia, Kuwait and Bahrain). CWG results in 2001 were impacted by losses incurred in the Aqua Cool business, in part due to the efforts to ready that business for sale, losses in two home water locations which the Company plans to restructure during 2002, and an impairment charge of $0.7 million relating to the residual value of bleach manufacturing equipment. These losses were partially offset by a gain on the sale of certain bottled water assets earlier in the year.

The IBG segment reported income from operations of $0.9 million in 2001, compared to $2.6 million in 2000. The decrease in income is primarily due to a charge recorded for the impairment of goodwill of $1.7 million related to an acquisition made in 1999.

The Company also recorded charges of approximately $9.2 million related to the planned divestiture of its majority interest in its Malaysian affiliate. These charges relate to the impairment of assets and the recognition of certain obligations that the Company will retain after the divestiture is completed. The Company expects the divestiture to be completed in the first half of 2002.

The Company's effective tax rate for 2001 was 49.0%, compared to 34.0% in 2000. The increase in the effective tax rate for 2001 was caused primarily by the gain on the sale of the Aqua Cool Pure Bottled Water business, which included non-deductible goodwill, and by foreign losses, most significantly the losses incurred by the Company's Malaysian affiliate, that were not benefited since realization of those benefits was not likely.

Revenues - 2001 Compared to 2000

Consolidated revenues were $466.7 million in 2001, compared to $474.6 million in

2000. Revenues increased in both the EBG and the CWG segments, and decreased in the UWG and IBG segments. EBG revenues of $207.9 million increased by 1.3% over 2000 revenues of $205.2 million. Total equipment revenues decreased slightly, while supply business revenues increased over 2000. UWG revenues of $107.8 million decreased by 18.5% from 2000 revenues of $132.2 million. 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. CWG revenues of $124.0 million increased by 14.4% over 2000 revenues of $108.3 million, reflecting increases in the bottled water, home water and the bleach-based consumer product businesses. IBG revenues of $27.0 million decreased by 6.1% from 2000 revenues of $28.8 million, also reflecting the further deterioration of the microelectronics sector, which is an important customer for IBG products.

Revenues - 2000 Compared to 1999

Consolidated revenues were $474.6 million in 2000, compared with $358.2 million in 1999. The increased revenues resulted from revenue growth across all four of the Company's business segments. EBG revenues of $205.2 million increased by 45.9% over 1999 revenues of $140.7 million, reflecting increased capital equipment revenues (including the desalination plant project in Trinidad, and revenues on a large spent nuclear-fuel container contract in the Company's fabricated products business). UWG revenues of $132.2 million increased by 41.3% over 1999 revenues of $93.6 million, reflecting increased capital equipment sales to the microelectronics industry, predominantly in the Far East. CWG revenues of $108.3 million increased by 12.2% over 1999 revenues of $96.6 million, reflecting growth in both the domestic and European operations for Aqua Cool and home water. IBG revenues of $28.8 million increased by 5.0% over 1999 revenues of $27.4 million, resulting primarily from increased sales to the microelectronics industry.

Cost of Sales and Operating Expenses

2001 Compared to 2000

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 remained relatively flat in the EBG segment, decreased in the CWG segment, and increased UWG and IBG segments.

Cost of sales as a percentage of revenue for the EBG segment was 79.8% in 2001 compared to 80.2% in 2000, reflecting a continued high level of equipment revenues which have lower gross margins than service revenues. The losses incurred on several equipment contracts with civil construction scope previously mentioned had an adverse impact the EBG cost of sales as a percentage of revenue in 2001.

Cost of sales as a percentage of revenues for UWG increased to 82.0% in 2001 from 80.5% in 2000, reflecting cost increases incurred on projects executed by the Company's Malaysian affiliate 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 revenues remained fixed.

Cost of sales as a percentage of revenue for CWG decreased to 59.7% in 2001 from 61.2% 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 business for sale in the second half of the year.

IBG cost of sales as a percentage of revenues increased to 48.0% in 2001 from 44.4% in 2000, primarily as a result of reduced sales volume levels caused by the further deterioration of the microelectronics sector.

Operating expenses as a percentage of revenue increased to 29.9% in 2001 from 26.3% in 2000. The increase in 2001 reflects a significant shift in mix between UWG, which has a lower operating expense component, and CWG, which has a significantly higher operating expense component. Also, the operating expense percentage was impacted by the asset impairment charges previously mentioned, which include approximately $9.2 million relating to the planned divestiture of the Company's majority interest in its Malaysian subsidiary, $3.1 million of goodwill associated with previous acquisitions, and $0.7 million associated with the residual value of bleach manufacturing equipment.

