PERMA FIX ENVIRONMENTAL SERVICES INC Form ARS October 09, 2002

PermaFix environmental services

Annual Report 2001

Moving towards a cleaner environment.

Cover -- center photograph (nuclear lab employee utilizing test equipment to analyze production sample)

Cover -- lower right photograph (M&EC employee operating Perma-Fix II processing equipment)

Cover -- lower left photograph (scenic view of mountains and lake)

Perma**Fix** 

environmental services

**OUR MISSION** 

The Perma-Fix mission is to enhance profitability and increase shareholder value by:

\* consistently improving and expanding the range and quality of waste treatment technologies and services that we can offer our customers;

expanding our customer base both through acquisitions and the building of customer loyalty through the consistent demonstration of our commitment to providing safe, effective, low-cost solutions to our customers' complex nuclear mixed waste and industrial waste and wastewater disposal needs; and

by the wise management of our financial, technological and human resources.

#### **CORPORATE PROFILE**

Perma-Fix Environmental Services, Inc. is a national environmental technology company, providing unique mixed waste and industrial waste management services. The Company has increased its focus on the nuclear services segment, which provides radioactive and mixed waste treatment services to hospitals, research laboratories and institutions, numerous federal agencies including the Departments of Energy and Defense and nuclear utilities. The industrial services segment provides hazardous and non-hazardous waste treatment services for a diverse group of customers including Fortune 500 companies, numerous federal, state and local agencies and thousands of smaller clients. The Company operates nine major waste treatment facilities across the country, supported by numerous satellite offices, a government services group and a large technical staff.

2001
2001
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# FINANCIAL HIGHLIGHTS

(Amounts in Thousands, Except for Share Amounts)	2001	2000	1999	1998	1997
Net Revenues	Ø 5.4.402	\$ 59,139	\$ 46,464	\$ 30,551	\$ 28,413
Gross Profit	\$ 74,492	18,229	15,193	9,487	8,586
EBITDA	24,773	5,464	4,894	2,640	2,904
Operating Income	= :,,,,	1,813	2,116	531	924

Total Assets	10,035	72,771	54,644	28,748	28,570
Stockholders' Equity		22,020	19,819	15,953	12,194
	5,419				
	99,137				
	41,841				

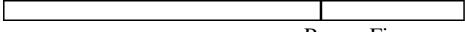
# Consolidated revenues increased 26% or \$15.4 million to a

# record \$74.5 million for the year ended December 31, 2001

Net Revenues (in millions)	EBITDA (in millions)	Operating Income (in millions)
1999 \$46.5	1999 \$4.9	1999 \$2.1
2000 \$59.1	2000 \$5.5	2000 \$1.8
2001 \$74.5	2001 \$10.0	2001 \$5.4

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26%



# Perma-Fix

environmental services

# LETTER TO OUR SHAREHOLDERS

2001 was a year of major accomplishments for Perma-Fix, as we successfully executed on our business plan. We have positioned our Company to be a leader in the Mixed Waste Market and focused on niche industrial opportunities through new technologies, such as the Bio-Fix water treatment technology.

# DEAR FELLOW SHAREHOLDER:

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Photograph of Dr. Louis F. Centofanti, the Company's Chairman, President, and Chief Executive Officer

Nuclear Revenues
(in millions)

Nuclear revenues increased 17.2 million or

146% to \$28.9 million

BAR GRAPH

\$7.0\$11.7\$28.9 '99'00**'0**1

\*

In June 2001, we completed the acquisition of M&EC, a permitted mixed waste facility in Oak Ridge, Tennessee, which holds three major DOE subcontracts. The newly constructed M&EC facility became operational in September 2001.

Three common themes will remain constant as we attempt to position the Company for continued growth:

\*

During the year, we made great strides toward restructuring our balance sheet. In July 2001, the Company finalized a private placement offering for \$7.7 million, secured longterm sub-debt financing for \$5.6 million and completed an exchange of \$3.1 million in debt for equity.

\* To focus on opportunities in growing and profitable markets that require the development and deployment of proprietary technologies, developed or licensed by the Company, that are safe and nondestructive to the environment.

\*

During 2001, the industrial segment developed and constructed a new biological wastewater treatment facility at its Ohio location, installed our new "Bio-Fix" water treatment technology and subsequently achieved successful full scale operations in June of 2002.\*

To continue our expansion into the nuclear mixed waste market.

To strive toward continued growth of the Company with the constant goal of improving shareholder value.

The corporate initiatives we had previously implemented and our many accomplishments during 2001 have set the stage for our anticipated growth and expansion during 2002. Within the nuclear segment, our backlog is at an all-time high, and we continue to treat increased levels of mixed waste. Within the industrial segment, we see new opportunities as we roll out our new 'Bio-Fix' process, which continues to expand our penetration into the water treatment market.

Finally, I would like to thank all of our employees for their hard work, our customers for their confidence and our shareholders for their loyalty during this unprecedented period of growth and transformation into a leading hazardous nuclear waste company. With a strong foundation in place, we foresee many new opportunities for our Company in the years ahead.

Dr. Louis F. Centofanti Chairman, President and Chief Executive Officer

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# PERMA-FIX ENVIRONMENTAL SERVICES Q & A

One of the most exciting market opportunities for our industrial segment are those hard to treat, highly organic, contaminated wastewaters. We have developed and constructed a new biological wastewater treatment facility and installed our new 'Bio-Fix' water treatment technology, which has already proven successful in treating such heavily contaminated wastewater streams.

Q

What is the size of the nuclear waste market and what is your role in it?

A. The mixed waste market (waste containing both hazardous waste and low level radioactive waste) is national in scope. The U.S. Department of Energy ("DOE") is the largest generator of mixed waste. Due to the high cost to treat mixed waste, transportation expense is not a limiting factor.

The largest component of the mixed waste market was generated by the DOE in conjunction with nuclear weapons production. The DOE has estimated the cost to treat its mixed waste at a minimum of \$7 billion. Estimates to treat new mixed waste generated annually by the DOE and commercial organizations currently stand at more than \$150 million per year.

In June 1998, six "Broad Spectrum Contracts" were issued to serve as the first and currently, the only, procurement mechanism to treat mixed waste generated by federal government agencies including the DOE, three of which were awarded to M&EC. As an example of the magnitude of the market, DOE has estimated that \$1.2 billion of low-level mixed waste will be generated at the DOE's Oak Ridge, Tennessee facility. To accelerate cleanup efforts at this facility, the State of Tennessee has recently obtained consent decrees requiring the DOE to treat and dispose of targeted levels of mixed waste.

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#### *Q* What is unique about the Perma-Fix $^{(R)}$ Process?

A. Our process differs from those of our competitors in that it is not only a proven technology, but it is far simpler, and as a result, less expensive and safer to use. There are no dangerously high temperatures and no emissions. It is a very forgiving process -- if we make a mistake, we just go back and mix in more chemicals. The Perma-Fix Process is a batch process, so we have total control at all times. Because it employs a relatively safe technology, with little need for complicated safety features, it is far less expensive. The technology is proven and has been utilized for many years.

#### Q What is your strategy for capitalizing on the nuclear waste treatment market?

The Company has a minimum three-year head start on any potential entrants to the industry due to its proprietary technology, lengthy and restrictive government licensing requirements, the Company's extensive experience and impeccable safety record. As a result, the barriers to entry are significant.

#### Q What is the market like for the industrial services you provide?

A. Based on the Farkas Berkowitz Marketing Study, the industrial waste management market (hazardous and non-hazardous waste) is estimated at \$40 billion with approximately \$13 billion allocated to treatment services. The market is regional in nature as commercial waste generators do not want to incur the cost of transporting waste in excess of 200 to 300 miles.

The industrial waste market is highly regulated with few, if any, new or significantly modified hazardous waste permits and licenses granted by state or federal governments. In the unusual event that a new hazardous waste permit is awarded, the process typically encompasses 3-5 years. In general, industrial waste is considered to be a mature but fragmented market.

#### Q What is your marketing strategy for the industrial segment?

A. We maintain a staff of local salespeople at each facility, who call on potential customers. Our strategy is to dominate the geographic area surrounding each of our facilities. We presently dominate the lower southeast U.S. and will continue to grow via upgrades to existing

facilities and tuck-in acquisition in the Southeast and Midwest.

# Q Other than targeting the growing nuclear waste treatment market, what is the Company's overall strategy for future growth?

A. The Company's strategy is to treat industrial and mixed waste streams generated by commercial institutions and the federal government. The Company plans to enhance its position as one of the leading providers of industrial and mixed waste treatment services. Key elements of the Company's strategy include: Acquiring existing treatment facilities; investing in plant expansion, especially with proprietary technology; maximizing use of facility capacity; building strong relationships with federal government agencies, commercial institutions and industrial customers; and maintaining our expertise in waste treatment.

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Photograph of two employees sampling nuclear waste upon receipt.

Photograph of Perma-Fix II processing unit at the M&EC facility

# NUCLEAR WASTE MANAGEMENT

various government agencies, M&EC also operates under three broad spectrum subcontracts issued by Bechtel-Jacobs Company, DOE's environmental program manager.

Perma-Fix currently operates three of the country's most treatment and disposal of a variety of hazardous and radioactive mixed wastes. The Florida facility treats and stores radioactive material, hazardous and radioactive mixed wastes. PCB contaminated wastes and industrial hazardous and non-hazardous liquids, sludges and solids. The Diversified Scientific Services, Inc. facility is the only commercial facility of its kind in the U.S. and employs a unique energy recovery process that utilizes

three of the country's most unique facilities, which provide treatment and disposal of a variety of hazardous and radioactive mixed wastes. The Florida facility treats and stores

State-of-the-art, environmentally friendly technologies, and the Company's ability to obtain the necessary combination of permits and licenses, has made Perma-Fix extremely successful in this specialized field. A skilled technical staff, combined with sophisticated equipment and systems, ensures that all waste is destroyed in full compliance with all applicable regulations. Perma-Fix's turnkey service, from sampling through disposal, leaves the customers secure in the knowledge that their nuclear waste has been managed as safely and effectively as possible.

mixed waste as an energy source for the destruction of liquid organic mixed waste. During June of 2001, Perma-Fix completed the acquisition of East Tennessee Materials and Energy Corporation ("M&EC"), a very unique mixed waste treatment facility, situated on the Department of Energy complex. During the third quarter of 2001, M&EC completed construction of its new 150,000 sq. ft. state-of-the-art processing facility. In addition to our various mixed waste contracts with large industrial companies, nuclear utilities, research labs and

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# INDUSTRIAL WASTE MANAGEMENT

Photograph of employee monitoring wastewater tank and analyzing results

With six facilities strategically located throughout the United States, Perma-Fix has positioned itself as a leader in the treatment, disposal, and recycling of a broad range of hazardous and non-hazardous materials. From common waste streams to the most complex, Perma-Fix is uniquely suited to provide turnkey disposal services. From lab packs to bulk, Perma-Fix can manage every RCRA waste code in any quantity. Via extensive in-house transportation services, coupled with the complete integration of our facilities, Perma-Fix is committed to offering the most comprehensive waste management experience in the industry.

During 2001, Perma-Fix identified a new wastewater market and began construction of a biological wastewater system at our Ohio facility. The enhanced treatment technology was completed in early 2002, and full-scale operations were successfully achieved during

the second quarter.

While leading the way today, Perma-Fix is laying the groundwork for the future. Already utilizing a proprietary treatment technology, which provides environmentally safe alternative to incineration, Perma-Fix continues to pioneer technologies to benefit industry and the environment.

84%

Earnings Before Interest, Taxes, Depreciation and Amortization

(EBITDA) increased 85% or \$4.5 million to a record

\$10.0 million.

Photograph of biological wastewater system at Ohio facility

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#### **CONSULTING ENGINEERING**

Perma-Fix's engineering firm, Schreiber, Yonley & Associates, provides high quality environmental engineering services to industry, addressing the broad spectrum of environmental regulations and technologies. The firm has a solid reputation for delivering professional, practical and innovative engineering solutions to meet the client's environmental challenges Typical projects include regulatory permitting and compliance for existing and new facilities; auditing; agency and public

communications; environmental project design; oversight and operation; remediation services and pollutant testing and research. With a dedicated staff of environmental professionals and a long working relationship in the industry, the firm not only supports and enhances the Company's facilities, but is a consistent and profitable business segment.

Photograph of M&EC facility located at DOE's K-25 Nuclear Weapons Plant

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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 10-K

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

For the fiscal year ended \_\_\_\_\_ December 31, 2001\_\_\_\_

or

Commission File No. <u>1-11596</u>

#### PERMA-FIX ENVIRONMENTAL SERVICES, INC.

(Exact name of registrant as specified in its charter)

Delaware 58-1954497

(State or other jurisdiction of incorporation or organization)

(IRS Employer Identification Number)

1940 N.W. 67th Place, Gainesville, FL

32653

(Address of principal executive offices)

(Zip Code)

(352) 373-4200

(Registrant's telephone number)

Title of each class	Name of each exchange on which registered
Common Stock, \$.001 Par Value	Boston Stock Exchange
Securities registered pursuant to Section 12(g) of the A	Act: None
the Securities Exchange Act of 1934 during the preced	filed all reports required to be filed by Section 13 or 15(d) of ling 12 months (or for such shorter period that the Registrant bject to such filing requirements for the past 90 days. Yes X
•	rs pursuant to Item 405 of Regulation S-K is not contained gistrant's knowledge, in definitive proxy or information Form 10-K or any amendment to this Form 10-K. [ ]
the closing sale price of such stock as reported by NAS calculation, we have excluded shares held by officers a shares held of record by Capital Bank Grawe-Gruppe.	y nonaffiliates of the Registrant as of March 28, 2002, based or SDAQ on such day, was \$99,911,945. For the purposes of this and directors of the Company, and have included 9,530,745 As discussed in Part VII under Item 12 - "Security Ownership consider Capital Bank to be an affiliate of the Company. The SmallCap Market and the Boston Stock Exchange.
As of March 28, 2002, there were 34,087,125 shares o excluding 988,000 shares held as treasury stock.	f the registrant's Common Stock, \$.001 par value, outstanding,

# PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Documents incorporated by reference: none

Securities registered pursuant to Section 12(b) of the Act:

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#### PART I

#### ITEM 1. BUSINESS

#### **Company Overview and Principal Products and Services**

Perma-Fix Environmental Services, Inc. (the Company, which may be referred to as we, us, or our) is a Delaware corporation, engaged through its subsidiaries, in:

\* Industrial Waste Management Services, which includes:

\* treatment, storage, processing, and disposal of hazardous and

nonhazardous waste; and

\* industrial waste and wastewater management services, including the collection, treatment, processing and disposal of hazardous and non-hazardous waste.

\* Nuclear Waste Management Services, which includes:

\* treatment, storage, processing and disposal of mixed waste (which is both low-level radioactive and hazardous waste); and

- \* nuclear and low-level radioactive waste treatment, processing and disposal, which includes research, development, on and off-site waste remediation and processing.
- \* Consulting Engineering Services, which includes:
  - \* consulting services regarding broad-scope environmental issues, including environmental management programs, regulatory permitting, compliance and auditing, landfill design, field testing and characterization.

We have grown through both acquisitions and internal development. Our present objective is to focus on the operations, maximize the profitability and to continue the research and development of innovative technologies for the

treatment of nuclear, mixed waste and industrial waste.

We service research institutions, commercial companies, public utilities and governmental agencies nationwide. The distribution channels for our services are through direct sales to customers or via intermediaries.

We were incorporated in December of 1990. Our executive offices are located at 1940 N.W. 67th Place, Gainesville, Florida 32653.

Our home page on the Internet is at www.perma-fix.com. You can learn more about us by visiting that site.

#### Segment Information and Foreign and Domestic Operations and Export Sales

During 2001, we were engaged in eleven operating segments. Pursuant to FAS 131, we define an operating segment as:

- \* A business activity from which we may earn revenue and incur expenses;
- \* Whose operating results are regularly reviewed by the President of the segment to make decisions about resources to be allocated within the segment and assess its performance; and
- \* For which discrete financial information is available.

We therefore define our operating segments as each separate facility or location that we operate. These segments, however, exclude the Corporate headquarters which does not generate revenue and Perma-Fix of Memphis, Inc. ("PFM") a discontinued operation which is reported with Corporate headquarters. See Note 3 to Notes to Consolidated Financial Statements regarding discontinued operations.

Pursuant to FAS 131 we have aggregated our operating segments into three reportable segments to ease in the presentation and understanding of our business. Each reportable segment has a President who manages and makes decisions for the reportable segment as a whole. The results of the reportable segments are then

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reviewed by the Company's chief operating decision maker. We used the following criteria to aggregate our segments:

- \* The nature of our products and services;
- \* The nature of the production processes;
- \* The type or class of customer for our products and services;
- \* The methods used to distribute our products or provide our services; and
- \* The nature of the regulatory environment.

During 2000, in conjunction with the expansion of the nuclear, mixed waste facilities, the acquisition of Diversified Scientific Services, Inc. and expanded Oak Ridge, Tennessee, mixed waste activities, the Company established a Nuclear Waste Management Services segment, in addition to the two previously reported segments.

Most of our activities are conducted nationwide, however, our Industrial Waste Management Services segment maintains a significant role in the Southeast and Midwest portions of the United States. We had no foreign operations or export sales during 2001.

#### **Operating Segments**

We have eleven operating segments which represent each separate facility or location that we operate. Seven of these

segments provide Industrial Waste Management Services, three of these segments provide Nuclear Waste Management Services and one segment provides Consulting Engineering Services as described below:

INDUSTRIAL WASTE MANAGEMENT SERVICES, which includes, off-site waste storage, treatment, processing and disposal services of hazardous and non-hazardous waste (solids and liquids) through six of our treatment facilities and numerous related operations provided by our other location, as discussed below.

Perma-Fix Treatment Services, Inc. ("PFTS") is a Resource Conservation and Recovery Act of 1976 ("RCRA") permitted treatment, storage and disposal ("TSD") facility located in Tulsa, Oklahoma. PFTS stores and treats hazardous and non-hazardous waste liquids, provides waste transportation and disposal of non-hazardous liquid waste via its on-site Class I Injection Well located at the facility. The injection well is permitted for the disposal of non-hazardous liquids and characteristic hazardous wastes that have been treated to remove the hazardous characteristic. PFTS operates a non-hazardous wastewater treatment system for oil and solids' removal, a corrosive treatment system for neutralization and metals precipitation, and a container stabilization system. The injection well is controlled by a state-of-the-art computer system to assist in achieving compliance with all applicable state and federal regulations.