2000 Compared to 1999

Cost of sales as a percentage of revenues was 73.8% and 66.4% in 2000 and 1999, respectively. Correspondingly, overall Company gross margin was 26.2% and 33.6% in 2000 and 1999, respectively. The increase in cost of sales as a percentage of revenues from 1999 to 2000 included increases in all four of the business groups, and is attributable to several factors.

Cost of sales as a percentage of revenues for EBG increased to 80.2% in 2000 from 72.3% in 1999, reflecting a shift in business mix to lower margin capital equipment, increased costs on certain long-term contracts, as well as inventory-related charges and unrecoverable business development expenses primarily relating to the Trinidad project.

Cost of sales as a percentage of revenues for UWG increased to 80.5% in 2000 from 75.5% in 1999, reflecting the continued competitive environment in the microelectronics industry for ultrapure water capital equipment, as well as a higher level of capital equipment sales than in 1999.

Cost of sales as a percentage of revenue for CWG increased to 61.2% in 2000 from 56.0% in 1999. Factors affecting this increase were primarily attributable to increased fuel and labor costs associated with the bottled water group as well as inventory-related charges that occurred late in 2000.

IBG cost of sales as a percentage of revenues increased to 44.4% in 2000 from 41.9% in 1999. The increase in cost of sales in 2000 was primarily attributable to inventory charges incurred in 2000, relating to the relocation of the Watertown, Massachusetts-based instrument group to Boulder, CO.

Operating expenses as a percentage of revenues increased to 26.3% in 2000 compared to 25.7% in 1999. The increase in 2000 compared to 1999 was attributable to increased legal costs related primarily to the Company's involvement in patent infringement lawsuits, as well as additional charges relating to accounts receivable. Also, the Company recognized asset impairment charges attributable to the Company's decision to abandon plans to commence bleach-manufacturing operations in Elkton, Maryland and to write down the value of goodwill associated with an acquisition made in 1996.

Interest, Equity Income, Gain on Sale of Aqua Cool Pure Bottled Water Business, and Taxes

Interest income was $1.0 million in 2001, $1.3 million in 2000 and $1.0 million in 1999. Interest expense, net of capitalized interest, was $5.2 million, $4.9 million and $0.7 million in 2001, 2000 and 1999, respectively. The interest expense in 2001 reflected higher average borrowings (although at lower

prevailing rates) compared to 2000 and 1999. Borrowing levels in 2001 were primarily attributable to continued investment in, and working capital requirements of, the Trinidad project, as well as other working capital needs.

Equity income was $1.4 million in 2001, compared to $1.6 million and $1.1 million in 2000 and 1999, respectively. Equity income in 2001 related primarily to two projects located in Mexico in which the Company has a 20% equity interest.

The Company's effective tax rate was 49.0% in 2001, 34.0% in 2000 and 32.0% in 1999. The increase in the Company's effective tax rate in 2001 was primarily attributable to the gain on the sale of the Aqua Cool Pure Bottled Water business, which included non-deductible goodwill, and also to foreign losses, most significantly the losses incurred by the Company's Malaysian affiliate, that were not benefited since realization of those benefits was not likely.

Net income in 2001 of $44.7 million compares to a net loss of $1.9 million in 2000, and to net income of $19.4 million in 1999. Net income in 2001 included a pre-tax gain of $102.8 million resulting from the sale of CWG's Aqua Cool Pure Bottled Water businesses in the U.S., U.K. and France. (See Note 15.)

FINANCIAL CONDITION

At December 31, 2001, the Company had total assets of $633.3 million, compared to total assets of $585.8 million at December 31, 2000. The increase in assets reflects an increase in cash and cash equivalents of $152.8 million, primarily attributable to the gain of $102.8 million on the receipt of approximately $210.5 million in proceeds relating to the divestiture of the Aqua Cool Pure Bottled Water business (an additional $10.0 million is being held in escrow under the terms of the divestiture agreement). Accounts receivable decreased by $28.4 million, inventories decreased by $1.9 million, and other current assets decreased by $5.4 million from 2000 to 2001, primarily as a result of the Aqua Cool divestiture and the treatment of the Malaysian subsidiary as "held for sale." Deferred income taxes, increased by $9.4 million primarily because of deferred tax benefits associated with the divestiture of the Aqua Cool Pure Bottled Water business, and the planned divestiture of the Malaysian affiliate. Notes receivable, long-term and current investments in affiliated companies increased from 2000 to 2001 by $5.7 million and $5.5 million, respectively. This was primarily attributable to the Company's investment in the Trinidad desalination project and a loan to the majority equity participant. Net property, plant and equipment decreased by $55.8, million primarily as a result of the Aqua Cool divestiture, and the planned divestiture of the Malaysian subsidiary held for sale. Capital expenditures during the year were $39.6 million. Other assets decreased by $32.2 million, primarily because of goodwill associated with the divested Aqua Cool business, as well as goodwill impairment charges for investments made in Malaysia, Australia and Israel.

At December 31, 2001 the Company had total liabilities of $210.0 million and stockholders' equity of $423.4 million. Notes payable and current portion of long-term debt decreased by $60.8 million, reflecting the pay-down of bank debt upon receipt of the proceeds from the Aqua Cool sale, as well as the treatment of the Malaysian subsidiary as held for sale. Accounts payable decreased by $21.4 million, primarily as a result of the Trinidad project nearing completion, and also the treatment of the Malaysian subsidiary as held for sale. Other current liabilities increased by $67.1 million, reflecting accruals for tax payments and sale price reserves relating to the Aqua Cool Pure Bottled Water sale.

Working capital increased to $220.5 million at the end of 2001 compared to $79.5

million at the end of 2000, reflecting the proceeds from the divestiture of the Aqua Cool business. The Company's current ratio correspondingly increased to 2.4 in 2001 from 1.5 in 2000.

Net cash provided by operating activities was $13.5 million in 2001, compared to net cash provided by operating activities of $4.3 million in 2000. Compared to 2000, cash provided by operating activities increased by $9.3 million, despite a reduction in net income after exclusion of the gain on the sale of the Aqua Cool business and despite a reduction in accounts payable from the level at December 31, 2000. These impacts were offset by substantially smaller accounts receivable growth in 2001 than occurred in 2000, and by additional non-cash charges impacting net income compared to 2000 related to asset impairment and income tax liabilities. Net cash provided by operating activities decreased by $26.2 million in 2000 compared to 1999, primarily due to a net loss in 2000, as well as increased accounts receivable offset by increased accounts payable and accrued expenses. Accounts receivable increases were attributable to increased sales revenues, while the increases in accounts payable and accrued expenses were primarily related to litigation-related charges accrued late in 2000.

Net cash provided by investing activities was $168.0 million in 2001 compared to a use of cash of $44.8 million in 2000. The increase in cash provided by investing activities in 2001 compared to 2000 reflects the proceeds from the sale of the Aqua Cool Pure Bottled Water business, of $210.5 million, offset by capital expenditures made during the year. Net cash used by investing activities of $44.8 million in 2000 reflected capital expenditures and acquisitions completed in 2000, offset by cash received from the sale of certain manufacturing equipment to Toray Membrane America, Inc. (TMA), a 43% owned affiliate of the Company. The Company spent $4.5 million in 2000 for acquisitions, primarily in the bottled water segment. Net cash used by investing activities of $71.3 million in 1999 was attributable to capital expenditures and acquisitions completed in 1999. The Company spent $8.5 million in 1999 in certain acquisitions. Capital expenditures in 1999 of $61.5 million were generally made to expand the Company's bottled water operations, and to expand or build additional manufacturing and "own and operate" facilities. Cash from operations, borrowings of current and long-term debt and proceeds from stock option exercises provided funds for these expenditures.

In 2001, net cash used by financing activities was $28.2 million, a change of $81.3 million from the $53.2 million that was provided by financing activities in 2000. This change resulted from the pay-down of short-term borrowings at year-end utilizing the proceeds from the sale of the Aqua Cool Pure Bottled

Water business, which was partially offset by proceeds from the issuance of stock of $21.8 million associated with a private placement of public equity completed earlier in the year. In 2000, net cash provided by financing activities was $53.2 million, a change of $27.1 million from the $26.1 million that was provided by financing activities in 1999. The change resulted primarily from the higher level of short-term borrowings at December 31, 2000 from December 31, 1999. In 1999, net cash provided by financing activities was $26.1 million, which resulted primarily from increased short and long-term borrowings.