Perma-Fix of Dayton, Inc. ("PFD") is a RCRA permitted TSD facility located in Dayton, Ohio. PFD has four main disposal production areas. The four production areas are a RCRA permitted TSD, a centralized wastewater treatment area, a used oil recycling area, and a non-hazardous solids solidification area. Hazardous waste accepted under the RCRA permit is typically drum waste for fuel bulking, incineration or stabilization. Wastewaters accepted at the facility include hazardous and non-hazardous wastewaters, which are treated by ultra filtration, metals precipitation and bio-degradation to meet the requirements of PFD's Clean Water Act pretreatment permit. Waste industrial oils and used motor oils are processed through high-speed centrifuges to produce a high quality fuel that is burned by industrial burners.

Perma-Fix of Ft. Lauderdale, Inc. ("PFFL") is a permitted facility located in Ft. Lauderdale, Florida. PFFL collects and treats wastewaters, oily wastewaters, used oil and other off-specification petroleum-based products, some of which may potentially be recycled into usable products. Key activities at PFFL include process cleaning and material recovery, production and sales of on-specification fuel oil, custom tailored waste management programs and hazardous material disposal and recycling materials from generators such as the cruise line and marine industries.

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Perma-Fix of Orlando, Inc. ("PFO"), F/K/A Chemical Conservation Corporation ("CCC"), is a RCRA permitted TSD facility located in Orlando, Florida, which was acquired effective June 1, 1999. PFO collects, stores and treats hazardous and non-hazardous wastes out of two processing buildings, under one of our most inclusive permits. PFO is also a transporter of hazardous waste and operates a transfer facility at the site.

Perma-Fix of South Georgia, Inc. ("PFSG"), F/K/A Chemical Conservation of Georgia, Inc. ("CCG"), is a RCRA permitted TSD facility located in Valdosta, Georgia, which was acquired effective June 1, 1999. PFSG provides storage, treatment and disposal services to hazardous and non-hazardous waste generators throughout the United States, in conjunction with the utilization of the PFO facility and transportation services. PFSG operates a hazardous waste storage facility that primarily blends and processes hazardous and non-hazardous waste liquids, solids and sludges into substitute fuel or as a raw material substitute in cement kilns that have been specially permitted for the

processing of hazardous and non-hazardous waste.

Perma-Fix of Michigan, Inc. ("PFMI"), F/K/A Chem-Met Services, Inc. ("CM"), is a permitted TSD facility located in Detroit, Michigan, which was acquired effective June 1, 1999. PFMI is a waste treatment and storage facility, situated on 60 acres, that treats hazardous, non-hazardous and inorganic wastes with solidification/chemical fixation and bulks, repackages and remanifests wastes that are determined to be unsuitable for treating. This large bulk processing facility utilizes a chemical fixation and stabilization process to produce a solid non-hazardous matrix that can safely be disposed of in a solid waste landfill.

Perma-Fix Government Services ("PFGS") F/K/A Chem-Met Government Services ("CMGS") specializes in the on-site (at the government's site) environmental and hazardous waste management, with emphasis on the management of large long-term federal and industrial on-site field service contracts. PFGS operates out of five (5) field service offices, located throughout the United States. PFGS currently manages six (6) hazardous waste management service contracts with the Defense Reutilization & Marketing Service ("DRMS"), working closely with the above noted permitted facilities for certain transportation and waste management services.

For 2001, the Company's Industrial Waste Management Services segment accounted for approximately \$42,355,000 (or 56.9%) of the Company's total revenue, as compared to approximately \$44,191,000 (or 74.7%) for 2000. See "Financial Statements and Supplementary Data" for further details.

NUCLEAR WASTE MANAGEMENT SERVICES, which includes nuclear, mixed and low-level radioactive waste treatment, processing and disposal services through three of our TSD facilities. The presence of nuclear and low-level radioactive constituents within the waste streams processed by this segment create different and unique operational, processing and permitting/licensing requirements, from those contained within the Industrial Waste Management Services segment, as discussed below.

Perma-Fix of Florida, Inc. ("PFF"), located in Gainesville, Florida, is a uniquely permitted and licensed TSD. PFF specializes in the processing and treatment of certain types of wastes containing both low-level radioactive and hazardous wastes, which are known in the industry as mixed waste. PFF is one of only a few facilities nationally to operate under both a hazardous waste permit and a nuclear materials license, from which it has built its reputation based on its ability to treat difficult waste streams using its unique processing technologies and its ability to provide related research and development services. With the amended permits and licenses received during 2000 and the expansion of its mixed waste processing equipment and capabilities, PFF has transitioned into a full mixed waste and low level radioactive processing facility. Its mixed waste services have included the treatment and processing of waste Liquid Scintillation Vials (LSVs) since the mid 1980's. The LSVs are generated primarily by institutional research agencies and biotechnical companies. These wastes contain mixed (low-level) radioactive materials and hazardous waste (flammable) constituents. Management believes that PFF currently processes approximately 80% of the available LSV waste in the country. The business has expanded into receiving and handling other types of mixed waste, primarily from the nuclear utilities, commercial generators, prominent pharmaceutical companies, the Department of Energy ("DOE") and other government facilities as well as select mixed waste field remediation projects.

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Diversified Scientific Services, Inc. ("DSSI"), located in Kingston, Tennessee, is also a uniquely permitted and licensed TSD, which was acquired effective August 31, 2000. DSSI specializes in the processing and destruction of certain types of wastes containing both low-level radioactive and hazardous waste (mixed waste). DSSI, like PFF, is

one of only a few facilities nationally to operate under both a hazardous waste permit and a nuclear materials license. Additionally, DSSI is the only commercial facility of its kind in the U.S. that is currently operating and licensed to destroy liquid organic mixed waste, through its treatment unit. DSSI provides mixed waste disposal services for nuclear utilities, commercial generators, prominent pharmaceutical companies, and agencies and contractors of the U.S. government, including the DOE and the Department of Defense ("DOD").

East Tennessee Materials & Energy Corporation ("M&EC"), located in Oak Ridge, Tennessee, is the Company's third mixed waste facility, which was acquired effective June 25, 2001. As with PFF and DSSI, M&EC also operates under both a hazardous waste permit and nuclear materials license. M&EC represents the largest of the Company's three mixed waste facilities, covering 150,000 sq.ft., and is located within the DOE K-25 complex. M&EC operates in a newly constructed facility, whose initial construction phase was completed during the third quarter of 2001 and became operational in September 2001. In addition to providing mixed waste treatment services to commercial generators, nuclear utilities and various agencies and contractors of the U.S. Government, including the DOD, M&EC was awarded three contracts to treat DOE mixed waste by Bechtel-Jacobs Company, LLC, DOE's Environmental Program Manager, which covers the treatment of mixed waste throughout all DOE facilities ( see "Oak Ridge Contract Award").

For 2001, the Company's nuclear waste management services business accounted for \$28,932,000 (or 38.8%) of total revenue for 2001, as compared to \$11,737,000 (or 19.9%) of total revenue for 2000. See "Financial Statements and Supplementary Data" for further details.

CONSULTING ENGINEERING SERVICES, which provides environmental engineering and regulatory compliance consulting services through one subsidiary, as discussed below.

Schreiber, Yonley & Associates ("SYA") is located in St. Louis, Missouri. SYA specializes in environmental management programs, permitting, compliance and auditing, in addition to landfill design, field investigation, testing and monitoring. SYA clients are primarily industrial, including many within the cement manufacturing industry. SYA also provides the necessary support, compliance and training as required by our operating facilities.

During 2001, environmental engineering and regulatory compliance consulting services accounted for approximately \$3,205,000 or 4.3% of our total revenue, as compared to approximately \$3,211,000 or 5.4% in 2000. See "Financial Statements and Supplementary Data" for further details.

#### Importance of Patents and Trademarks, or Concessions Held

We do not believe we are dependent on any particular trademark in order to operate our business or any significant segment thereof. We have received registration through the year 2006 for the service mark "Perma-Fix" by the U.S. Patent and Trademark office.

The Company is active in the research and development of technologies that allow it to address certain of its customers' environmental needs. To date, the Company's R&D efforts have resulted in the granting of three patents and the filing of an additional ten pending patent applications. The Company's flagship technology, the *Perma-Fix Process*, is a proprietary, cost effective, treatment technology that converts hazardous waste into non-hazardous material. Subsequently, the Company developed a new *Perma-Fix II* process ("New Process"), a multi-step treatment process that converts hazardous organic components into non-hazardous material. The New Process is particularly important to the Company's mixed waste strategy. Management believes that at least one third of DOE mixed wastes contain organic components.

The New Process is designed to remove certain types of organic hazardous constituents from soils or other solids and sludges ("Solids") through a water-based system. We have filed a patent application with the U.S.

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Patent and Trademark Office covering the New Process. As of the date of this report, we have not received a patent for the New Process, and there are no assurances that such a patent will be issued. Until development of this New Process, we were not aware of a relatively simple and inexpensive process that would remove the organic hazardous constituents from Solids without elaborate and expensive equipment or expensive treating agents. Due to the organic hazardous constituents involved, the disposal options for such materials are limited, resulting in high disposal cost when there is a disposal option available. By reducing the organic hazardous waste constituents from the Solids to a level where the Solids may be returned to the ground, the generator's disposal options for such waste are substantially increased, allowing the generator to dispose of such waste at substantially less cost. We began commercial use of the New Process in 2000. Patent applications have also been filed for processes to treat radon, selenium and other speciality materials utilizing variations of this new process. However, changes to current environmental laws and regulations could limit the use of the New Process or the disposal options available to the generator. See "BUSINESS--Permits and Licenses" and "BUSINESS--Research and Development."

#### **Permits and Licenses**

Waste management companies are subject to extensive, evolving and increasingly stringent federal, state and local environmental laws and regulations. Such federal, state and local environmental laws and regulations govern our activities regarding the treatment, storage, processing, disposal and transportation of hazardous, non-hazardous and radioactive wastes, and require us to obtain and maintain permits, licenses and/or approvals in order to conduct certain of our waste activities. Failure to obtain and maintain our permits or approvals would have a material adverse effect on us, our operations and financial condition. The permits and licenses have a term ranging from five (5) to ten (10) years and, provided that the Company maintains a reasonable level of compliance, renew with minimal effort and cost. Historically, there have been no compelling challenges to the permit and license renewals. Moreover, as we expand our operations we may be required to obtain additional approvals, licenses or permits, and there can be no assurance that we will be able to do so. Such permits and licenses, however, represent a potential barrier to entry for possible competitors.

PFTS is a permitted solid and hazardous waste treatment, storage, and disposal facility. The RCRA Part B Permit to treat and store certain types of hazardous waste was issued by the Waste Management Section of the Oklahoma Department of Environmental Quality ("ODEQ"). Additionally PFTS maintains an Injection Facility Operations Permit issued by the ODEQ Underground Injection Control Section for our two waste disposal injection wells, and a pre-treatment permit in order to discharge industrial wastewaters to the local Publically Owned Treatment Works. PFTS is also registered with the ODEQ and the Department of Transportation as a hazardous waste transporter.

PFFL operates under a general permit and used oil processors license issued by the Florida Department of Environmental Protection ("FDEP"), a transporter license issued by the FDEP and a transfer facility license issued by Broward County, Florida. Broward County also issued PFFL a discharge Pre-Treatment permit that allows discharge of treated water to the Broward County Publically Owned Treatment Works.

PFD operates a hazardous and non-hazardous waste treatment and storage facility under various permits, including a RCRA Part B permit. PFD provides wastewater pretreatment under a discharge permit with the local Publically Owned Treatment Works and is a specification and off-specification used oil processor under the guidelines of the Ohio EPA.

PFMI operates under an operating license issued in 1982 as an existing facility for the treatment and storage of certain hazardous wastes. The operating license continues in effect in conjunction with the terms of a consent judgement as agreed to in 1991.

PFO operates a hazardous and non-hazardous treatment and storage facility under various permits, including a RCRA Part B permit, issued by the State of Florida.

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PFSG operates a hazardous treatment and storage facility under a RCRA Part B permit, issued by the State of Georgia.

PFF operates its hazardous and low-level radioactive waste activities under a RCRA Part B permit and a radioactive materials license issued by the State of Florida.

DSSI operates hazardous and low-level radioactive waste activities under a RCRA Part B permit and a radioactive materials license issued by the State of Tennessee.

M&EC operates hazardous and low-level radioactive waste activities under a RCRA Part B permit and a radioactive materials license issued by the State of Tennessee.

The combination of a RCRA Part B hazardous waste permit and a radioactive materials license, as held by PFF, DSSI and M&EC, are very difficult to obtain for a single facility and make these facilities very unique.

We believe that our TSD facilities presently have obtained all approvals, licenses and permits necessary to enable them to conduct their business as they are presently conducted. The failure of our TSD facilities to renew any of their present approvals, licenses and permits, or the termination of any such approvals, licenses or permits, could have a material adverse effect on us, our operations and financial condition.

#### Seasonality

We experience a seasonal slowdown in operations and revenues during the winter months extending from late November through early March. The seasonality factor is a combination of poor weather conditions in the central plains and Midwestern geographical markets we serve for on-site and off-site waste management services, and the impact of reduced activities during holiday periods along with the inability to generate consistent billable hours in the consulting engineering segment, resulting in a decrease in revenues and earnings during such period.

#### **Dependence Upon a Single or Few Customers**

The majority of our revenues for fiscal 2001 have been derived from hazardous, non-hazardous and mixed waste management services provided to a variety of industrial, commercial customers, and government agencies and contractors. Our customers are principally engaged in research, biotechnical development, transportation, chemicals, metal processing, electronic, automotive, petrochemical, refining and other similar industries, in addition to government agencies that include the DOE, DOD, and other federal, state and local agencies. We are not dependent upon a single customer, or a few customers, the loss of anyone or more would not have a material adverse effect on us. However, PFGS currently manages six (6) hazardous waste management service contracts with the DRMS. The DRMS is a subagency of the Defense Logistics Agency and the DOD, which is considered to be a single customer. The consolidated revenues for the DRMS contracts for 2001 total \$5,996,000 (or 8.0%) of total revenue, as compared to \$7,606,000 (or 12.9%) for the year ended December 31, 2000, which results in a decrease of \$1,610,000 for 2001. Delays in the government's payment of amounts owing to the Company have resulted, from time to time, in a decrease in the Company's liquidity. Also, M&EC was awarded three contracts to treat certain waste at DOE facilities. See Oak Ridge Contract Award below for further discussion on the Oak Ridge Contracts.

We have and continue to enter into contracts with (directly or indirectly as a subcontractor) the federal government. The contracts that we are a party to with the federal government or with others as a subcontractor to the federal government, generally provide that the government may terminate on 30 days notice or renegotiate the contracts, at the government's election. Our inability to continue under existing contracts that we have with the federal government (directly or indirectly as a subcontractor) could have a material adverse effect on our operations and financial condition.

#### Oak Ridge Contract Award

The Company and M&EC entered into an agreement pursuant to which the Company and M&EC agreed to act as a team in the performance of certain contracts that either the Company or M&EC may obtain from

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customers of the DOE regarding treatment and disposal of certain types of radioactive, hazardous or mixed waste (waste containing both hazardous and low level radioactive waste) at DOE facilities. In connection with proposals relating to the treatment and disposal of mixed waste at DOE's Oak Ridge, Tennessee system ("Oak Ridge"), M&EC and the Company made a joint proposal to DOE, with M&EC to act as the team leader. In June 1998 M&EC, as the team leader, was awarded three contracts ("Oak Ridge Contracts") by Bechtel Jacobs Company, LLC, the government-appointed manager of the environmental program for Oak Ridge, to perform certain treatment and disposal services relating to Oak Ridge. The Oak Ridge Contracts were issued by Bechtel Jacobs Company, as a contract to the DOE, based on proposals by M&EC and the Company.

The Oak Ridge Contracts are similar in nature to a blanket purchase order whereby the DOE specifies the approved waste treatment process and team to be used for certain disposal, but the DOE does not specify a schedule as to dates for disposal or quantities of disposal material to be processed. The initial term of the contract represented a demonstration period for the team's successful treatment of the waste and the resulting ability of such processed waste to meet acceptance criteria for its ultimate disposal location. All three of the Company's mixed waste facilities (PFF, DSSI and M&EC) have successfully performed under the demonstration period and are currently receiving and processing waste under the Oak Ridge Contracts.

As with most such blanket processing agreements, the Oak Ridge Contracts contain no minimum or maximum processing guarantees, and may be terminated pursuant to federal contracting terms and conditions. Each specific waste stream processed under the Oak Ridge Contracts will require a separate work order from DOE and will be priced separately with an intent of recognizing an acceptable profit margin.

Effective June 25, 2001, the Company acquired M&EC and the facility became operational in the third quarter of 2001. Consolidated revenues under the Oak Ridge contracts for 2001 total \$6,300,000 or 8.5% of total revenues for the year ended December 31, 2001. See "Management's Discussion and Analysis of Financial Conditions and Results of Operations -- Liquidity and Capital Resources of the Company," and "Note 4 to Notes to Consolidated Financial Statements."

#### **Competitive Conditions**

Competition is intense within certain product lines within the Industrial Waste Management Services segment of our business. We compete with numerous companies both large and small, that are able to provide one or more of the environmental services offered by us and many of which may have greater financial, human and other resources than we have. However, we believe that the range of waste management and environmental consulting, treatment, processing and remediation services we provide affords us a competitive advantage with respect to certain of our more

specialized competitors. We believe that the treatment processes we utilize offer a cost savings alternative to more traditional remediation and disposal methods offered by our competitors. The intense competition for performing the services provided by us within the Industrial Waste Management Services segment has resulted in reduced gross margin levels for certain of those services.

The Nuclear Waste Management Services segment, however has only a few competitors and does not currently experience such competitive pressures. In addition, at present we believe there is only one other facility in the United States that provides low-level radioactive and hazardous waste processing of scintillation vials, which also requires both a radioactive materials license and a hazardous waste permit.

Competition in the waste management industry is likely to increase as the industry continues to mature, and as consolidations continue to occur. We believe that there are no formidable barriers to entry into certain of the on-site treatment businesses. However, the permitting and licensing requirements, and the cost to obtain such permits, are barriers to the entry of hazardous waste TSD facilities and radioactive and mixed waste activities as presently operated by our subsidiaries. Certain of the non-hazardous waste operations, however, do not require such permits and, as a result, entry into these non-hazardous waste businesses would be easier. If the permit requirements for both hazardous waste storage, treatment and disposal activities and/or the licensing requirements for the handling of low level radioactive matters are eliminated or if such licenses or permits were made easier to obtain, such would allow more companies to enter into these markets and provide greater competition.