The Company maintains several domestic and foreign lines of credit. On June 29, 2001 the Company entered into a third amended and restated credit agreement with Fleet National Bank (as lender and agent), Bank of America, N.A., the Chase Manhattan Bank, and Mellon Bank, N.A. (the "Credit Agreement"). Under the terms of the Credit Agreement, which supercedes the prior loan agreement with Fleet National Bank, the Company was able to borrow up to $90.0 million, subject to certain financial covenants, including a prohibition against the payment of cash

dividends. On December 21, 2001, the Credit Agreement was amended in connection with obtaining a waiver from the lenders to permit the sale of the Company's bottled water assets. Under the amended Credit Agreement, the borrowing limit was reduced to $50 million and the maturity date was changed from December 31, 2004 to April 30, 2002. On March 27, 2002, the Company paid all outstanding borrowings under the Credit Agreement. On March 28, 2002, the Credit Agreement was further amended to reduce maximum borrowings to $30 million, extend its term for a period of 364 days from the date of the amendment, eliminate and revise certain of the financial and other covenants contained therein, and make Fleet National Bank the sole lender.

Outstanding amounts under foreign lines of credit outstanding at December 31, 2001 were $7.7 million, excluding those for specific project financing. The Company also has several facilities to accommodate its foreign trade requirements. At December 31, 2001, the Company's controlled Barbados affiliate had outstanding borrowings of $8.3 million in connection with the financing of a Barbados desalination facility. (See Note 8.)

The Company believes that its cash on hand, lines of credit and foreign trade facilities are adequate to meet its currently anticipated operational needs. Significant expenditures in 2002 are anticipated to include capital expenditures and investments in additional "own and operate" facilities.

Also during 2002, construction is expected to be completed on the Trinidad desalination facility owned by Desalination Company of Trinidad and Tobago Ltd. (Desalcott), in which the Company has a 40% equity interest. The Company has loaned $10 million to the 60% equity owner, Hafeez Karamath Engineering Services Ltd. (HKES), as the source of HKES' equity contribution, in addition to the $10 million contributed by the Company for its 40% equity interest. 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. However, the bridge loan plus the $20 million equity provided to Desalcott will not provide sufficient funds to complete construction and commissioning of the project. The Company has committed to lend up to $10 million to Desalcott to complete the project once all bridge loan proceeds have been expended. Although Desalcott has received proposals, including a term sheet, for long-term debt financing, there is no assurance that such financing will be obtained on terms acceptable to Desalcott.

During 2001, the Company acquired a 25% equity ownership interest in a Kuwaiti project company, Utilities Development Company W.L.L., that was awarded a concession agreement by an agency of the Kuwaiti government for the construction, ownership and operation of wastewater reuse facility in Kuwait. At December 31, 2001, the Company had deferred costs of approximately $1.0 million relating primarily to preliminary project management and

initial design work on the project, and had invested $1.5 million in the project company. Although the Company anticipates that long-term financing for the project should be obtained by mid-2002, there is no assurance that such financing will be obtained, and the Company would expense the deferred costs and investment in the event financing is not obtained. Also in such event, the Company could incur its 25% proportionate share of liability under a $28 million performance bond issued on behalf of the project company.

Inflationary increases in material and labor costs remained moderate during the last three years. The Company has been working to offset such cost increases by redesigning its equipment to reduce costs. To the extent permitted by the competitive environment, the Company has raised prices where appropriate.

Net periodic pension cost amounted to $1.3 million and $0.7 million for the years ended December 31, 2001 and 2000, respectively. Related projected benefit obligation amounted to $19.5 million and $15.8 million at December 31, 2001 and 2000, respectively. The increase in projected benefit obligation of $3.7 million primarily reflects the decrease in the discount rate from 7.5% to 7.0%, as well as the lower-than-expected return on plan assets in 2001 compared to 2000.

ACCOUNTING PRONOUNCEMENTS

In July 2001, the Financial Accounting Standards Board (FASB) issued SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS No. 142 addresses financial accounting and reporting for intangible assets acquired individually or with a group of assets (but not those acquired in a business combination) at acquisition. This Statement also addresses financial accounting and reporting for goodwill and other intangible assets subsequent to their acquisition. The provisions of this Statement are required to be applied with fiscal years beginning after December 15, 2001. This Statement is required to be applied at the beginning of an entity's fiscal year and to be applied to all goodwill and other intangible assets recognized in its financial statements at that date. Impairment losses for goodwill and indefinite-lived intangible assets that arise due to the initial application of this Statement are to be reported as resulting from a change in accounting principle. The Company has not yet determined what effect, if any, the adoption of SFAS No. 142 will have on the Company's financial position or results of operations.

In August 2001, the FASB issued SFAS No. 143, "Accounting for Obligations Associated with the Retirement of Long-Lived Assets." SFAS No. 143 provides the accounting requirements for retirement obligations associated with tangible long-lived assets. SFAS No. 143 is effective for financial statements for fiscal years beginning after June 15, 2002. The Company is currently assessing SFAS No. 143 but does not believe it will have a material impact on its financial position or results of operations.

In October 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment of Disposal of Long-Lived Assets." This accounting standard, which is effective for fiscal years beginning after December 31, 2001, requires that long-lived assets that are to be disposed of by sale be measured at the lower of book value or fair value less cost to sell. Additionally, SFAS No. 144 expands the scope of discontinued operations to include all components of an entity with operations that can be distinguished from the rest of the entity and will be eliminated from the ongoing operations of the entity in a disposal transaction. The effect of adopting SFAS No. 144 is not expected to have a material impact on the Company's financial position or results of operations.

RISKS AND UNCERTAINTIES

The Company may face significant risks from its international operations

The Company derives a significant portion of its revenues from international operations, which involve a number of additional risks, including the following:

- impact of possible recessionary environments in economies outside the United States;
- longer receivables collection periods and greater difficulty in accounts receivable collection;
- exposure to foreign taxation;
- tariffs and other trade barriers;

- transportation delays;
- foreign currency exchange rate fluctuations;
- difficulties in staffing and managing foreign operations;
- unexpected changes in regulatory requirements;
- the burdens of complying with a variety of foreign laws and regulations; and
- political and economic instability

The Company may face significant risks from participating in large "own and operate" projects

There has been a worldwide trend in the desalination and water treatment markets towards large-scale own and operate projects. The Company has made bids on a number of large-scale desalination and other water treatment projects in a number of countries, under a business structure in which the Company (usually through a subsidiary) will be an equity participant, together with one or more local partners, in a project company which will own and operate the water treatment facility that is the subject of the bid. The project company, if its bid is successful, typically will enter into a concession agreement with a government entity or utility for the provision of water or water treatment services over a defined long period at a defined price, subject to escalation. The project company is usually responsible for obtaining construction and long-term financing for the project, and bears the risk of being able to do so once the concession agreement is awarded. Under this project structure, the Company may also sell water treatment equipment to the project company and in addition may provide certain operation and maintenance services in connection with the long-term operation of the facility. When these projects are located overseas, such as the Trinidad desalination project, the Company either directly or as a result of its equity interest in the project company, is exposed to the risks inherent in international operations, described above. In addition, the Company's equity investment in such projects is subject to risk that the entity purchasing the water or the services being rendered will have the necessary financial wherewithal over the term of the contract to continue to make payments to the project company, and the risk that the project company's bid properly reflected long-term operating costs so as to be able to operate at a profit over the term of the concession agreement.

The Company has only limited protection for its proprietary technology

The Company relies on a combination of patent, trademark and trade secret laws and restrictions on disclosure to protect its intellectual property rights. The Company's success depends in part on its ability to obtain new patents and licenses and to preserve other intellectual property rights covering its products. The Company intends to continue to seek patents on its inventions when appropriate. The process of seeking patent protection can be time-consuming and expensive, and there is no assurance that any new patent applications will be approved, that any patents that may issue will protect the Company's intellectual property or that any issued patents will not be challenged by third parties or will be sufficient in scope or strength to provide meaningful protection or any commercial advantage to the Company. Other parties may independently develop similar or competing technology or design around any patents that may be issued to the Company. The Company cannot be certain that the steps it has taken will prevent the misappropriation of its intellectual property, particularly in foreign countries where the laws may not protect proprietary rights as fully as in the United States.

The Company may become subject to infringement claims

Although the Company does not believe that its products infringe the proprietary

rights of any third parties, the Company has in the past been subject to infringement claims and third parties might assert infringement claims against the Company or its customers in the future. Furthermore, the Company may initiate claims or litigation against third parties for infringement of its proprietary rights or to establish the validity of its proprietary rights. Litigation, either as plaintiff or defendant, would cause the Company to incur substantial costs and divert management resources. Any litigation, regardless of the outcome, could harm the Company's business.