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Within our Industrial Waste Management Services segment we participate nationwide. However, we believe that we are a significant participant in the delivery of off-site waste treatment services in the Southeast, Midwest and Southwest portions of the United States. We compete with TSD facilities operated by national, regional and independent environmental services firms located within a several hundred-mile radius of our facilities. Our subsidiaries, PFF, DSSI and M&EC, with permitted radiological activities solicit business on a nationwide basis, including the U.S. Territories and Antarctica.

Environmental engineering and consulting services provided by us through SYA involve competition with larger engineering and consulting firms. We believe that we are able to compete with these firms based on our established reputation in these market areas and our expertise in several specific elements of environmental engineering and consulting such as environmental applications in the cement industry.

#### Capital Spending, Certain Environmental Expenditures and Potential Environmental Liabilities

During 2001, we spent approximately \$4,598,000 in capital expenditures, which was principally for the expansion and improvements to our continuing operations. Included in this total is approximately \$1,699,000 to complete the initial phase of the construction of the M&EC facility, incurred after the date of acquisition and a new waste water treatment system within the Dayton, Ohio, industrial facility, totaling approximately \$972,000. This 2001 capital spending total includes \$517,000 of which was financed. For 2002, we have budgeted approximately \$11,000,000 for capital expenditures to improve and expand our operations into new markets, reduce the cost of waste processing and handling, expand the range of wastes that can be accepted for treatment and processing and to maintain permit compliance requirements, and approximately \$1,202,000 to comply with federal, state and local regulations in connection with remediation activities at four locations. See Note 9 to Notes to Consolidated Financial Statements. However, there is no assurance that we will have the funds available for such budgeted expenditures. See "Management's Discussion and Analysis of Financial Condition and Results of Operations -- Liquidity and Capital Resources of the Company." We do not anticipate the ongoing environmental expenditures to be significant, with the

exception of remedial activities at the four locations discussed below.

In June 1994, we acquired from Quadrex Corporation and/or a subsidiary of Quadrex Corporation (collectively, "Quadrex") three TSD companies, including PFD. The former owners of PFD had merged Environmental Processing Services, Inc. ("EPS") with PFD, which was subsequently sold to Quadrex. Through our acquisition of PFD in 1994 from Quadrex, we were indemnified by Quadrex for costs associated with remediating certain property leased by EPS from an affiliate of EPS on which EPS operated a RCRA storage and processing facility ("Leased Property"). Such remediation involves soil and/or groundwater restoration. The Leased Property used by EPS to operate its facility is separate and apart from the property on which PFD's facility is located. During 1995, in conjunction with the bankruptcy filing by Quadrex, we recognized an environmental liability of approximately \$1,200,000 for remedial activities at the leased property. We have accrued approximately \$541,000 for the estimated, remaining costs of remediating the Leased Property used by EPS, which will extend for a period of two (2) to three (3) years.

Due to the acquisition of PFM, we assumed and recorded certain liabilities to remediate gasoline contaminated groundwater and investigate, under the hazardous and solid waste amendments, potential areas of soil contamination on PFM's property. Prior to our ownership of PFM, the owners installed monitoring and treatment equipment to restore the groundwater to acceptable standards in accordance with federal, state and local authorities. We have accrued approximately \$973,000 for the estimated, remaining cost of remediating the groundwater contamination.

The PFM facility is situated in the vicinity of the Memphis Military Defense Depot (the "Defense Facility"), which Defense Facility is listed as a Superfund Site. The Defense Facility is located in the general up gradient direction of ground water flow of the Allen Well Field utilized by Memphis Light, Gas & Water, a public water supply utilized in Memphis, Tennessee. Chlorinated compounds have previously been detected in the groundwater beneath the Defense Facility, as well as in very limited amounts in certain production wells in the adjacent Allen Well Field. Very low concentrations of certain chlorinated compounds have also been detected in the groundwater beneath the PFM facility. The PFM facility is located in the down gradient

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direction of ground water flow from the Allen Well Field. Based upon a study performed by our environmental engineering group, we do not believe the PFM facility is the source of the chlorinated compounds in the noted production wells in the Allen Well Field and, as a result, do not believe that the presence of the low concentrations of chlorinated compounds at the PFM facility will have a material adverse effect upon the Company.

Pursuant to the acquisition of PFSG during 1999, we recognized an environmental accrual of \$2,199,000 for estimated long-term costs to remove contaminated soil and to undergo ground water remediation activities at the acquired facility in Valdosta, Georgia. Initial valuation has recently been completed, and the remedial process selected. The planning and approval process will continue throughout 2002, with remedial activities beginning in 2003. For the year ended December 31, 2001, we have a remaining accrual of \$1,400,000, of which we anticipate spending \$108,000 during 2002, with the remaining \$1,292,000 to be spent over the next five to seven years.

In conjunction with the acquisition of PFMI during 1999, we recognized a long-term environmental accrual of \$2,120,000. This amount represented the Company's estimate of the long-term costs to remove contaminated soil at the PFMI acquired facility in Detroit, Michigan. The facility has pursued remedial activities over the past three years, and anticipates completion of such activities during 2003. The accrued balance at December 31, 2001, for the PFMI remediation is \$620,000, of which we anticipate spending \$507,000 during 2002, with the remaining \$113,000 in 2003.

No insurance or third party recovery was taken into account in determining our cost estimates or reserves, nor do our cost estimates or reserves reflect any discount for present value purposes. See Note 4 to Notes to Consolidated Financial Statements for discussion on the acquisition and Note 9 to Notes to Consolidated Financial Statements for discussion on environmental liabilities.

The nature of our business exposes us to significant risk of liability for damages. Such potential liability could involve, for example, claims for cleanup costs, personal injury or damage to the environment in cases where we are held responsible for the release of hazardous materials; claims of employees, customers or third parties for personal injury or property damage occurring in the course of our operations; and claims alleging negligence or professional errors or omissions in the planning or performance of our services or in the providing of our products. In addition, we could be deemed a responsible party for the costs of required cleanup of any property which may be contaminated by hazardous substances generated or transported by us to a site we selected, including properties owned or leased by us. We could also be subject to fines and civil penalties in connection with violations of regulatory requirements.

#### **Research and Development**

Innovation by our operations is very important to the success of our business. Our goal is to discover, develop and bring to market innovative ways to process waste that address unmet environmental needs. We are planning for future growth of our research operations. We conduct research internally, and also through collaborations with universities. We feel that our investments in research have been rewarded by the discovery of the *Perma-Fix Process* and the New Process. Our competitors also devote resources to research and development and many such competitors have greater resources at their disposal than we do. We have estimated that during 1999, 2000 and 2001, we spent approximately \$467,000, \$359,000, and \$428,000, respectively in Company-sponsored research and development activities.

# **Number of Employees**

In our service-driven business, our employees are vital to our success. We believe we have good relationships with our employees. As of December 31, 2001, we employed approximately 498 persons, of which approximately 13 were assigned to our corporate office, approximately 28 were assigned to our Consulting Engineering Services segment, approximately 278 to the Industrial Waste Management Services segment of which 19 employees at one facility are represented by a collective bargaining unit, under a contract expiring on March 31,2006, and approximately 179 to the Nuclear Waste Management Services segment, including approximately 58 employees at the M&EC facility acquired in June 2001.

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# **Governmental Regulation**

Environmental companies and their customers are subject to extensive and evolving environmental laws and regulations by a number of national, state and local environmental, safety and health agencies, the principal of which being the EPA. These laws and regulations largely contribute to the demand for our services. Although our customers remain responsible by law for their environmental problems, we must also comply with the requirements of those laws applicable to our services. Because the field of environmental protection is both relatively new and rapidly developing, we cannot predict the extent to which our operations may be affected by future enforcement policies as applied to existing laws or by the enactment of new environmental laws and regulations. Moreover, any predictions regarding possible liability are further complicated by the fact that under current environmental laws we could be jointly and severally liable for certain activities of third parties over whom we have little or no control. Although we believe that we are currently in substantial compliance with applicable laws and regulations, we could be subject to fines, penalties or other liabilities or could be adversely affected by existing or subsequently enacted laws or regulations. The principal environmental laws affecting us and our customers are briefly discussed below.

#### The Resource Conservation and Recovery Act of 1976, as amended ("RCRA")

RCRA and its associated regulations establish a strict and comprehensive regulatory program applicable to hazardous waste. The EPA has promulgated regulations under RCRA for new and existing treatment, storage and disposal facilities including incinerators, storage and treatment tanks, storage containers, storage and treatment surface impoundments, waste piles and landfills. Every facility that treats, stores or disposes of hazardous waste must obtain a RCRA permit or must obtain interim status from the EPA, or a state agency which has been authorized by the EPA to administer its program, and must comply with certain operating, financial responsibility and closure requirements. RCRA provides for the granting of interim status to facilities that allows a facility to continue to operate by complying with certain minimum standards pending issuance or denial of a final RCRA permit.

# Boiler and Industrial Furnace Regulations under RCRA ("BIF Regulations")

BIF Regulations require boilers and industrial furnaces, such as cement kilns, to obtain permits or to qualify for interim status under RCRA before they may use hazardous waste as fuel. If a boiler or industrial furnace does not qualify for interim status under RCRA, it may not burn hazardous waste as fuel or use such as raw materials without first having obtained a final RCRA permit. In addition, the BIF Regulations require 99.99% destruction of the hazardous organic compounds used as fuels in a boiler or industrial furnace and impose stringent restrictions on particulate, carbon monoxide, hydrocarbons, toxic metals and hydrogen chloride emissions.

#### The Safe Drinking Water Act, as amended (the "SDW Act")

SDW Act regulates, among other items, the underground injection of liquid wastes in order to protect usable groundwater from contamination. The SDW Act established the Underground Injection Control Program ("UIC Program") that provides for the classification of injection wells into five classes. Class I wells are those which inject industrial, municipal, nuclear and hazardous wastes below all underground sources of drinking water in an area. Class I wells are divided into nonhazardous and hazardous categories with more stringent regulations imposed on Class I wells which inject hazardous wastes. PFTS' permit to operate its underground injection disposal wells is limited to nonhazardous wastewaters.

# The Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA," also referred to as the "Superfund Act")

CERCLA governs the cleanup of sites at which hazardous substances are located or at which hazardous substances have been released or are threatened to be released into the environment. CERCLA authorizes the EPA to compel responsible parties to clean up sites and provides for punitive damages for noncompliance. CERCLA imposes joint and several liability for the costs of clean up and damages to natural resources.

# **Health and Safety Regulations**

The operation of the Company's environmental activities is subject to the requirements of the Occupational Safety and Health Act ("OSHA") and comparable state laws. Regulations promulgated under OSHA by the

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Department of Labor require employers of persons in the transportation and environmental industries, including independent contractors, to implement hazard communications, work practices and personnel protection programs in order to protect employees from equipment safety hazards and exposure to hazardous chemicals.

#### **Atomic Energy Act**

The Atomic Energy Act of 1954 governs the safe handling and use of Source, Special Nuclear and Byproduct materials in the U.S. and its territories. This act authorized the Atomic Energy Commission (now the Nuclear

Regulatory Commission) to enter into "Agreements with States to carry out those regulatory functions in those respective states except for Nuclear Power Plants and federal facilities like the VA hospitals and the DOE operations." The State of Florida (with the USNRC oversight), Office of Radiation Control, regulates the radiological program of the PFF facility, and the State of Tennessee (with the USNRC oversight), Tennessee Department of Radiological Health, regulates the radiological program of the DSSI and M&EC facilities.

#### **Other Laws**

Our activities are subject to other federal environmental protection and similar laws, including, without limitation, the Clean Water Act, the Clean Air Act, the Hazardous Materials Transportation Act and the Toxic Substances Control Act. Many states have also adopted laws for the protection of the environment which may affect us, including laws governing the generation, handling, transportation and disposition of hazardous substances and laws governing the investigation and cleanup of, and liability for, contaminated sites. Some of these state provisions are broader and more stringent than existing federal law and regulations. Our failure to conform our services to the requirements of any of these other applicable federal or state laws could subject us to substantial liabilities which could have a material adverse affect on us, our operations and financial condition. In addition to various federal, state and local environmental regulations, our hazardous waste transportation activities are regulated by the U.S. Department of Transportation, the Interstate Commerce Commission and transportation regulatory bodies in the states in which we operate. We cannot predict the extent to which we may be affected by any law or rule that may be enacted or enforced in the future, or any new or different interpretations of existing laws or rules.

#### **Insurance**

We believe we maintain insurance coverage adequate for our needs and which is similar to, or greater than, the coverage maintained by other companies of our size in the industry. There can be no assurances, however, that liabilities which may be incurred by us will be covered by our insurance or that the dollar amount of such liabilities which are covered will not exceed our policy limits. Under our insurance contracts, we usually accept self-insured retentions which we believe appropriate for our specific business risks. We are required by EPA regulations to carry environmental impairment liability insurance providing coverage for damages on a claims-made basis in amounts of at least \$1 million per occurrence and \$2 million per year in the aggregate. To meet the requirements of customers, we have exceeded these coverage amounts.

#### ITEM 2. PROPERTIES

Our principal executive offices are in Gainesville, Florida. Our Industrial Waste Management Services segment maintains facilities in Orlando and Ft. Lauderdale, Florida; Dayton, Ohio; Tulsa, Oklahoma; Valdosta, Georgia; and Detroit, Michigan. Our Nuclear Waste Management Services segment maintains facilities in Gainesville, Florida; Kingston, Tennessee; and Oak Ridge, Tennessee. Our Consulting Engineering Services are located in St. Louis, Missouri. We also maintain Government Services offices in Jacksonville, Florida; Anniston, Alabama; San Diego, California; Oklahoma City, Oklahoma; and Honolulu, Hawaii.

We own nine facilities, all of which are in the United States. Five of our facilities are subject to mortgages as placed by the Company's senior lender. In addition, we lease ten properties for office space, all of which are located in the United States as described above. Included in our leased properties is M&EC's 150,000 square-foot facility, located on the grounds of the Oak Ridge K-25 weapons facility of the DOE.

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We believe that the above facilities currently provide adequate capacity for our operations and that additional facilities

are readily available in the regions in which we operate.

#### ITEM 3. LEGAL PROCEEDINGS

PFMI, which was purchased by the Company effective June 1, 1999, has been advised that it is considered a potentially responsible party ("PRP") in three Superfund sites, two of which had no relationship with PFMI according to PFMI records. The relationship of PFMI to the third site, if any, is currently being investigated by the Company. PFO, which was also purchased by the Company effective June 1, 1999, has been advised that it is a PRP in two Superfund sites. The Company is currently investigating the relationship of PFO to the two sites.

PFFL has been advised by the EPA that a release or threatened release of hazardous substances has been documented by the EPA at the former facility of Florida Petroleum Reprocessors (the "Site"), which is located approximately 3,000 feet northwest of the PFFL facility in Davie, Florida. However, studies conducted by, or under the direction of, the EPA, together with data previously provided to PFFL by the EPA, do not indicate that the PFFL facility in Davie, Florida has contributed to the deep groundwater contamination associated with the Site. As a result, we are unable to determine with any degree of certainty what exposure, if any, PFFL may have as a result of the documented release from the Site.

PFD is required to remediate a parcel of leased property ("Leased Property"), which was formerly used as a Resource Conservation and Recovery Act of 1976 storage facility that was operated as a storage and solvent recycling facility by a company that was merged with PFD prior to the Company's acquisition of PFD. The Leased Property contains certain contaminated waste in the soils and groundwater. The Company was indemnified by the seller of PFD for costs associated with remediating the Leased Property, which entails remediation of soil and/or groundwater restoration. However, during 1995, the seller filed for bankruptcy. Prior to the acquisition of PFD by the Company, the seller had established a trust fund ("Remediation Trust Fund"), which it funded with the seller's stock to support the remedial activity on the Leased Property pursuant to the agreement with the Ohio Environmental Protection Agency ("Ohio EPA"). After the Company purchased PFD, it was required to advance \$250,000 into the Remediation Trust Fund due to the reduction in the value of the seller's stock that comprised the Remediation Trust Fund, which stock had been sold by the trustee prior to the seller's filing bankruptcy and has subsequently put an additional \$192,000 into the Remediation Trust Fund. PFD has brought action against the owners and former operators of the Leased Property to remediate the Leased Property and/or to recover any cost incurred by PFD in connection therewith.

PFMI was previously named as a PRP under the Indiana state equivalent to the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 at the Four County Landfill site near DeLong, Indiana. In March 1999, PFMI the Indiana Department of Environmental Management ("IDEM"), and the members of the Four County Landfill Group and the Four County Landfill Operable Unit One RD/RA Group (collectively the "Groups") entered into an Agreed Order (the "Agreed Order") in an administrative proceeding before IDEM pursuant to which PFMI received a full and complete release from the Groups, a covenant from IDEM not to sue or take any administrative action against PFMI with respect to present or future liability relating to the site (with the exception of liability, if any, associated with loss of natural resources), and protection from contribution actions of third parties relating to the site. On July 13, 2001, the United States of America (the "Government") filed an action against PFMI and others, including members of the Groups, seeking to recover response costs allegedly incurred by the United States Environmental Protection Agency ("EPA") in connection with the Four County Landfill site. The suit is pending in the United States District Court for the Northern District of Indiana, South Bend Division, R#D5:01CVO513R. According to the demand, the Government is seeking to recover approximately \$576,000. The complaint alleges that the defendants are jointly and severally liable. The action is currently stayed while the parties pursue settlement negotiations. At this point we are unable to determine what exposure PFMI may have to the Government in this matter.

In addition to the above matters and in the normal course of conducting our business, we are involved in various other litigation. We are not a party to any litigation or governmental proceeding which our management believes could result in any judgments or fines against us that would have a material adverse affect on our financial position, liquidity or results of future operations.

#### ITEM 4A. EXECUTIVE OFFICERS OF THE COMPANY

The following table sets forth, as of the date hereof, information concerning the Executive Officers of the Company:

<u>NAME</u>	<u>AGE</u>	<u>POSITION</u>
Dr. Louis F. Centofanti	58	Chairman of the Board, President and Chief Executive Officer
Mr. Richard T. Kelecy	46	Chief Financial Officer, Vice President and Secretary
Mr. Roger Randall	58	President, Industrial Services
Mr. Larry McNamara	52	President, Nuclear Services

#### DR. LOUIS F. CENTOFANTI

Dr. Centofanti has served as Chairman of the Board since he joined the Company in February 1991. Dr. Centofanti also served as President and Chief Executive Officer of the Company from February 1991 until September 1995 and again in March 1996 was elected to serve as President and Chief Executive Officer of the Company. From 1985 until joining the Company, Dr. Centofanti served as Senior Vice President of USPCI, Inc., a large hazardous waste management company, where he was responsible for managing the treatment, reclamation and technical groups within USPCI. In 1981 he founded PPM, Inc., a hazardous waste management company specializing in the treatment of PCB contaminated oils which was subsequently sold to USPCI. From 1978 to 1981, Dr. Centofanti served as Regional Administrator of the U.S. Department of Energy for the southeastern region of the United States. Dr. Centofanti has a Ph.D. and a M.S. in Chemistry from the University of Michigan, and a B.S. in Chemistry from Youngstown State University.

#### MR. RICHARD T. KELECY

Mr. Kelecy was elected Vice-President and Chief Financial Officer in September 1995. He previously served as Chief Accounting Officer and Treasurer of the Company since July 1994. From 1992 until June 1994, Mr. Kelecy was Corporate Controller and Treasurer for Quadrex Corporation. From 1990 to 1992 Mr. Kelecy was Chief Financial Officer for Superior Rent-a-Car, and from 1983 to 1990 held various positions at Anchor Glass Container Corporation including Assistant Treasurer. Mr. Kelecy holds a B.A. in Accounting and Business Administration from Westminster College.

#### MR. ROGER RANDALL

Mr. Randall was elected President of the Industrial Waste Management Services Segment in October 2000. He previously served as Vice President of Industrial Services from December 1997 to October 2000 and as Vice President/General Manager of PFD since its acquisition by the Company in June 1994. From June 1992 to June 1994, Mr. Randall served as General Manager of PFD under the ownership of Quadrex Corporation. From 1982 to June 1992, Mr. Randall served a variety of management roles at the Dayton facility, ranging from Operations Manager to Chairman of the Board and Chief Executive Officer under the ownership of Clark Processing, Inc. Previous to his involvement with the waste management industry, Mr. Randall spent 17 years in public education serving a variety of administrative roles. He has a B.S. from Wittenberg University and an M.A. from Wright State University.

#### MR. LARRY MCNAMARA

Mr. McNamara has served as President of the Nuclear Waste Management Services Segment since October 2000. From December 1998 to October 2000, he served as Vice President of the Nuclear Waste Management Services Segment for the Company's nuclear activities. Between 1997 and 1998, he served as Mixed Waste Program Manager for Waste Control Specialists (WCS) developing plans for the WCS mixed waste processing facilities, identifying

markets and directing proposal activities. Between 1996 and 1995, Mr. McNamara was the single point of contact for the DOD to all state and federal regulators for issues related to disposal of Low Level Radioactive Waste and served on various National Committees and advisory groups. Mr. McNamara served, from 1992 to 1995, as Chief of the Department of Defense Low Level Radioactive Waste office. Between 1986 and 1992 he served as the Chief of Planning for the Department of Army overseeing project management and program policy for the Army program. Mr. McNamara has a B.S. from the University of Iowa.

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#### **PART II**

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

Our Common Stock, with a par value of \$.001 per share, is traded on the NASDAQ SmallCap Market ("NASDAQ") and the Boston Stock Exchange ("BSE") under the symbol "PESI" on both NASDAQ and BSE. Effective December 1996, our Common Stock also began trading on the Berlin Stock Exchange under the symbol "PES.BE." The following table sets forth the high and low market trade prices quoted for the Common Stock during the periods shown. The source of such quotations and information is the NASDAQ online trading history reports.

			2001	2000	
		Low	High	Low	High
Common Stock:	1st Quarter 2nd Quarter 3rd Quarter 4th Quarter	2.1	250 \$2.094 520 2.810 60 3.650 400 3.890	\$1.125 1.250 1.375 1.313	\$1.938 1.750 1.719 2.438

Such over-the-counter market quotations reflect inter-dealer prices, without retail markups or commissions and may not represent actual transactions.

As of March 20, 2002, there were approximately 300 shareholders of record of our Common Stock, including brokerage firms and/or clearing houses holding shares of our Common Stock for their clientele (with each brokerage house and/or clearing house being considered as one holder). However, the total number of beneficial shareholders as of March 20, 2002, was approximately 3,944.

Since our inception, we have not paid any cash dividends on our Common Stock and have no dividend policy. Our loan agreement prohibits paying any cash dividends on our Common Stock without prior approval.

In addition to the securities sold by us during 2001, as reported in our Forms 10-Q for the quarters ended March 31, 2001, June 30, 2001 and September 30, 2001, which were not registered under the Securities Act of 1933, as amended, we sold or issued during the fourth quarter of 2001 the following securities which were also not registered

under the Act:

1. On or about December 31, 2001, pursuant to the terms of a certain Consulting Agreement ("Consulting Agreement") entered into effective as of January 1, 1998, the Company issued 4,057 shares of Common Stock in payment of accrued fees of \$9,000 to Alfred C. Warrington IV, an outside, independent consultant to the Company, as consideration for certain consulting services rendered to the Company by Warrington from October 2000 through September 2001 reduced by an overpayment of fees during 1999. The issuance of Common Stock pursuant to the Consulting Agreement was a private placement under Section 4(2) of the Act. The Consulting Agreement provides that Warrington will be paid \$1,000 per month of service to the Company, payable, at the option of Warrington (i) all in cash, (ii) sixty-five percent in shares of Common Stock and thirtyfive percent in cash, or (iii) all in Common Stock. If Warrington elects to receive part or all of his compensation in Common Stock, such will be valued at seventy-five percent of its "Fair Market Value" (as defined in the Consulting Agreement). Warrington elected to receive all of his accrued compensation from October 2000 through the end of September 2001 in Common Stock. Warrington represented and warranted in the Consulting Agreement, inter alia, as follows: (i) the Common Stock is being acquired for Warrington's own account, and not on behalf of any other persons; (ii) Warrington is acquiring the Common Stock to hold for investment, and not with a view to the resale or distribution of all or any part of the Common Stock; (iii) Warrington will not sell or otherwise transfer the Common Stock in the absence of an effective registration statement under the Act, or an opinion of counsel satisfactory to the Company, that the transfer can be made without violating the registration provisions of the Act and the rules and regulations

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promulgated thereunder; (iv) Warrington is an "accredited investor" as defined in Rule 501 of Regulation D as promulgated under the Act; (v) Warrington has such knowledge, sophistication and experience in financial and business matters that he is capable of evaluating the merits and risks of the acquisition of the Common Stock; (vi) Warrington fully understands the nature, scope and duration of the limitations on transfer of the Common Stock as contained in the Consulting Agreement; and (vii) Warrington understands that a restrictive legend as to transferability will be placed upon the certificates for any of the shares of Common Stock received by Warrington under the Consulting Agreement and that stop transfer instructions will be given to the Company's

transfer agent regarding such certificates. Mr. Warrington was subsequently elected as a director of the Company in March 2002 to fill a newly created directorship. Upon his election to the board the Consulting Agreement was terminated.

#### ITEM 6. SELECTED FINANCIAL DATA

The financial data included in this table has been derived from our audited consolidated financial statements, which have been audited by BDO Seidman, LLP.

#### **Statement of Operations Data:**

(Amounts in Thousands, Except for Share Amounts)

December 31,

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	2	2001(4)	2000 <sup>(3)</sup> 19		1999 <sup>(1)</sup> 1998		1997			
Revenues <sup>(2)</sup>	\$	74,492	\$	59,139	\$	46,464	\$	30,551	\$	28,413
Net income (loss) from continuing operations		(602)		(556)		1,570		462		192
Net loss from discontinued operations										(4,101)
Preferred Stock dividends		(145)		(206)		(308)		(1,160)		(1,260)
Gain on Preferred Stock redemption						188				
Net income (loss) applicable to Common Stock from continuing operations		(747)		(762)		1,450		(698)		(1,068)
Basic net income (loss) per common share from continuing operations		(.03)		(.04)		.08		(.06)		(.10)
Diluted net income (loss) per common share from continuing operations	\$	(.03)	\$	(.04)	\$	.07	\$	(.06)	\$	(.10)
Basic number of shares used in computing net income (loss) per share	Ψ	27,235	Ψ	21,558	Ψ	17,488	Ψ	12,028	Ψ	10,650
Diluted number of shares and potential common shares used in computing net		27,233		21,550		17,100		12,020		10,000
income (loss) per share		27,235		21,558		21,224		12,028		10,650

# **Balance Sheet Data:**

# December 31,

	2001		2000		1999		1998		1997	
Working capital (deficit)	\$	831	\$	(2,829)	\$	(1,400)	\$	372	\$	754
Total assets		99,137		72,771		54,644		28,748		28,570
Long-term debt		31,146		25,490		15,306		3,042		4,981
Total liabilities		56,011		50,751		34,825		12,795		16,376
Preferred Stock of subsidiary		1,285								
Stockholders' equity		41,841		22,020		19,819		15,953		12,194

- (1) Includes financial data of PFO, PFSG and PFMI as acquired during 1999 and accounted for using the purchase method of accounting from the date of acquisition, June 1, 1999.
- (2) Excludes revenues of PFM, shown elsewhere as a discontinued operation.
- (3) Includes financial data of DSSI as acquired during 2000 and accounted for using the purchase method of accounting from the date of acquisition, August 31, 2000.
- (4) Includes financial data of M&EC as acquired during 2001 and accounted for using the purchase method of accounting from the date of acquisition, June 25, 2001.

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

Certain statements contained within this "Management's Discussion and Analysis of Financial Condition and Results of Operations" may be deemed "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (collectively, the "Private Securities Litigation Reform Act of 1995"). See "Special Note regarding Forward-Looking Statements" contained in this report.

Management's discussion and analysis is based, among other things, upon our audited consolidated financial statements and includes the accounts of the Company and our wholly-owned subsidiaries, after elimination of all significant intercompany balances and transactions.

The following discussion and analysis should be read in conjunction with our consolidated financial statements and the notes thereto included in Item 8 of this report.

#### **Critical Accounting Policies and Estimates**

In preparing the consolidated financial statements in conformity with generally accepted accounting principles, management makes estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, as well as, the reported amounts of revenues and expenses during the reporting period. The Company believes the following critical accounting policies affect the more significant estimates used in preparation of the consolidated financial statements:

Intangible Assets. Intangible assets relating to acquired businesses consist primarily of the cost of purchased businesses in excess of the estimated fair value of net assets acquired ("goodwill") and the recognized permit value of the business. The Company continually reevaluates the propriety of the carrying amount of permits and goodwill as well as the amortization period to determine whether current events and circumstances warrant adjustments to the carrying value and estimates of useful lives. Effective January 1, 2002, the Company will adopt SFAS 142 and will obtain a financial valuation of our intangible assets. At this time, the Company does not believe there will be an impairment to intangible assets, does not expect a write-down of our intangible assets, and effective January 1, 2002, will discontinue amortizing indefinite life intangible assets as required by SFAS 142.

Accrued Closure Costs. The accrued closure costs are estimates based on guidelines developed by federal and/or state regulatory authorities under RCRA. Such costs are evaluated annually and adjusted for inflationary factors and for approved changes or expansions to the facilities. Increases due to inflationary factors for the years ended December 31, 2001, 2000 and 1999 have been approximately 2.1%, 1.5% and 1.1%, respectively, and based on the historical information, the Company does not expect future inflationary changes to differ materially from the last three years. Increases or decreases in accrued closure costs resulting from changes or expansions at the facilities are determined based on specific RCRA guidelines applied to the requested change. This calculation includes certain estimates, such as disposal pricing, which are based on current market conditions. Accrued closure costs represent a contingent

environmental liability

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to clean up a facility in the event the Company ceases operations in an existing facility. However, the Company has no intention, at this time, to close any of our facilities.

Accrued Environmental Liabilities. The Company has four remediation projects currently in progress. The current and long-term accrual amounts for the projects are our best estimates determined based on proposed or approved processes for clean-up. The circumstances that could affect the outcome range from new technologies, that are being developed every day that reduce the Company's overall costs, to increased contamination levels that could arise as the Company completes remediation which could increase the Company's costs, neither of which the Company anticipates at this time. In addition, significant changes in regulations could adversely or favorably affect our costs to remediate existing sites or potential future sites, which cannot be reasonably quantified.

Disposal Costs. The Company accrues for waste disposal based upon a physical count of the total waste at each facility at the end of each accounting period. Current market prices for transportation and disposal costs are applied to the end of period waste inventories to calculate the disposal accrual. Costs are calculated using current costs for disposal, but economic trends could materially affect our actual costs for disposal. As there are limited disposal sites available to us, a change in the number of available sites or an increase or decrease in demand for the existing disposal areas could significantly affect the actual disposal costs either positively or negatively.

Self Insurance. We have a self-insurance program for certain health benefits. The cost of such benefits is recognized as expense in the period in which the claim occurred and includes an estimate of claims incurred but not reported ("IBNR"), with such estimates based upon historical trends. Actual health insurance claims may differ materially from the estimates, as a result of the nature and extent of the actual IBNR claims paid. The Company maintains separate insurance to cover the excess liability over an established specific single claim amount and also an aggregate annual claim total.

#### **Results of Operations**

The reporting of financial results and pertinent discussions are tailored to three reportable segments: Industrial Waste Management Services, Nuclear Waste Management Services and Consulting Engineering Services.

Below are the results of operations for our years ended December 31, 2001, 2000 and 1999 (amounts in thousands, except for share amounts):

(Consolidated)	2001	%	2000	%	1999	%
Net Revenues	\$ 74,492	100.0	\$ 59,139	100.0	\$ 46,464	100.0
Cost of goods sold	49,719	66.7	40,910	69.2	31,271	67.3
Gross profit	24,773	33.3	18,229	30.8	15,193	32.7
Selling, general and administrative	14,738	19.8	12,765	21.6	10,299	22.2
Depreciation and amortization	4,616	6.2	3,651	6.2	2,778	6.0

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Other income (expense)						
Interest income	29		41	.1	50	.1
Interest expense	(3,038)	(4.1)	(2,132)	(3.6)	(650)	(1.4)
Interest expense-Warrants	(234)	(.3)	(344)	(.6)		
Interest expense-financing fees	(2,732)	(3.6)	(181)	(.3)	(67)	(.1)
Other	(46)	(.1)	247	.4	121	.3
Net income (loss)	(602)	(.8)	(556)	(1.0)	1,570	3.4
Preferred Stock dividends	(145)	(.2)	(206)	(.3)	(308)	(.7)
Gain on Preferred Stock redemption					188	.4
Net income (loss) applicable to Common Stock	\$ (747)	(1.0)	\$ (762)	(1.3)	\$ 1,450	3.1
Basic net income (loss) per common share	\$ (.03)		\$ (.04)	ı	\$ .08	
Diluted net income (loss) per Common share	\$ (.03)		\$ (.04)	ı	\$ .07	
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# Summary - Years Ended December 31, 2001 and 2000

Consolidated revenues increased \$15,353,000 or 26.0% for the year ended December 31, 2001, compared to the year ended December 31, 2000. This increase is principally attributable to a full year of additional revenues resulting from the acquisition of DSSI, effective August 31, 2000, which contributed approximately \$5,095,000 of the increase and the additional revenues resulting from the acquisition of M&EC, effective June 25, 2001, which contributed approximately \$6,702,000 of the increase. Additionally, revenues increased in the Nuclear Waste Management Services segment due to the mixed waste subcontract work preformed for M&EC prior to the acquisition and from growth in mixed waste revenues driven by the expansion of the mixed waste treatment facility in North Florida. These factors combined increased revenues by approximately \$17,195,000 in the Nuclear Waste Management Services segment. Offsetting this increase, were decreases in the Industrial Waste Management Services segment totaling approximately \$1,836,000 and in the Consulting Engineering Services segment totaling approximately \$6,000. The decreases were primarily due to the harsher weather conditions in the winter months, the impact of the downturn in the economy and the reduced revenue in September 2001 within all segments resulting from the tragic events of September 11, 2001. The strategy to target higher margin business and the expiration of certain government contracts also contributed to the decrease within the Industrial Waste Management Services segment.

Cost of goods sold increased \$8,809,000, or 21.5% for the year ended December 31, 2001, compared to the year ended December 31, 2000. This increase in cost of goods sold reflects principally the increased operating, disposal and transportation costs corresponding to the increased revenues from the August 31, 2000, acquisition of DSSI, and the June 25, 2001, acquisition of M&EC. The acquired facilities contributed additional cost of goods sold totaling approximately \$3,978,000 and \$3,887,000, respectively. Additionally, cost of goods sold increases were experienced in the Nuclear Waste Management Services segment in conjunction with increased revenues from the mixed waste subcontract work performed for M&EC prior to the acquisition and from growth in mixed waste revenues driven by the expansion of the mixed waste facility in North Florida. Combined, these factors increased cost of goods sold by \$11,628,000 in the Nuclear Waste Management Services segment. Offsetting these increases, were decreases in cost of goods sold in the Industrial Waste Management Services segment totaling approximately \$2,560,000 and in the Consulting Engineering Services segment totaling approximately \$259,000. These decreases were in conjunction with the decrease in revenues in these segments mentioned above and cost reduction programs.

Gross profit for the year ended December 31, 2001, increased to \$24,773,000, which as a percentage of revenue is 33.3%, reflecting an increase over the 2000 percent of revenue of 30.8%. This increase in the gross profit percentage principally reflects the impact of increased wastewater activity, including certain new processes, the benefit of cost reduction programs and the impact of targeting higher margin business in the Industrial Waste Management Services segment. Additionally, the Consulting Engineering Services segment showed an increase in gross profit percentage reflecting the benefits from the restructuring and consolidation of our engineering businesses. Offsetting these increases was a decrease in gross profit percentage in the Nuclear Waste Management Services segment associated with the subcontract work performed for M&EC prior to the acquisition at agreed upon reduced margins and the increased start-up costs incurred as this segment ramps up to normal activities.

Selling, general and administrative expenses increased \$1,973,000 or 15.5% for the year ended December 31, 2001, as compared to the corresponding period for 2000. The increase in selling, general and administrative expense is principally due to the acquisition of DSSI, which reflects additional expense of \$702,000 for this facility, as compared to the year ended December 31, 2000. Additionally, selling, general and administrative expense increased due to the impact of the acquisition of M&EC, effective June 25, 2001, which resulted in additional expense of \$679,000 and the remaining increase of \$592,000 is associated with additional sales and marketing efforts as we continue to refocus the business segments into new environmental markets, such as nuclear and mixed waste. However, as a percentage of revenue, selling, general and administrative expenses decreased to 19.8% for the year ended December 31, 2001, compared to 21.6% for the same period of 2000.

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Depreciation and amortization expense, including amortization of intangibles, for the year ended December 31, 2001, reflects an increase of approximately \$965,000 or 26.4%, as compared to the year ended December 31, 2000. This increase is principally a result of additional depreciation and amortization of \$304,000 from the August 2000 acquisition of DSSI, and of \$722,000 from the acquisition of M&EC in June 2001. These increases were offset by a decrease in depreciation and amortization expense of approximately \$61,000 related to assets becoming fully depreciated. Depreciation expense for the year ended December 31, 2001, was \$3,041,000 which included \$420,000 and \$177,000 for the above noted acquisitions in 2000 and 2001, respectively. Amortization expense for the year ended December 31, 2001, was \$1,575,000 which included \$129,000 and \$545,000 for the above noted acquisitions in 2000 and 2001, respectively.