The Company has many competitors and may not be able to compete effectively

The Company experiences competition from a variety of sources with respect to virtually all of its products and services, although the Company does not know of any single entity that competes with it across the full range of its products, systems and services. Competition in the markets served by the Company is based on a number of factors, including price, technology, applications experience, know-how, availability of financing, reputation, product warranties, reliability, service and distribution. Many of the Company's current and potential competitors have greater name recognition and substantially greater financial, marketing and other resources than does the Company. These greater resources could, for example, allow the Company's competitors to develop technology, products and services superior to those of the Company. As a result, the Company may not be able to compete effectively with current or future competitors.

The Company may not be able to develop the new products or acquire the rights to new products necessary to remain competitive

The water purification industry is characterized by ongoing technological developments and changing customer requirements. As a result, the Company's success and continued growth depend, in part, on its ability to develop or acquire rights to, and successfully introduce into the marketplace, enhancements of existing products or new products that incorporate technological advances, meet customer requirements and respond to products developed by competitors. There can be no assurance that the Company will be successful in developing or acquiring such rights to products on a timely basis or that such products will adequately address the changing needs of the marketplace.

The Company may not be able to adapt to changes in technology and government regulation fast enough to remain competitive

The water purification industry is characterized by changing technology, competitively imposed process standards and regulatory requirements, each of which influences the demand for the Company's products and services. Changes in legislative, regulatory or industrial requirements may render certain of the Company's purification products and processes obsolete. Acceptance of new products may also be affected by the adoption of new government regulations requiring stricter standards. The Company's ability to anticipate changes in technology and regulatory standards and to develop and introduce new and enhanced products successfully on a timely basis will be a significant factor in its ability to grow and to remain competitive. There can be no assurance that the Company will be able to achieve the technological advances that may be necessary to remain competitive or that certain of the Company's products will not become obsolete. In addition, the Company is subject to the risks generally associated with new product introductions and applications, including lack of market acceptance, delays in development or failure of products to operate properly.

A portion of the Company's sales is dependent upon its customers' spending

cycles for capital equipment

The sale of capital equipment within the water purification industry is cyclical and influenced by various economic factors including interest rates and general fluctuations of the business cycle. The Equipment Business Group and Ultrapure Water Group each derive a significant portion of its revenue from the sale of capital equipment. While the Company sells capital equipment to customers in diverse industries and in domestic and international markets, cyclicality of capital equipment sales and general economic conditions could have an adverse effect on the Company's revenues and profitability. For example, in the past several years, conditions in the microelectronics industry have negatively affected sales of equipment by the Ultrapure Water Group to customers in that industry.

The Company must comply with significant environmental regulations, which can be difficult and expensive

The Company is subject to a variety of federal, state and local governmental regulations related to the use, storage, discharge and disposal of hazardous materials used in certain of its manufacturing processes. Although the Company believes that its activities conform to presently applicable environmental regulations, the failure to comply with present or future regulations could result in fines being imposed, suspension of production or a cessation of operations. Any failure to control the use of, or adequately restrict the discharge of, hazardous substances, or otherwise comply with environmental regulations, could subject the Company to significant future liabilities. In addition, there is no assurance that past use or disposal of environmentally sensitive materials in conformity with then existing environmental laws and regulations will not result in remediation or other significant liabilities under current or future environmental laws or regulations.

The Company relies significantly upon certain key individuals, and its business may suffer if it is unable to retain them.

The Company has been and is presently dependent upon the continued efforts of our senior management team, including Arthur L. Goldstein, Chairman, President and Chief Executive Officer. The loss of the services of Mr. Goldstein or any other members of the senior management team could have a material adverse effect on the Company's ability to achieve its objectives.

Higher interest rates may hurt the Company financially

The Company engages in short-term and long-term borrowing, some of which is subject to interest rates that float with U.S. prime rates or foreign rates. This borrowing subjects the Company to the risk that interest rates may increase significantly and increase the cost of such borrowing.