Interest expense increased approximately \$906,000 for the year ended December 31, 2001, as compared to the corresponding period of 2000. This increase reflects the impact of DSSI, which was acquired during August 2000.

Two promissory notes were executed in conjunction with the DSSI acquisition, comprising \$6,000,000 of the purchase price, resulting in approximately \$126,000 of additional interest expense for the year 2001. This increase also reflects the impact of M&EC, which was acquired during June 2001. As a condition of the closing, M&EC entered into two installment agreements, comprising of the original principal balance of \$4,637,000, which resulted in approximately \$218,000 of additional interest expense. The remaining increase is a direct result of the interest expense on the BHC Interim Funding, L.P. ("BHC") loan agreement, which totaled \$390,000, and the interest expense on the Associated Mezzanine Investors-PESI, L.P. ("AMI") and Bridge East Capital, L.P. ("BEC") loan agreement, which totaled \$319,000, both related to the expansion of our mixed waste facilities. This increase is offset by the impact of lower interest rates due to a drop in the prime lending rate, reduced borrowing levels on the revolving and term loan with PNC Bank, National Association ("PNC") and the debt to equity conversion on amounts due to Capital Bank. Combined, these factors resulted in a decrease in interest expense of \$147,000.

Interest expense-Warrants for the year ended December 31, 2001, was \$234,000. This expense reflects the Black-Scholes pricing valuation for certain Warrants issued to Capital Bank pursuant to the \$3,000,000 Unsecured Promissory Note and the \$750,000 Unsecured Promissory Note. The notes required that certain Warrants be issued upon the initial execution of the note and at monthly intervals until the debt obligations to Capital Bank were repaid in full. During 2001, the Company issued 315,000 Warrants to Capital Bank resulting in the above noted expense. See Note 6 to Notes to Consolidated Financial Statements regarding the repayment of this debt.

Interest expense-financing fees increased approximately \$2,551,000 for the year ended December 31, 2001, as compared to the corresponding period of 2000. This increase is partially due to the amortization and write-off of unamortized financing fees from the BHC debt of approximately \$2,041,000. The increase is also due to the amortization of PNC financing fees of \$438,000 offset by the financing fees of the previous primary lender recorded in 2000 of \$171,000 and AMI and BEC financing fees of \$243,000. See Liquidity and Capital Resources in this section and Note 6 to Notes to Consolidated Financial Statements regarding the debt.

See Note 10 to Notes to Consolidated Financial Statements for a reconciliation between the expected tax benefit and the provision for income taxes as reported. For the years ended December 31, 2001 and 2000, we had no federal income tax liability.

Preferred Stock dividends decreased approximately \$61,000, for the year ended December 31, 2001, as compared to the year ended December 31, 2000. This decrease is principally due to the conversion of \$1,735,000 (1,735 preferred shares) of the Preferred Stock into Common Stock in January and April of 2001. See Note 5 to Notes to Consolidated Financial Statements regarding the issuance of Preferred Stock.

#### Summary - Years Ended December 31, 2000 and 1999

Consolidated revenues increased \$12,675,000 or 27.3% for the year ended December 31, 2000, compared to the year ended December 31, 1999. This increase is principally attributable to a full year of additional revenues resulting from the acquisition of PFO, PFSG and PFMI, effective June 1, 1999, which in

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the aggregate contributed approximately \$9,641,000 of the increase and the additional revenues resulting from the acquisition of DSSI, effective August 31, 2000, which contributed approximately \$3,046,000 of the increase. Additionally, revenues increased in the Nuclear Waste Management Services segment due to the mixed waste subcontract work performed for M&EC prior to the acquisition offset by a decrease in revenues in the Consulting Engineering Services segment due to the reduction and consolidation of the engineering businesses. Furthermore, a

decrease was experienced in the Industrial Waste Management Services segment due to the closing of an unprofitable service center.

Cost of goods sold increased \$9,639,000, or 30.8% for the year ended December 31, 2000, compared to the year ended December 31, 1999. This increase in cost of goods sold reflects principally the increased operating disposal and transportation costs corresponding to the increased revenues from the June 1, 1999, acquisition of PFO, PFSG and PFMI, and the August 31, 2000, acquisition of DSSI. The acquired facilities contributed additional cost of goods sold totaling approximately \$7,590,000 and \$1,224,000, respectively. The remaining increases in cost of goods sold reflect internal growth within the waste management segments, included therein is an increase of \$1,889,000 for the Nuclear Waste Management Services segment in relation to the increased revenues due to work performed for M&EC. These increases are partially offset by decreases in cost of goods sold for the Consulting Engineering Services segment due to the engineering consolidation and for the Industrial Waste Management Services segment due to the closing of an unprofitable service center.

Gross profit for the year ended December 31, 2000, increased to \$18,229,000, which as a percentage of revenue is 30.8%, reflecting a slight decrease over the 1999 percent of revenue of 32.7%. This decrease in the gross profit percentage principally reflects increased transportation and disposal costs at certain facilities, and the negative impact from increased costs within the Nuclear Waste Management Services segment resulting from this transitional year impacted by the new permit, license, construction and expanded operations.

Selling, general and administrative expenses increased \$2,466,000 or 23.9% for the year ended December 31, 2000, as compared to the corresponding period for 1999. The increase in selling, general and administrative expense is principally due to the acquisition of PFO, PFSG and PFMI, which reflects additional expense of \$2,381,000 for these facilities, as compared to the year ended December 31, 1999. The remaining increases to selling, general and administrative expenses were related to the acquisition of DSSI and increases from existing operations which were principally offset by decreases in selling, general and administrative expenses in our Consulting Engineering Services segment due to consolidation and the Industrial Waste Management Services segment due to the closing of an unprofitable service center. However, as a percentage of revenue, selling, general and administrative expenses decreased to 21.6% for the year ended December 31, 2000, compared to 22.2% for the same period of 1999.

Depreciation and amortization expense, including amortization of intangibles, for the year ended December 31, 2000, reflects an increase of approximately \$873,000 or 31.4%, as compared to the year ended December 31, 1999. This increase is principally a result of additional depreciation and amortization of \$556,000 from the 1999 acquisition of PFO, PFSG and PFMI, and of \$245,000 from the acquisition of DSSI in August 2000. The remaining increase is in direct relation to additional capital expenditures from existing operations. Depreciation expense for the year ended December 31, 2000, was \$2,702,000 which included \$826,000 and \$155,000 for the acquisitions in 1999 and 2000, respectively. Amortization expense for the year ended December 31, 2000, was \$948,000 which included \$396,000 and \$90,000 for the acquisitions in 1999 and 2000, respectively.

Interest expense increased approximately \$1,482,000 for the year ended December 31, 2000, as compared to the corresponding period of 1999. This increase is principally due to additional borrowing levels maintained pursuant to facility expansions and acquisition efforts which totaled \$1,055,000. Interim financing obtained pursuant to acquisition efforts contributed \$59,000 to the increase. Additional interest expense in conjunction with the DSSI acquisition financing for the period from August 31, 2000 through December 31, 2000, totaled \$270,000. Additionally, a portion of the increase reflects the twelve-month impact on 2000,

compared to the seven-month impact on 1999, of the PFO, PFSG and PFMI debt assumption and acquisition financing, which totals approximately \$98,000.

Interest expense-Warrants for the year ended December 31, 2000, was \$344,000. This expense reflects the Black-Scholes pricing valuation for certain Warrants issued to Capital Bank pursuant to the \$3,000,000 Unsecured Promissory Note and the \$750,000 Unsecured Promissory Note. The notes require that certain Warrants be issued upon the initial execution of the note and at monthly intervals if the debt obligations to Capital have not been repaid in full. As of December 31, 2000, the Company has issued 705,000 Warrants to Capital resulting in the above noted expense. See Note 6 to Notes to Consolidated Financial Statements regarding the debt.

Interest expense-financing fees increased approximately \$114,000 for the year ended December 31, 2000, as compared to the corresponding period of 1999. This increase is principally due to the write-off of unamortized financing fees from the previous primary lender of approximately \$83,000, and an early termination fee of \$40,000 paid to the previous primary lender for the early termination of the previous primary lender, partially offset by \$9,000 reduction in other financing fees. See Note 6 to Notes to Consolidated Financial Statements regarding the debt.

See Note 10 to Notes to Consolidated Financial Statements for a reconciliation between the expected tax benefit and the provision for income taxes as reported.

Preferred Stock dividends decreased approximately \$102,000, for the year ended December 31, 2000, as compared to the year ended December 31, 1999. This decrease is principally due to the conversion of \$350,000 (350 preferred shares) of the Preferred Stock into Common Stock in February and March of 2000. See Note 5 to Notes to Consolidated Financial Statements regarding the issuance of Preferred Stock.

# Liquidity and Capital Resources of the Company

At December 31, 2001, we had cash of \$860,000. This cash total reflects an increase of \$362,000 from December 31, 2000, as a result of net cash used by continuing operations of \$16,000, cash used by discontinued operations of \$188,000, cash used in investing activities of \$14,015,000 (principally purchases of equipment, net totaling \$4,081,000, cash used for acquisition consideration and settlements totaling \$10,083,000 partially offset by the proceeds from the sale of property and equipment of \$167,000) and cash provided by financing activities of \$14,581,000 (consisting of proceeds from issuance of stock of \$10,635,000, and net debt borrowings of \$3,946,000).

Accounts Receivable, net of allowances for doubtful accounts, totaled \$17,191,000, an increase of \$956,000 over the December 31, 2000, balance of \$16,235,000. This increase reflects the impact of the acquisition of M&EC effective June 25, 2001, which had a year end accounts receivable balance of \$4,706,000. This increase was partially offset by the elimination of receivables in the Nuclear Waste Management Services segment of \$2,657,000 and the Industrial Waste Management Services segment of \$364,000 in conjunction with the acquisition of M&EC as these amounts were due from M&EC prior to the acquisition. The remaining decrease in the accounts receivable balance totaling \$729,000, resulted from increased collection efforts across all segments, write off of some uncollectible accounts and reduced revenues within the Industrial Waste Management Services segment.

As of December 31, 2001, total consolidated accounts payable was \$7,167,000, a decrease of \$642,000 from the December 31, 2000, balance of \$7,809,000. The Nuclear Waste Management Services segment had increases in accounts payable of \$526,000, which were attributed to the acquisition of M&EC and expansion projects at the other mixed waste facilities. This increase was more than offset by the decreases in accounts payable in the Industrial Waste Management services segment and the Consulting Engineering services segment, totaling \$1,168,000, that is reflective of the private placement equity raised during the year, a portion of which was used to reduce certain payables.

Our purchases of new capital equipment for the twelve-month period ended December 31, 2001, totaled approximately \$4,598,000. These expenditures were for expansion and improvements to the operations principally within the waste management segments. These capital expenditures were principally funded by the cash provided by continuing operations, \$517,000 through various other lease financing sources and through a portion of the private placement equity funds and Warrant proceeds raised during the year. We have budgeted capital expenditures of approximately \$11,000,000 for 2002, which includes completion of certain current projects, as well as other identified capital and permit compliance purchases. We anticipate funding these capital expenditures by a combination of lease financing with lenders other than the equipment financing arrangement discussed above, internally generated funds, and/or the proceeds received from Warrant exercises.

On December 22, 2000, the Company entered into a Revolving Credit, Term Loan and Security Agreement ("Agreement") with PNC acting as agent ("Agent") for lenders, and as issuing bank. The Agreement provides for a term loan in the amount of \$7,000,000, which requires principal repayments based upon a seven-year amortization, payable over five years, with monthly installments of \$83,000 and the remaining unpaid principal balance due on December 22, 2005. Payments commenced on February 1, 2001. The Agreement also provided for a revolving line of credit ("Revolving Credit") with a maximum principal amount outstanding at any one time of \$15,000,000. The revolving credit advances are subject to limitations of an amount up to the sum of a) up to 85% of Commercial Receivables aged 90 days or less from invoice date, b) up to 85% of Commercial Broker Receivables aged up to 120 days from invoice date, c) up to 85% of acceptable Government Agency Receivables aged up to 150 days from invoice date, and d) up to 50% of acceptable unbilled amounts aged up to 60 days, less e) reserves Agent reasonably deems proper and necessary. The Revolving Credit advances shall be due and payable in full on December 22, 2005. As of December 31, 2001, our availability under our revolving credit facility was \$4,080,000 based on our eligible receivables.

Pursuant to the Agreement the Term Loan bears interest at a floating rate equal to the prime rate plus 1 1/2%, and the Revolving Credit at a floating rate equal to the prime rate plus 1%. The Company incurred approximately \$2,190,000 in financing fees relative to the solicitation and closing of this Agreement which are being amortized over the term of the Agreement. Included in such financing fees are (i) PNC commitment fee of \$220,000, (ii) investment banking fees of \$559,000, (iii) investment banking Warrants valued at \$867,000 (non-cash), (iv) legal fees of approximately \$275,000 and (v) appraisals, valuations and other closing related expenses of approximately \$269,000. The Agreement also contains certain management and credit limit fees payable throughout the term. The loans are subject to a prepayment fee of 1 1/2% in the first year, 1% in the second and third years and 3/4% after the third anniversary until termination date.

As security for prompt payment and performance of the Agreement, the Company granted a security interest in all receivables, equipment, general intangibles, inventory, investment property, real property, subsidiary stock and other assets of the Company and subsidiaries. The Agreement contains affirmative covenants including, but not limited to, maintenance of indebtedness and collateral, management reports and disclosures and fair presentation of financial statements and disclosures. The Agreement also contains a tangible adjusted net worth covenant and a fixed charge coverage ratio covenant, both of which began effective March 31, 2001, and which the Company was in compliance at December 31, 2001.

The proceeds of the Agreement were utilized to repay in full on December 22, 2000, the outstanding balance of the Congress revolver and term loan, and to repay in full the guaranteed promissory note to Waste Management Holding, dated August 31, 2000 in the principal amount of \$2,500,000 as incurred pursuant to the DSSI acquisition. The balance of the Congress revolving loan on December 22, 2000, as repaid pursuant to the PNC Agreement was \$5,491,000. Subsequent to closing, additional funds in the amount of \$1,253,000 were deposited in the Congress revolver and subsequently forwarded to PNC in January 2001. The balance of the Congress term loan on December 22, 2000 as report pursuant to the PNC Agreement was \$2,266,000.

In December 2000, the Company entered into an interest rate swap agreement related to its term loan. This hedge, has effectively fixed the interest rate on the notional amount of \$3,500,000 of the floating rate

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\$7,000,000 PNC term loan debt. The Company will pay the counterparty interest at a fixed rate equal to the base rate of 6.25%, for a period from December 22, 2000, through December 22, 2005, in exchange for the counterparty paying the Company one month LIBOR rate for the same term (2.14% at December 31, 2001). The value of the interest rate swap at January 1, 2001, was deminimus. At December 31, 2001, the market value of the interest rate swap was in an unfavorable value position of \$158,000 and was recorded as a liability and the loss was recorded as other comprehensive loss on the Statement of Stockholders' Equity.

Pursuant to the terms of the Stock Purchase Agreements in connection with the acquisition of Perma-Fix of Orlando, Inc. ("PFO"), Perma-Fix of South Georgia, Inc. ("PFSG") and Perma-Fix of Michigan, Inc. ("PFMI"), a portion of the consideration was paid in the form of Promissory Notes, in the aggregate amount of \$4,700,000, payable to the former owners of PFO, PFSG and PFMI. The Promissory Notes are paid in equal monthly installments of principal and interest of approximately \$90,000 over five years with the first installment due on July 1, 1999, and having an interest rate of 5.5% for the first three years and 7% for the remaining two years. The aggregate outstanding balance of the Promissory Notes total \$2,495,000 at December 31, 2001, of which \$957,000 is in the current portion. Payments of such Promissory Notes are guaranteed by PFMI under a non-recourse guaranty, which non-recourse guaranty is secured by certain real estate owned by PFMI. These Promissory Notes are subject to subordination agreements with the Company's senior and subordinated lenders.

On July 14, 2000, the Company entered into a letter agreement ("\$750,000 Capital Loan Agreement") with Capital Bank-Grawe Gruppe AG (f/k/a RBB Bank Aktiengesellschaft) organized under the laws of Austria ("Capital Bank"), pursuant to which Capital Bank, acting as agent for certain investors who provided the funds, loaned (the "\$750,000 Capital Loan") the Company the aggregate principal amount of \$750,000, as evidenced by the \$750,000 Capital Promissory Note in the face amount of \$750,000, bearing an annual interest rate of 10.0% per annum. The purpose of the \$750,000 Capital Loan is to provide interim financing to facilitate the acquisition of DSSI and M&EC and to fund certain capital expansions at the Company's existing facilities. The principal amount of this Note and accrued interest thereon was initially payable in full upon the earlier of (i) December 31, 2000, or (ii) ten business days after the Company raises \$3,000,000 or more through a private placement of capital securities. On December 19, 2000, this agreement was amended pursuant to the terms of the PNC Revolving Credit and Term Loan Agreement, which extended the due date of the principal and interest to July 1, 2001. On September 11, 2001, the Company paid the principal balance of \$750,000 and accrued interest of \$87,000 with proceeds from the exercise of Warrants.

On August 29, 2000, the Company entered into a short term bridge loan agreement with Capital Bank in connection with the Company's acquisition of DSSI. This loan agreement (the "\$3,000,000 Capital Loan Agreement") was between the Company and Capital Bank, pursuant to which Capital Bank, acting as agent for certain investors who provided the funds, loaned (the "\$3,000,000 Capital Loan") the Company the aggregate principal amount of \$3,000,000, as evidenced by a Promissory Note (the "\$3,000,000 Capital Promissory Note") in the face amount of \$3,000,000, having an initial maturity date of November 29, 2000 and bearing an annual interest rate of 12%. On December 19, 2000, this agreement was also amended pursuant to the terms of the PNC Revolving Credit and Term Loan Agreement, which extended the due date of the principal and interest to July 1, 2001.

The Company entered into an agreement (the "Exchange Agreement") with Capital Bank, to issue to Capital Bank, as agent for certain of its accredited investors, 1,893,505 shares of the Company's Common Stock and a Warrant to

purchase up to 1,839,405 shares of Common Stock at an exercise price of \$1.75 per share (the "Capital Bank Warrant"), in satisfaction of all amounts due or to become due under the \$3,000,000 Capital Loan Agreement, and the related \$3,000,000 Capital Promissory Note, including the Company's obligations to issue to Capital Bank shares of Common Stock if the \$3,000,000 Capital Promissory Note was not paid by certain due dates. The \$3,000,000 Capital Promissory Note became due on July 1, 2001. The Exchange Agreement was completed, effective as of July 9, 2001.

Upon the closing of the Exchange Agreement, the Company (a) paid to Capital Bank a closing fee of \$325,000, payable \$75,000 cash and by the issuance by the Company of 105,932 shares of the Company's

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Common Stock, such number of shares being equal to the quotient of \$250,000 divided by the last closing bid price of the Common Stock as quoted on the NASDAQ on June 26, 2001, and (b) issued certain five year Warrants for the purchase of up to 625,000 shares of Common Stock at a purchase price of \$1.75 per share.

On August 31, 2000, as part of the consideration for the purchase of DSSI, the Company issued to Waste Management Holdings a long term unsecured promissory note (the "Unsecured Promissory Note") in the aggregate principal amount of \$3,500,000, bearing interest at a rate of 7% per annum and having a five-year term with interest to be paid annually and principal due at the end of the term of the Unsecured Promissory Note.

On January 31, 2001, the Company entered into a definitive loan agreement (the "Loan Agreement"), with BHC. Pursuant to the terms of the Loan Agreement, BHC agreed to loan to the Company the principal amount of \$6 million (the "BHC Loan"), with \$3.5 million of the BHC Loan funded at the closing of the BHC Loan on February 2, 2001, and an additional \$2.5 million funded in March 2001. The outstanding principal amount of the BHC Loan was payable on March 30, 2002, with interest payable monthly on the outstanding principal balance of the BHC Loan at the annual rate of \$13.75%. The proceeds from the BHC Loan were used for the Company's working capital purposes and for construction of M&EC's facility. On July 31, 2001, the Company paid off the BHC Loan, including interest and early termination fees, with new long term debt as discussed below in the amount of \$5,625,000 and with proceeds from the Private Placement Offering. Of the original prepaid financing fees of \$2,041,000, the unamortized balance of \$1,440,000 was written-off in the quarter ended September 30, 2001.

On July 31, 2001, the Company issued approximately \$5.6 million of its 13.50% Senior Subordinated Notes due July 31, 2006 (the "Notes"). The Notes were issued pursuant to the terms of a Note and Warrant Purchase Agreement, dated July 31, 2001 (the "Purchase Agreement"), between the Company, AMI, and BEC. The Notes are unsecured and are unconditionally guaranteed by the subsidiaries of the Company. The Company's payment obligations under the Notes are subordinate to the Company's payment obligations to its primary lender and to certain other debts of the Company up to an aggregate amount of \$25 million. The net proceeds from the sale of the Notes were used to repay the BHC short-term loan agreement.

Under the terms of the Purchase Agreement, the Company also issued to AMI and BEC Warrants to purchase up to 1,281,731 shares of the Company's Common Stock ("Warrant Shares") at an initial exercise price of \$1.50 per share (the "Warrants"), subject to adjustment under certain conditions. The Warrants were valued at \$1,622,000 using the Black-Sholes Pricing Model and such valuation was recorded as a discount to the Notes to be amortized over the term of the Notes. The Warrants may be exercised at any time during a seven-year term and provide for cashless exercise. The number of shares issuable upon exercise of the Warrants is subject to adjustment pursuant to certain anti-dilution provisions.

The Notes may be prepaid at any time, subject to a 13.50% premium prior to July 31, 2003, a 6.75% premium prior to July 31, 2004, a 3.375% premium prior to July 31, 2005, and no premium thereafter. Upon a Change of Control of the Company (as defined in the Purchase Agreement) or if Dr. Louis F. Centofanti ceases for any reason to be the President and Chief Executive Officer of the Company, the holders of the Notes have the option to require the Company to prepay all amounts owing under the Notes plus, if the prepayment is a result of a Change of Control, the applicable prepayment premium.

The holders of at least 25% of the Warrants or the Warrant Shares may, at any time and from time to time during the term of the Warrants, request on two occasions registration with the Securities and Exchange Commission ("SEC") of the Warrant Shares. In addition, the holders of the Warrants are entitled, subject to certain conditions, to include the Warrant Shares in a registration statement covering other securities which the Company proposes to register. On October 1, 2001, the Company filed an S-3 Registration Statement with the SEC covering the Warrants. Subject to certain approvals by shareholders, the Company will be filing with the SEC an amendment to the S-3 Registration Statement in the near future. This Registration Statement has not been declared effective as of the date of this Form 10-K.

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The Company incurred prepaid financing fees of approximately \$1,296,000 for the closing of the AMI and BEC Notes, which will be amortized over the term of the notes. Included in such financing fees are (a) closing fees of \$200,000 to AMI and \$75,000 to Bridge East Management, LLC; (b) investment banking fees of \$291,000; (c) investment banking Warrants of \$389,000 (non-cash); (d) legal fees of \$269,000; and (e) other closing related costs of approximately \$72,000.

In connection with the sale of the Notes, the Company, AMI, and BEC entered into an Option Agreement, dated July 31, 2001 (the "Option Agreement"). Pursuant to the Option Agreement, the Company granted each Purchaser an irrevocable option requiring the Company to purchase any or all of the Warrants or the shares of Common Stock issuable under the Warrants (the "Warrant Shares") then held by the Purchaser (the "Put Option"). The Put Option may be exercised at any time commencing July 31, 2004, and ending July 31, 2008. In addition, each Purchaser granted to the Company an irrevocable option to purchase all the Warrants or the Warrant Shares then held by the Purchaser (the "Call Option"). The Call Option may be exercised at any time commencing July 31, 2005, and ending July 31, 2008. The purchase price under the Put Option and the Call Option is based on the quotient obtained by dividing (a) the sum of six times the Company's consolidated EBITDA for the period of the 12 most recent consecutive months minus Net Debt plus the Warrant Proceeds by (b) the Company's Diluted Shares (as the terms EBITDA, Net Debt, Warrant Proceeds, and Diluted Shares are defined in the Option Agreement). Pursuant to the guidance under EITF 00-19 on accounting for and financial presentation of securities that could potentially be settled in a Company's own stock. The put warrants would be classified outside of equity based on the ability of the holder to require cash settlement. Also, EITF Topic D-98 discusses the accounting for a security that will become redeemable at a future determinable date and its redemption is variable. This is the case with the Warrants as the date is fixed, but the put or call price varies. The EITF gives two possible methodologies for valuing the securities. The Company has selected to account for the changes in redemption value immediately as they occur and the Company will adjust the carrying value of the security to equal the redemption value at the end of each reporting period. On December 31, 2001, the purchase price under the Put Option was in a negative position, and as such no liability was recorded for the redemption of the Put Option.

In connection with the sale of the Notes, Ann L. Sullivan Living Trust, dated September 6, 1978, and the Thomas P. Sullivan Living Trust, dated September 8, 1978 (collectively the "Sullivan Trusts") each have entered into a certain

Subordination Agreement, dated July 30, 2001. Thomas P. Sullivan, a trustee of the Thomas P. Sullivan Living Trust, is a director of the Company. Under the terms of the Subordination Agreement, the Sullivan Trusts have subordinated all amounts owing by the Company to the Sullivan Trusts in favor of the Company's obligations under the Notes. Notwithstanding the subordination, the Company may (a) as long as no event of default under the Purchase Agreement has occurred and is continuing and if such payments would not create an event of default, continue to make regularly scheduled payments of principal and interest owing under certain promissory notes, dated May 28, 1999, in the original aggregate principal amount of \$4.7 million, which were issued to the Sullivan Trusts in connection with the Company's acquisition of Perma-Fix of Michigan, Inc., Perma-Fix of South Georgia, Inc., and Perma-Fix of Orlando, Inc.; and (b) make such payments as may be required pursuant to a certain Mortgage, dated May 28, 1999, by Perma-Fix of Michigan, Inc. in favor of the Sullivan Trusts. The outstanding principal amount due to the Sullivan Trusts is approximately \$2.5 million.

In conjunction with the Company's acquisition of M&EC, M&EC entered into an installment agreement with the Internal Revenue Service ("IRS") for a principal amount of \$913,000 dated June 7, 2001, for certain withholding taxes owed by M&EC. The installment agreement is payable over eight years on a semiannual basis on June 30 and December 31. Interest is accrued at the applicable law rate ("Applicable Rate") pursuant to the provisions of section 6621 of the Internal Revenue Code of 1986 as amended. Such rate is adjusted on a quarterly basis and payable in lump sum at the end of the installment period. On December 31, 2001, the rate was 8% (see Note 6). On December 31, 2001, the outstanding balance is \$941,000 including accrued interest of approximately \$38,000.

M&EC also issued a promissory note for a principal amount of \$3.7 million to PDC, dated June 7, 2001, for monies advanced to M&EC for certain services performed by PDC. The promissory note is payable over

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eight years on a semiannual basis on June 30 and December 31. Interest is accrued at the applicable rate (8.00% on December 31, 2001) and payable in lump sum at the end of the loan period. On December 31, 2001, the outstanding balance is \$3,809,000 including accrued interest of approximately \$175,000. PDC has directed M&EC to make all payments under the promissory note directly to the IRS to be applied to PDC's obligations under its installment agreement with the IRS (see Note 4).

The following table summarizes the Company's contractual obligations at December 31, 2001, and the effect such obligations are expected to have on its liquidity and cash flow in future periods, (in thousands):

#### Payments due by period

Contractual Obligations	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
Long-term debt Operating leases	\$31,146 6,198	\$2,989 1,859	\$21,082 3,667	\$6,135 672	\$940 
Total contractual obligations	\$37,344	\$4,848	\$24,749	\$6,807	\$940

The Company has outstanding 2,500 shares of Preferred Stock, with each share having a liquidation preference of \$1,000 ("Liquidation Value"). Annual dividends on the Preferred Stock are 5% of the Liquidation Value. Dividends on the Preferred Stock are cumulative, and are payable, if and when declared by the Company's Board of Directors, on a semiannual basis. Dividends on the outstanding Preferred Stock may be paid at the option of the Company, if declared by the Board of Directors, in cash or in the shares of the Company's Common Stock as described under Note 5 to Notes to Consolidated Financial Statements. Under the terms of the Company's loan agreement, the Company may not pay these dividends in cash without the lender's prior consent.

The working capital position at December 31, 2001, was \$831,000, as compared to a working capital deficit of \$2,829,000 at December 31, 2000. The increase in this position of \$3,660,000 is principally a result of the exchange of short term debt for equity. In July 2001 pursuant to the Exchange Agreement with Capital Bank, the Company exchanged \$3,000,000 in short-term debt for the Company's Common Stock. During 2001 the Company also paid off \$750,000 in short-term debt owed Capital Bank with proceeds from Warrant exercises.

On June 25, 2001, the Company completed the acquisition of M&EC, pursuant to the terms of the Stock Purchase Agreement, dated January 18, 2001, (the "Purchase Agreement"), between the Company, M&EC, all of the shareholders of M&EC and Bill Hillis. Pursuant to the terms of the Purchase Agreement, all of the outstanding voting stock of M&EC was acquired by the Company and M&EC with (a) M&EC acquiring 20% of the outstanding shares of voting stock of M&EC (held as treasury stock), and (b) the Company acquiring all of the remaining outstanding shares of M&EC voting stock (collectively, the "M&EC Acquisition"). As a result, the Company now owns all of the issued and outstanding voting capital stock of M&EC.

The purchase price paid by the Company for the M&EC voting stock was approximately \$2,396,000, which was paid by the Company issuing 1,597,576 shares of the Company's Common Stock to the shareholders of M&EC, with each share of Common Stock having an agreed value of \$1.50, the closing price of the Common Stock as represented on the NASDAQ on the date of the initial letter of intent relating to this acquisition. In addition, as partial consideration of the M&EC Acquisition, M&EC issued shares of its newly created Series B Preferred Stock to shareholders of M&EC having a stated value of approximately \$1,285,000. The Series B Preferred Stock is non-voting and non-convertible, has a \$1.00 liquidation preference per share and may be redeemed at the option of M&EC at any time after one year from the date of issuance for the per share price of \$1.00. Following the first 12 months after the original issuance of the Series B Preferred Stock, the holders of the Series B Preferred Stock will be entitled to receive, when, as, and if declared by the Board of Directors of M&EC out of legally available funds, dividends at the rate of 5% per year per share applied to the amount of \$1.00 per share, which shall be fully cumulative. As a condition to the closing of the acquisition, the Company also issued 346,666 shares of the Company's Common Stock to certain creditors of M&EC in satisfaction of \$520,000 of M&EC's liabilities.

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Prior to the date of acquisition, the Company was operating under a subcontract agreement for the design and construction of M&EC's facility. Pursuant to the subcontract agreement, the Company, as of the date of acquisition, had loaned and advanced M&EC approximately \$2.3 million for working capital purposes and had billed approximately \$9.8 million related to the construction of the new facility. At the date of closing, the Company advanced funds to M&EC to pay certain liabilities to the IRS, 401(k) plans and several debt holders, in the aggregate amount of \$2,048,000. During 2001, the net cash used for acquisition, including the above noted construction and advanced funds, totaled approximately \$10,083,000.

As a condition to the closing of the M&EC Acquisition, M&EC entered into an installment agreement with the Internal Revenue Service (the "IRS") relating to various withholding taxes owing by M&EC in the amount of approximately \$923,000 ("M&EC Installment Agreement"). The M&EC Installment Agreement provides for the payment of such withholding taxes over a term of approximately eight years. In addition, as a condition to such closing, one of M&EC's shareholders, Performance Development Corporation, a Tennessee corporation ("PDC") and two corporations affiliated with PDC, PDC Services Corporation ("PDC Services") and Management Technologies, Inc. ("MTI") each entered into an installment agreement with the IRS relating to withholding taxes owing by each of PDC, PDC Services and MTI ("PDC Installment Agreement"). The PDC Installment Agreement provides for the payment of semiannual installments over a term of eight years in the aggregate amount of approximately \$3,714,000. The M&EC Installment Agreement and the PDC Installment Agreement provides that (a) the Company does not have any liability for any taxes, interest or penalty with respect to M&EC, PDC, PDC Services or MTI; (b) M&EC will be solely liable for paying the obligations of M&EC under the M&EC Installment Agreement; (c) the IRS will not assert any liability against the Company, M&EC or any current or future related affiliate of the Company for any tax, interest or penalty of PDC, PDC Services or MTI; and (d) as long as the payments of M&EC under its installment agreement are made timely, pursuant to the terms of the installment agreement, the IRS will not file a notice of a federal tax lien, change or cancel the installment agreement, or take any other type of action against M&EC with respect to the withholding taxes and interest set forth in the installment agreement. The Company did not acquire any interest in PDC, PDC Services or MTI.

Prior to the closing of the M&EC Acquisition, PDC had advanced monies to, and performed certain services for M&EC totaling an aggregate of \$3.7 million. In payment of such advances and services and as a condition to closing, M&EC issued a Promissory Note, dated June 7, 2001, to PDC in the principal amount of approximately \$3.7 million. The promissory note is payable over eight years to correspond to payments due to the IRS under the PDC Installment Agreement. PDC has directed M&EC to make all payments under the promissory note directly to the IRS to be applied to PDC's obligations under its installment agreement with the IRS.

In connection with the closing of the M&EC Acquisition, the Company also made certain corrective contributions to M&EC's 401(k) Plan and to the 401(k) Plan of PDC. The total amount of corrective contributions made to the M&EC 401(k) Plan and the PDC 401(k) Plan was \$1.8 million. The Company utilized a portion of the proceeds of its private placement offering described in Note 11 and a portion of its working capital line of credit to fund the corrective contributions to the 401(k) Plans described above.

On August 31, 2000, the Company purchased all of the outstanding capital stock of DSSI and paid \$8,500,000, as follows: (i) \$2,500,000 in cash at closing, (ii) a guaranteed promissory note (the "Guaranteed Note"), guaranteed by DSSI, with the DSSI guarantee secured by certain assets of DSSI (except for accounts receivable, general intangibles, contract rights, cash, real property and proceeds thereof), executed by the Company in favor of Waste Management Holdings in the aggregate principal amount of \$2,500,000 and bearing interest at a rate equal to the prime rate charged on August 30, 2000, as published in the *Wall Street Journal* plus 1.75% per annum and having a term of the lesser of 120 days from August 31, 2000, or the business day that the Company acquires any entity or substantially all of the assets of an entity (the "Guaranteed Note Maturity Date"), with interest and principal due in a lump sum at the end of the Guaranteed Note Maturity Date, and (iii) an unsecured promissory note (the "Unsecured Promissory Note"), executed by the Company in favor of Waste Management Holdings in the aggregate principal amount of

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\$3,500,000, and bearing interest at a rate of 7% per annum and having a five-year term with interest to be paid annually and principal due at the end of the term of the Unsecured Promissory Note. The \$2.5 million guaranteed

promissory note was paid in December 2000, using proceeds received under our new senior credit facility. The cash portion of the purchase price for DSSI was obtained pursuant to the terms of the \$3,000,000 Capital Loan Agreement, whereby Capital Bank loaned (the "\$3,000,000 Capital Loan") the Company the aggregate principal amount of \$3,000,000, as evidenced by the \$3,000,000 Capital Promissory Note, having a maturity date of July 1, 2001, and bearing an annual interest rate of 12%. On July 9, 2001, the \$3,000,000 Capital loan was paid in full through the Exchange Agreement.

On June 1, 1999, the Company purchased all of the outstanding stock of PFO, PFSG and PFMI and paid \$8.7 million, as follows: (i) \$1 million in cash, (ii) five (5) year promissory notes totaling the original principal amount of \$4.7 million, bearing an annual rate of interest of 5.5% for the first three years and 7% for the last two years, with principal and accrued interest payable in monthly installments of approximately \$90,000 each, and (iii) \$3 million payable in the form of 1.5 million shares of the Company's Common Stock based on each share having an agreed value of \$2.00. If the average of the closing price of the Company's Common Stock as quoted on the NASDAQ for the five (5) trading days immediately preceding the date eighteen (18) months after June 1, 1999 ("Valuation Date") is less than \$2.00 per share, the Company is to pay in cash or Common Stock or a combination thereof, at the Company's option, the difference between \$3 million and the value of the 1.5 million shares of Common Stock based on the five (5) trading day average as quoted on the NASDAQ immediately preceding the Valuation Date. Under the Company's loan agreement, the Company may pay such amount, if any, only in Common Stock unless the lender agrees that the Company may satisfy such in whole or in part in cash. However, the Company is not to issue in connection with the acquisition of PFO, PFSG and PFMI more than 18% of the outstanding shares of Common Stock at the closing of the acquisition of PFO, PFSG and PFMI. In December 2000, 55,904 shares of Common Stock were issued pursuant to the guarantee with the average price for the five days proceeding the end of the valuation date being \$1.93.