If the Company is unable to continue to hire and retain skilled technical and scientific personnel, it will have trouble developing products

The Company's success depends largely upon the continued service of its management and scientific staff and its ability to attract, retain and motivate highly skilled scientific, management and marketing personnel. The Company faces significant competition for such personnel from other companies, research and academic institutions, government and other organizations which may better be able to attract such personnel. The loss of key personnel or the Company's inability to hire and retain personnel who have technical and scientific backgrounds could materially adversely affect its product development efforts and business.

FORWARD-LOOKING INFORMATION

Derivative Instruments

In 2001, the Company's Italian subsidiary entered into a series of U.S.dollar/euro options contracts with the intent of offsetting the foreign exchange risk associated with forecasted cash flows related to an ongoing project. These options contracts were not entered into for trading purposes. In accordance with the restrictions set forth in SFAS 133, the contracts do not qualify for hedge accounting treatment. The fair market value of the contracts is recorded as a liability of $1.2 million in the other current liabilities section of the Consolidated Balance Sheet. End-of-period changes in the market value of the contracts are reflected in the selling, general and administrative expenses in the Consolidated Statement of Operations. A hypothetical weakening of the euro by 10% against the U.S. dollar would result in an additional loss in fair market value of $1.5 million. In addition, the Company periodically enters into foreign exchange contracts to hedge certain operational and balance sheet exposures against changes in foreign currency exchange rates. With the exception of the options contracts described above, the Company had no foreign exchange contracts outstanding at December 31, 2001 and 2000.

Market Risk

The Company's primary market risk exposures are in the areas of interest rate risk and foreign currency exchange rate risk. The Company's investment portfolio of cash equivalents is subject to interest rate fluctuations, but the Company believes this risk is not material due to the short-term nature of these investments. At December 31, 2001, the Company had $14.3 million of short-term debt and $10.1 million of long-term debt outstanding. The major portion of this debt has variable interest rates and, therefore is subject to interest rate risk. However, a hypothetical increase of 10% in these interest rates for a one-year period would result in additional interest expense that would not be material in the aggregate. The Company's net foreign currency exchange loss was $0.6 million in 2001 compared to a loss of $0.8 million in 2000 and a gain of $11,000 in 1999. The Company's exposure to foreign currency exchange rate fluctuations is moderated by the fact that the operations of its international subsidiaries are primarily conducted in their respective local currencies. Also, in certain situations, the Company will consider entering into forward exchange contracts to mitigate the impact of foreign currency exchange fluctuations.

Safe Harbor Statement under Private Securities Litigation Reform Act of 1995

The Company's future results of operations and certain statements contained in this report, including, without limitation, "Management's Discussion and Analysis of Results of Operations and Financial Condition," constitute forward-looking statements. Such statements are based on management's current views and assumptions and involve risks, uncertainties and other factors that could cause actual results to differ materially from management's current expectations. Among these factors are the matters described under "Risks and Uncertainties" in this Item, business conditions and the general economy; competitive factors, such as acceptance of new products and price pressures and competition from companies larger than the Company; risk of nonpayment of accounts receivable; risks associated with foreign operations; risks involved in litigation; regulations and laws affecting business in each of the Company's markets; market risk factors, as described above under "Derivative Instruments" and "Market Risk;" and other risks and uncertainties described from time to time in the Company's filings with the Securities and Exchange Commission.

ITEM 7a. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Derivative Instruments

In 2001, the Company's Italian subsidiary entered into a series of U.S.dollar/euro options contracts with the intent of offsetting the foreign exchange risk associated with forecasted cash flows related to an ongoing project. These options contracts were not entered into for trading purposes. In accordance with the restrictions set forth in SFAS 133, the contracts do not qualify for hedge accounting treatment. The fair market value of the contracts is recorded as a liability of $1.2 million in the other current liabilities section of the Consolidated Balance Sheet. End-of-period changes in the market

value of the contracts are reflected in the selling, general and administrative expenses in the Consolidated Statement of Operations. A hypothetical weakening of the euro by 10% against the U.S. dollar would result in an additional loss in fair market value of $1.5 million. In addition, the Company periodically enters into foreign exchange contracts to hedge certain operational and balance sheet exposures against changes in foreign currency exchange rates. With the exception of the options contracts described above, the Company had no foreign exchange contracts outstanding at December 31, 2001 and 2000.

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ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

IONICS, INCORPORATED

INDEX TO FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULE

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders of Ionics, Incorporated:

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Ionics, Incorporated and its subsidiaries at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management; our responsibility is to express an opini