On April 6, 2001, the Company commenced a private placement offering of units (the "Offering") to accredited investors. Each unit is comprised of one share of the Company's Common Stock and one Warrant to purchase one share of Common Stock. The purchase price for each unit was \$1.75, and the exercise price of each Warrant included in the units is \$1.75, subject to adjustment under certain conditions. On June 15, 2001, the Company revised the offering terms to comply with NASDAQ requirements. The maximum units were reduced to 4.4 million from the original 5 million. The amendment also required the Company to obtain shareholder approval prior to exercising the Warrants issued as part of the units. Pursuant to the terms of the Offering, the Company filed a preliminary proxy statement on October 19, 2001, for a Special Meeting of Shareholders to obtain approval for the exercise of the Warrants, which is currently under review by the SEC. The Offering was made pursuant to an exemption from registration under Section 4(2) of the Securities Act of 1933, as amended (the "Act"), and/or Rule 506 of Regulation D promulgated under the Act. The Offering was made only to accredited investors through one or more broker/dealer placement agents. At the completion of the offering, on July 30, 2001, 4,397,566 units were accepted for an aggregate purchase price of \$7,696,000. Expenses related to the offering subscriptions, were approximately \$814,000.

During 2001, accrued dividends for the period July 1, 2000, through December 31, 2000, in the amount of approximately \$102,000 were paid in March 2001, in the form of 74,038 shares of Common Stock. Dividends for the period January 1, 2001 through June 30, 2001, of approximately \$82,000 were paid in the form of 43,638 shares of Common Stock. The accrued dividends for the period July 1, 2001, through December 31, 2001, in the amount of approximately \$63,000 were paid in March 2002, in the form of 24,217 shares of Common Stock. Under the Company's loan agreement, any dividends declared by the Company's Board of Directors on its outstanding shares of Preferred Stock is required to be paid in Common Stock of the Company.

In summary, we have continued to take steps to improve our operations and liquidity as discussed above. However, with the M&EC acquisition in 2001, we incurred and assumed certain debt obligations and long-term liabilities, which had a short term impact on liquidity. We anticipate continued improvement in the

financial performance of the Company. If we are unable to continue to improve our operations and, to become profitable on an annualized basis, such would have a material adverse effect on our liquidity position.

#### **Discontinued Operations**

On January 27, 1997, an explosion and resulting tank fire occurred at the PFM facility, a hazardous waste storage, processing and blending facility, located in Memphis, Tennessee, which resulted in damage to certain hazardous waste storage tanks located on the facility and caused certain limited contamination at the facility. As a result of the damage and the related cost to rebuild this operating unit, we decided to discontinue this line of business. Upon evaluation of the above business decision, and given the loss of both the existing line of business and its related customer base, we previously reported the Memphis segment as a discontinued operation, pursuant to Paragraph 13 of APB 30. The Company reclassified PFM balance sheet items to the corresponding accounts in continuing operations for the periods ending December 31, 2001 and 2000, as the remaining balances are solely for long-term remediation and closure purposes and are better represented in the corresponding accounts.

#### **Known Trends and Uncertainties**

Seasonality. Historically the Company has experienced operating losses or decreased operating profits during the first and fourth quarters of the Company's fiscal years due to a seasonal slowdown in operations from poor weather conditions and overall reduced activities during the holiday season. During the Company's second and third fiscal quarters there has historically been an increase in operating profits. Management expects this trend to continue in future years. However, the recent acquisitions and business developments within the Nuclear Waste Management Services segment have resulted in increased revenues during the first and fourth quarters of 2001.

*Economic conditions*. Economic downturns or recessionary conditions can adversely affect the demand for the Company's services, principally within the Industrial Waste Management Services segment. Reductions in industrial production generally follow such economic conditions, resulting in reduced levels of waste being generated and/or sent off for treatment. The Company believes that its revenues and profits were negatively affected within this segment by the recessionary conditions in 2001, and the Company believes that this trend may continue into 2002.

Significant contracts. The Company's revenues are principally derived from numerous varied customers. However, PFGS manages six contracts with the DRMS, a subagency of the DOD, which accounted for 8.0% of total consolidated revenues in 2001, and the newly acquired M&EC operates under three broad spectrum contracts ("Oak Ridge Contracts") which attributed 8.5% of total consolidated revenues during 2001. As the Company operates M&EC for a full year and as expansions to the facility are completed, the Company could see significantly higher total revenue percentages increase under the Oak Ridge Contracts. There is no guarantee under the Oak Ridge Contracts as they can be terminated by either party at any time on 30 days prior notice, and could leave the Company vulnerable if the contracts were terminated. The Company is working towards increasing other sources of revenues at M&EC to reduce the risk of reliance on one major source of revenues.

*Insurance*. The Company maintains insurance coverage similar to, or greater than, the coverage maintained by other companies of the same size and industry, which complies with the requirements under applicable environmental laws. The Company evaluates its insurance policies annually to determine adequacy, cost effectiveness and desired deductible levels. Due to downturns in the economy and changes within the environmental insurance market. The Company has no guarantee that it will be able to obtain similar insurance in future years.

#### **Environmental Contingencies**

We are engaged in the waste management services segment of the pollution control industry. As a participant in the on-site treatment, storage and disposal market and the off-site treatment and services market, we are subject to

rigorous federal, state and local regulations. These regulations mandate strict compliance and therefore are a cost and concern to us. Because of their integral role in providing quality environmental services, we make every reasonable attempt to maintain complete compliance with these regulations;

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however, even with a diligent commitment, we, along with many of our competitors, may be required to pay fines for violations or investigate and potentially remediate our waste management facilities.

We routinely use third party disposal companies, who ultimately destroy or secure landfill residual materials generated at our facilities or at a client's site. We, compared to certain of our competitors, dispose of significantly less hazardous or industrial by-products from our operations due to rendering material nonhazardous, discharging treated wastewaters to publicly-owned treatment works and/or processing wastes into saleable products. In the past, numerous third party disposal sites have improperly managed wastes and consequently require remedial action; consequently, any party utilizing these sites may be liable for some or all of the remedial costs. Despite our aggressive compliance and auditing procedures for disposal of wastes, we could, in the future, be notified that we are a PRP at a remedial action site, which could have a material adverse effect.

In addition to budgeted capital expenditures of \$11,000,000 for 2002 at the TSD facilities, which are necessary to maintain permit compliance, improve operations and expand our business into new markets, as discussed above under "BUSINESS -- Capital Spending, Certain Environmental Expenditures" and "Liquidity and Capital Resources of the Company" of this Management's Discussion and Analysis, we have also budgeted for 2002 an additional \$1,202,000 in environmental expenditures to comply with federal, state and local regulations in connection with remediation of certain contaminates at four locations. As previously discussed under "Business -- Capital Spending, Certain Environmental Expenditures and Potential Environmental Liabilities," the four locations where these expenditures will be made are the Leased Property in Dayton, Ohio (EPS), a former RCRA storage facility as operated by the former owners of PFD, PFM's facility in Memphis, Tennessee, PFSG's facility in Valdosta, Georgia and PFMI's facility in Detroit, Michigan. We have estimated the expenditures for 2002 to be approximately \$287,000 at the EPS site, \$300,000 at the PFM location, \$108,000 at the PFSG site and \$507,000 at the PFMI site. Additional funds will be required for the next two to seven years to properly remediate these sites. We expect to fund these expenses to remediate these four sites from funds generated internally, however, no assurances can be made that we will be able to do so.

At December 31, 2001, the Company had accrued environmental liabilities totaling \$3,534,000, which reflects a decrease of \$808,000 from the December 31, 2000, balance of \$4,342,000. The decrease represents payments on remediation projects. The December 31, 2001, current and long-term accrued environmental balance is recorded as follows:

	PFD	PFMI	PFSG	PFM	Total	
Current accrual Long-term accrual	\$287,000 254,000	\$507,000 113,000	\$ 108,000 1,292,000	\$300,000 673,000	\$1,202,000 2,332,000	
Total	\$541,000	\$620,000	\$1,400,000	\$973,000	\$3,534,000	

#### **Interest Rate Swap**

The Company entered into an interest rate swap agreement effective December 22, 2000, to modify the interest characteristics of its outstanding debt from a floating basis to a fixed rate, thus reducing the impact of interest rate changes on future income. This agreement involves the receipt of floating rate amounts in exchange for fixed rate interest payments over the life of the agreement without an exchange of the underlying principal amount. The differential to be paid or received is accrued as interest rates change and recognized as an adjustment to interest expense related to the debt. The related amount payable to or receivable from counter parties is included in other assets or liabilities. The value of the interest rate swap at January 1, 2001, was deminimus. At December 31, 2001, the market value of the interest rate swap was in an unfavorable value position of \$158,000 and was recorded as a liability and the loss was recorded as other comprehensive loss in the stockholders' equity section of the balance sheet (see Note 6 to Notes to Consolidated Financial Statements).

#### **Recent Accounting Pronouncements**

In June 2001, the Financial Accounting Standards Board finalized FASB Statements No. 141, *Business Combinations* ("SFAS 141"), and No. 142, *Goodwill and Other Intangible Assets* ("SFAS 142"). SFAS

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141 requires the use of the purchase method of accounting and prohibits the use of the pooling-of-interests method of accounting for business combinations initiated after June 30, 2001. SFAS 141 also requires that the Company recognize acquired intangible assets apart from goodwill if the acquired intangible assets meet certain criteria, SFAS 141 applies to all business combinations initiated after June 30, 2001, and for purchase business combinations completed on or after July 1, 2001. It also requires, upon adoption of SFAS 142, that the Company reclassify the carrying amounts of intangible assets and goodwill based on the criteria in SFAS 141.

SFAS 142 requires, among other things, that companies no longer amortize goodwill, but instead test goodwill for impairment at least annually. In addition, SFAS 142 requires that the Company identify reporting units for the purposes of assessing potential future impairments of goodwill, reassess the useful lives of other existing recognized intangible assets, and cease amortization of intangible assets with an indefinite useful life. An intangible asset with an indefinite useful life should be tested for impairment in accordance with the guidance in SFAS 142. SFAS 142 is required to be applied in fiscal years beginning after December 15, 2001, to all goodwill and other intangible assets recognized at that date, regardless of when those assets were initially recognized. SFAS 142 requires the Company to complete a transitional goodwill impairment test six months from the date of adoption. The Company is also required to reassess the useful lives of other intangible assets within the first interim quarter after adoption of SFAS 142.

The Company's previous business combinations were accounted for using the purchase method. As of December 31, 2001, the net carrying amount of goodwill is approximately \$6,509,000 and other intangible assets are approximately \$20,765,000. Amortization expense during the years ended December 31, 2001, 2000 and 1999, was approximately \$1,575,000, \$948,000 and \$675,000, respectively. Effective January 1, 2002, the Company will discontinue amortizing indefinite life intangible assets, and is in the process of evaluating intangible assets for impairment. At this time, the Company does not expect there to be an impairment to the intangible assets.

In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 143 ("FAS 143"), Accounting for Asset Retirement Obligations, effective for the fiscal years beginning after June 15, 2002. This statement provides the accounting for the cost of legal obligations associated with the retirement of

long-lived assets. FAS 143 requires that companies recognize the fair value of a liability for asset retirement obligations in the period in which the obligations are incurred and capitalize that amount as a part of the book value of the long-lived asset. That cost is then depreciated over the remaining life of the underlying long-lived asset. The Company is currently evaluating the impact of the adoption of FAS 143.

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" ("FAS 144"). This statement supersedes FAS 121 "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed of" and Accounting Principals Board Opinion No. 30, "Reporting Results of Operations - Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions." This Statement retains the fundamental provisions of FAS 121 for recognition and measurement of impairment, but amends the accounting and reporting standards for segments of a business to be disposed of. The provisions of this statement are required to be adopted no later than fiscal years beginning after December 31, 2001, with early adoption encouraged. The Company is currently evaluating the impact of the adoption of FAS 144.

#### ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is exposed to certain market risks arising from adverse changes in interest rates, primarily due to the potential effect of such changes on the Company's variable rate loan arrangements with PNC, as described under Note 6 to Notes to Consolidated Financial Statements. As discussed therein, the Company entered into an interest rate swap agreement to modify the interest characteristics of \$3.5 million of its \$7.0 million term loan with PNC Bank, from a floating rate basis to a fixed rate, thus reducing the impact of interest rate changes on this portion of the debt.

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#### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained within this report may be deemed "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (collectively, the "Private Securities Litigation Reform Act of 1995"). All statements in this report other than a statement of historical fact are forward-looking statements that are subject to known and unknown risks, uncertainties and other factors which could cause actual results and performance of the Company to differ materially from such statements. The words "believe," "expect," "anticipate," "intend," "will," and similar expressions identify forward-looking statements. Forward-looking statements contained herein relate to, among other things,

- \* ability or inability to continue and improve operations and become profitable on an annualized basis;
- \* the Company's ability to develop or adopt new and existing technologies in the conduct of its operations;
- \* anticipated improvement in the financial performance of the Company;
- \* ability to comply with the Company's general working capital requirements;
- \* ability to retain or receive certain permits or patents;
- \* ability to renew permits with minimal effort and costs;
- \* ability to be able to continue to borrow under the Company's revolving line of credit;

\*

ability to generate sufficient cash flow from operations to fund all costs of operations and remediation of certain formerly leased property in Dayton, Ohio, and the Company's facilities in Memphis, Tennessee; Valdosta, Georgia and Detroit Michigan;

- \* ability to remediate certain contaminated sites for projected amounts;
- \* no impairment to intangible assets and does not expect a write down of intangible assets;
- \* no intention to close any facilities; and
- \* ability to fund budgeted capital expenditures for 2002.

While the Company believes the expectations reflected in such forward-looking statements are reasonable, it can give no assurance such expectations will prove to have been correct. There are a variety of factors which could cause future outcomes to differ materially from those described in this report, including, but not limited to:

- general economic conditions;
- \* material reduction in revenues;
- \* inability to collect in a timely manner a material amount of receivables;
- \* increased competitive pressures;
- \* the ability to maintain and obtain required permits and approvals to conduct operations;
- the ability to develop new and existing technologies in the conduct of operations;
- ability to retain or renew certain required permits;
- discovery of additional contamination or expanded contamination at a certain Dayton, Ohio,

  \* property formerly leased by the Company or the Company's facilities at Memphis, Tennessee;

  Valdosta, Georgia and Detroit Michigan, which would result in a material increase in

  remediation expenditures;
- \* determination that PFM is the source of chlorinated compounds at the Allen Well Field;
- \* changes in federal, state and local laws and regulations, especially environmental laws and regulations, or in interpretation of such;
- \* potential increases in equipment, maintenance, operating or labor costs;
- \* management retention and development;
- \* financial valuation of intangible assets is substantially less than expected;
- \* the requirement to use internally generated funds for purposes not presently anticipated;
- \* inability to become profitable on an annualized basis;
- \* the inability of the Company to obtain under certain circumstances shareholder approval of the transaction in which certain Warrants were issued;
- \* the inability of the Company to maintain the listing of its Common Stock on the NASDAQ;
- \* the determination that PFMI or PFO was responsible for a material amount of remediation at certain Superfund sites; and

\*

terminations of contracts with federal agencies or subcontracts involving federal agencies, or reduction in amount of waste delivered to the Company under these contracts or subcontracts.

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The Company undertakes no obligations to update publicly any forward-looking statement, whether as a result of new information, future events or otherwise.

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

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Consolidated Statements of Cash Flows for the	
years ended December 31, 2001, 2000 and 1999	38
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#### **Schedules Omitted**

In accordance with the rules of Regulation S-X, other schedules are not submitted because (a) they are not applicable to or required by the Company, or (b) the information required to be set forth therein is included in the consolidated financial statements or notes thereto.

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#### **Report of Independent Certified Public Accountants**

Board of Directors Perma-Fix Environmental Services, Inc.

We have audited the accompanying consolidated balance sheets of Perma-Fix Environmental Services, Inc. and subsidiaries as of December 31, 2001 and 2000, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2001. We have also audited the schedule listed in the accompanying index. These consolidated financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and schedule based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and schedule are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements and schedule. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements and schedule. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Perma-Fix Environmental Services, Inc. and 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.

Also, in our opinion, the schedule presents fairly, in all material respects, the information set forth therein.

/s/ BDO Seidman, LLP

BDO Seidman, LLP Chicago, Illinois March 15, 2002 -34-

# PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED BALANCE SHEETS

As of December 31

(Amounts in Thousands, Except for Share Amounts) 20	01	2000
ASSETS		
Current Assets		
Cash	\$ 860	\$ 498
Restricted Cash	20	20
Accounts receivable, net of allowance for doubtful accounts of \$725 and \$894, respectively	17,191	16,235
Inventories	756	655
Prepaid expenses	1,651	1,251
Other receivables	142	1,259
Total current assets	20,620	19,918
Property and equipment:		
Buildings and land	15,210	14,089
Equipment	26,915	18,639
Vehicles	2,120	2,359
Leasehold improvements	10,029	16
Office furniture and equipment	1,657	1,518
Construction in progress	4,382	4,029
	60,313	40,650
Less accumulated depreciation/amortization	(11,940)	(9,961)
Net property and equipment	48,373	30,689
Intangibles and other assets:		
Permits, net of accumulated amortization of \$3,372 and \$2,129, respectively	20,639	13,338
Goodwill, net of accumulated amortization of \$1,654	6.500	C 040
and \$1,323, respectively	6,509	6,840
Other assets	2,996	1,986

Total assets \$ 99,137 \$ 72,771

The accompanying notes are an integral part of these consolidated financial statements.

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# PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED BALANCE SHEETS, CONTINUED

As of December 31

(Amounts in Thousands, Except for Share Amounts)	2001	2000
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts Payable	\$ 7,167	\$ 7,809
Current environmental accrual	1,202	1,229
Accrued expenses	8,431	7,307
Current portion of long-term debt	2,989	6,402
Total current liabilities	19,789	22,747
Environmental accruals	2,332	3,113
Accrued closure costs	4,919	5,338
Other long-term liabilities	814	465
Long-term debt, less current portion	28,157	19,088
Total long-term liabilities	36,222	28,004
Total liabilities	56,011	50,751
Commitments and Contingencies (see Notes 6, 8, 9 and 12)		
Preferred Stock of subsidiary, \$1.00 par value; 1,467,396 shares authorized, \$1,284,730 and 0 shares issued and outstanding, respectively, liquidation value \$1.00 per share (see Note 4)	1,285	
Stockholders' equity:		
Preferred Stock, \$.001 par value; 2,000,000 shares authorized, 2,500 and 4,187 shares issued and outstanding, respectively		

Common Stock, \$.001 par value; 50,000,000 shares authorized, 35,008,005 and 23,429,759 shares issued, including 988,000		
shares held as treasury stock, respectively	35	23
Additional paid-in capital	66,042	45,328
Accumulated deficit	(22,216)	(21,469)
Interest rate swap	(158)	
	43,703	23,882
Less Common Stock in treasury at cost; 988,000 shares	(1,862)	(1,862)
Total stockholders' equity	41,841	22,020
Total liabilities and stockholders' equity	\$ 99,137	\$ 72,771

The accompanying notes are an integral part of these consolidated financial statements.

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# PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED STATEMENTS OF OPERATIONS

For the years ended December 31

(Amounts in Thousands, Except for Share Amounts)	2001	2000	1999
Net revenues	\$ 74, 492	\$ 59,139	\$ 46,464
Cost of goods sold	49,719	40,910	31,271
Gross profit	24,773	18,229	15,193
Selling, general and administrative expenses	14,738	12,765	10,299
Depreciation and amortization	4,616	3,651	2,778
Income from operations	5,419	1,813	2,116
Other income (expense):			
Interest income	29	41	50
Interest expense	(3,038	(2,132)	(650)
Interest expense-Warrants	(234	(344)	
Interest expense-financing fees	(2,732	(181)	(67)
Other	(46	247	121

Net income (loss)	(602)	(556)	1,570
Preferred Stock dividends	(145)	(206)	(308)
Gain on Preferred Stock redemption			188
Net income (loss) applicable to Common Stock	\$ (747)	\$ (762)	\$ 1,450
Net income (loss) per common share:			
Basic	\$ (.03)	\$ (.04)	\$ .08
Diluted	\$ (.03)	\$ (.04)	\$ .07
Number of shares and potential common shares used in computing net income (loss) per share:			
Basic	27,235	21,558	17,488
Diluted	27,235	21,558	21,224

The accompanying notes are an integral part of these consolidated financial statements.

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## PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31

(Amounts in Thousands)	2001	2000	1999	
Cash flows from operating activities:  Net income (loss)	\$	\$ (602)	\$ (556)	\$ 1,570
Adjustments to reconcile net income (loss) to cash provided by continuing operations:				
Depreciation and amortization		4,616	3,651	2,778

Provision for bad debt and other reserves	334	99	126
Loss (Gain) on sale of plant, property and equipment	28	(122)	(30)
Issuance of Warrants for financing and services	234	389	(30)
Changes in assets and liabilities, net of effects from business acquisitions:	231	307	
Accounts receivable	(4,153)	(1,002)	(3,126)
Prepaid expenses, inventories and other assets	512	(2,517)	(218)
Accounts payable and accrued expenses	(985)	210	(78)
Net cash provided (used) by continuing operations	(16)	152	1,022
Net cash used by discontinued operations	(188)	(379)	(1,285)
Cash flows from investing activities:			_
Purchases of property and equipment, net	(4,081)	(3,170)	(1,834)
Proceeds from sale of plant, property and equipment	167	227	238
Change in restricted cash, net	(18)	30	1,042
Cash used for acquisition consideration	(10,083)	(2,500)	(1,000)
Net cash used for acquisition settlements			(1,616)
Net cash provided by (used by) discontinued operations		265	(47)
Net cash used in investing activities	(14,015)	(5,148)	(3,217)
Cash flows from financing activities:			
Borrowings of revolving loan and term note facility	921	3,731	5,060
Principal repayments of long term debt	(3,136)	(3,936)	(861)
Proceeds from issuance of long term debt	6,161	3,750	
Redemption of Preferred Stock			(750)
Proceeds from issuance of stock	10,635	1,516	143
Purchase of treasury stock			(50)
Net cash used by discontinued operations		(4)	(22)
Net cash provided by financing activities	14,581	5,057	3,520
Increase (decrease) in cash	362	(318)	40
Cash at beginning of period	498	816	776
Cash at end of period	\$ 860	\$ 498	\$ 816
Supplemental disclosure:			
Interest paid	\$ 2,656	\$ 1,772	\$ 942
Dividends paid			205
Non-cash investing and financing activities:			

Issuance of Common Stock for services	63	236	40
Issuance of Common Stock for payment of dividends	184	214	221
Issuance of Common Stock for acquisition	2,916		3,000
Issuance of Preferred Stock of subsidiary for acquisition	1,285		
Issuance of Warrants for services and financing	3,550	997	
Interest rate swap valuation	158		
Long-term debt incurred for purchase of property and equipment	517	642	826
Long-term debt incurred for acquisition		6,000	4,700
Long-term debt and accrued interest exchanged for Common Stock	3,144		

The accompanying notes are an integral part of these consolidated financial statements.

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## PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

For the years ended December 31

(Amounts in thousands, except for share amounts)	Preferred	Stock	Common	Stock		dedeem- ble	Additional Paid-In		Accumu-	Common Total Stock Stock- Held in holder's sury Equity
	Shares A	mount	Shares	Amour	nt Warran	its Cap	oital S	Swap De		, ,
Balance at December 31,	9,850	\$	13,215,093	\$ 13	\$140	\$39,769	\$	\$(22,157)	\$ (1,812	2) \$15,953
Net income								1,570		1,570
Preferred Stock dividends								(308)		(308)
Gain on Preferred Stock redemption						(188)		188		
Issuance of Common Stock for Preferred Stock dividend			152,494			221				221
ssuance of Common Stock in exchange for Warrants			200,000							
ssuance of Common Stock for acquisition			1,594,967	2		2,998				3,000
ssuance of stock for cash and services			81,560			90				90
Conversion of Preferred Stock to Common	(4,563)		6,119,135	6		(6)				
Redemption of Preferred Stock	(750)					(750)				(750)
Redemption of Common Stock to Treasury Stock									. (50	(50)
Exercise of Warrants			97,227			48				48
Option Exercise			41,300			45				45
Expiration of redeemable Warrants					(140)	140				
		_								

Balance at December 31, 1999	4,537	\$	21,501,776	\$21	\$	\$42,367	\$	\$(20,707)	\$(1,862)	\$ 19,819
Net loss								(556)		(556)
Preferred Stock dividends								(206)		(206)
Issuance of Common Stock for Preferred Stock dividend			168,825			214				214
Issuance of Common Stock for acquisition			55,904							
Issuance of stock for cash and services			219,703			276				276
Conversion of Preferred Stock to Common Stock	(350)		322,351	1		(1)				
Issuance of Warrants in conjunction with financing						997				997
Issuance of Warrants for services						163				163
Exercise of Warrants			1,161,200	1		1,312				1,313
Balance at December 31, 2000	4,187	\$	23,429,759	\$23	\$	\$45,328	\$	\$(21,469)	\$ (1,862)	\$ 22,020
Comprehensive Loss: Net loss								(602)		(602)
								(002)		(002)
Other comprehensive loss: Interest rate swap							(158)			(158)
Comprehensive loss										(760)
Preferred Stock dividend								(145)		(145)
Issuance of Common Stock for Preferred Stock dividend			117,676			184				184
Issuance of Common Stock			117,070			104				104
for cash and services			120,784			165				165
Conversion of Preferred Stock to Common Stock	(1,735)		1,156,666	1		(1)				
Issuance of Common Stock in conjunction with acquisition			1,944,242	2		2,914				2,916
Issuance of Common Stock from Private Placement Offering			4,397,566	5		6,877				6,882
Exchange of Preferred Stock Series 14, 15 & 16 for			,,=>+,===			3,2				3,332
Series 17	48		1.000.425			2 142				2.141
Debt for equity exchange Issuance of Warrants for			1,999,437	2		3,142				3,144
services and financing						3,784				3,784
Exercise of Warrants and options			1,841,875	2		3,649				3,651
Balance at December 31,	2.500	¢	25,009,005	¢ 25	r.	\$66.042	\$(150)	¢(22.21 <i>C</i> )	\$ (1.962)	¢ 41 041
2001	2,500	\$	35,008,005	\$ 35	\$	\$66,042	\$(158)	\$(22,216)	\$ (1,862)	\$ 41,841

The accompanying notes are an integral part of these consolidated financial statements.

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# PERMA-FIX ENVIRONMENTAL SERVICES, INC. Notes to Consolidated Financial Statements

December 31, 2001, 2000 and 1999

#### NOTE 1

#### DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Perma-Fix Environmental Services, Inc. (the Company, which may be referred to as we, us, or our) is a Delaware corporation, engaged through its subsidiaries, in:

- \* Industrial Waste Management Services, which includes:
  - \* treatment, storage, processing, and disposal of hazardous and nonhazardous waste; and
  - industrial waste and wastewater management services, including the collection, treatment, processing and disposal of hazardous and non-hazardous waste.
  - \* Nuclear Waste Management Services, which includes:
    - \* treatment, storage, processing and disposal of mixed waste (which is both low-level radioactive and hazardous waste); and
    - \* nuclear and low-level radioactive waste treatment, processing and disposal, which includes research, development, on and off-site waste remediation and processing.
- \* Consulting Engineering Services, which includes:
  - \* broad-scope environmental issues, including environmental management programs, regulatory permitting, compliance and auditing, landfill design, field testing and characterization.

We have grown through both acquisitions and internal development. Our present objective is to focus on the operations, maximize the profitability and to continue the research and development of innovative technologies for the treatment of nuclear, mixed waste and industrial waste. Such research and development expenses, although important, are not considered material.

We are subject to certain risks: (1) We are involved in the treatment, handling, storage and transportation of hazardous and nonhazardous, mixed and industrial wastes and wastewater. Such activities contain risks against which we believe we are adequately insured, and (2) in general, certain product lines within the Industrial Waste Management Services segment, in which we operate, are characterized by competition among a number of larger, more established companies with significantly greater resources.

Our consolidated financial statements for the year 1999 include the accounts of Perma-Fix Environmental Services, Inc. ("PESI") and our wholly-owned subsidiaries, Schreiber, Yonley and Associates ("SYA"), Perma-Fix Treatment Services, Inc. ("PFTS"), Perma-Fix of Florida, Inc. ("PFF"), Perma-Fix of Dayton, Inc. ("PFD") and, Perma-Fix of Ft. Lauderdale, Inc. ("PFFL"), and effective June 1, 1999, Perma-Fix of Orlando, Inc. ("PFO"), Perma-Fix of South Georgia, Inc. ("PFSG") and Perma-Fix of Michigan, Inc. ("PFMI") which have been included in our consolidated financial statements in 1999, from the date of acquisition. Effective August 31, 2000, we acquired Diversified Scientific Services, Inc. ("DSSI"), which has been included in our consolidated financial statements in 2000, from the date of acquisition. Effective June 25, 2001, we acquired East Tennessee Materials & Energy Corporation ("M&EC"),

which has been included in our consolidated financial statements in 2001, from the date of acquisition.

#### NOTE 2

#### SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### **Principles of Consolidation**

Our consolidated financial statements include our accounts and our wholly-owned subsidiaries after elimination of all significant intercompany accounts and transactions.

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#### Reclassifications

Certain prior year amounts have been reclassified to conform with the current year presentation.

#### **Use of Estimates**

In preparing financial statements in conformity with generally accepted accounting principles, management makes estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, as well as, the reported amounts of revenues and expenses during the reporting period. See Note 8 and 9 for management estimates of closure costs and environmental liabilities. Actual results could differ from those estimates.

#### **Restricted Cash**

Restricted cash, which is classified as a current asset, remained constant at \$20,000 for December 31, 2001 and 2000. In addition to this current asset, a trust fund of \$442,000, which is classified as a long term asset, increased \$18,000 at December 31, 2001, as compared to \$424,000 as of December 31, 2000. These restricted instruments reflect secured collateral relative to the various financial assurance instruments guaranteeing the standard RCRA closure bonding requirements for the PFFL TSD facility, while the long-term portion reflects cash held for long-term commitments related to the RCRA remedial action at a facility affiliated with PFD as further discussed in Note 9. The letter of credit secured by the current restricted cash renews annually, and the Company plans to replace the letter of credit with other alternative financial assurance instruments.

#### **Inventories**

Inventories consist of fly ash, cement kiln dust, treatment chemicals and certain supplies and replacement parts as utilized in maintenance of the operating equipment. Inventories are valued at the lower of cost or market with cost determined by the first-in, first-out method.

#### **Property and Equipment**

Property and equipment expenditures are capitalized and depreciated using the straight-line method over the estimated useful lives of the assets for financial statement purposes, while accelerated depreciation methods are principally used for tax purposes. Generally, annual depreciation rates range from ten to forty years for buildings (including improvements) and three to seven years for office furniture and equipment, vehicles, and decontamination and processing equipment. Leasehold improvements are capitalized and depreciated over the lesser of the life of the lease or the life of the asset. Maintenance and repairs are charged directly to expense as incurred. The cost and accumulated depreciation of assets sold or retired are removed from the respective accounts, and any gain or loss from sale or retirement is recognized in the accompanying consolidated statements of operations. Renewals and improvements which extend the useful lives of the assets are capitalized.

#### **Construction in Progress**

The Company has recorded as of December 31, 2001, \$4,382,000 in current construction in progress projects. It is estimated that the Company will incur an additional \$1,307,000 to complete the current projects by the end of 2003.

#### **Intangible Assets**

Intangible assets relating to acquired businesses consist primarily of the cost of purchased businesses in excess of the estimated fair value of net assets acquired ("goodwill") and the recognized permit value of the business. Goodwill has been generally amortized over 20 to 40 years and permits amortized over 10 to 20 years. Amortization expense approximated \$1,575,000, \$948,000, and \$675,000 for the years ended 2001, 2000, and 1999, respectively. We continually reevaluate the propriety of the carrying amount of permits and goodwill as well as the amortization period to determine whether current events and circumstances warrant adjustments to the carrying value and estimates of useful lives. Effective January 1, 2002, we will adopt SFAS 142 and will obtain a financial valuation of our intangible assets. At this time, we do not believe there will be an impairment to intangible assets, and do not expect a write-down of our intangible assets. Effective January 1, 2002, we will discontinue amortizing our indefinite life intangible assets as required by SFAS 142.

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#### **Accrued Closure Costs**

Accrued closure costs represent our estimated environmental liability to clean up our facilities in the event of closure.

#### **Income Taxes**

We account for income taxes under Statement of Financial Accounting Standards ("SFAS") No. 109, "Accounting for Income Taxes", which requires use of the liability method. SFAS No. 109 provides that deferred tax assets and liabilities are recorded based on the differences between the tax basis of assets and liabilities and their carrying amounts for financial reporting purposes, referred to as temporary differences. Deferred tax assets or liabilities at the end of each period are determined using the currently enacted tax rates to apply to taxable income in the periods in which the deferred tax assets or liabilities are expected to be settled or realized.

#### **Comprehensive Income**

Comprehensive income is defined as the change in equity (net assets) of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners. Comprehensive income has two components, net income and other comprehensive income, and is included on the balance sheet in the equity section. Other comprehensive income for the Company consists of the market value of the interest rate swap. See below under Interest Rate Swap for more information on the interest rate swap.

#### **Net Revenues**

Revenues for services and reimbursable costs are recognized at the time services are rendered. No customer accounted for more than ten percent (10%) of consolidated net revenues.

#### **Self-Insurance**

We have a self-insurance program for certain health benefits. The cost of such benefits is recognized as expense in the period in which the claim occurred, including estimates of claims incurred but not reported. Claims expense for 2001 was approximately \$1,881,000, as compared to \$1,533,000 and \$1,093,000 for 2000 and 1999, respectively.

#### Net Income (Loss) Per Share

Basic EPS is based on the weighted average number of shares of Common Stock outstanding during the year. Diluted EPS includes the dilutive effect of potential common shares. Diluted loss per share for the years ended December 31, 2001 and 2000 do not include potential common shares as their effect would be anti-dilutive.

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The following is a reconciliation of basic net income (loss) per share to diluted net income (loss) per share for the years ended December 31, 2001, 2000 and 1999:

(Amounts in Thousands, Except for Share Amounts)	2001	2000	1999	
Net income (loss) applicable to				
Common Stock - basic	\$	(747)	\$ (762)	\$ 1,450
Effect of dilutive securities:				
Preferred Stock dividends				308
Gain on Preferred Stock redemption				(188)
Net income (loss) applicable to				
Common Stock - diluted	\$	(747)	\$ (762)	\$ 1,570
Basic net income (loss) per share	\$	(.03)	\$ (.04)	\$ .08
Diluted net income (loss) per share	\$	(.03)	\$ (.04)	\$ .07
Weighted average shares outstanding - basic		27,235	21,558	17,488
Potential shares exercisable under stock option plans				505
Potential shares upon exercise of Warrants				160
Potential share upon conversion of				
Preferred Stock				3,071

Weighted	average	shares	outstanding -	diluted

27,235

21,558

21,224

Potential shares excluded from above weighted average share calculations due to their antidilutive effect include:			
Upon exercise of options	2,966,805	2,090,949	959,949
Upon exercise of Warrants	14,468,052	6,438,582	4,962,463
Upon conversion of Preferred Stock	1,666,667	2,791,333	

#### **Interest Rate Swap**

The Company entered into an interest rate swap agreement effective December 22, 2000, to modify the interest characteristics of its outstanding debt from a floating basis to a fixed rate, thus reducing the impact of interest rate changes on future income. This agreement involves the receipt of floating rate amounts in exchange for fixed rate interest payments over the life of the agreement without an exchange of the underlying principal amount. The differential to be paid or received is accrued as interest rates change and recognized as an adjustment to interest expense related to the debt. The related amount payable to or receivable from counter parties is included in other assets or liabilities. The value of the interest rate swap at January 1, 2001, was deminimus. At December 31, 2001, the market value of the interest rate swap was in an unfavorable value position of \$158,000 and was recorded as a liability and the loss was recorded as other comprehensive loss in the stockholders' equity section of the balance sheet (see Note 6).

#### Fair Value of Financial Instruments

The book values of cash, trade accounts receivable, trade accounts payable and accrued expenses approximate their fair values principally because of the short-term maturities of these instruments. The fair value of our long-term debt is estimated based on the current rates offered to us for debt of similar terms and maturities. Under this method, our fair value of long-term debt was not significantly different from the stated value at December 31, 2001 and 2000.

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#### **Recent Accounting Pronouncements**

In June 2001, the Financial Accounting Standards Board finalized FASB Statements No. 141, *Business Combinations* ("SFAS 141"), and No. 142, *Goodwill and Other Intangible Assets* ("SFAS 142"). SFAS 141 requires the use of the purchase method of accounting and prohibits the use of the pooling-of-interests method of accounting for business combinations initiated after June 30, 2001. SFAS 141 also requires that the Company recognize acquired intangible assets apart from goodwill if the acquired intangible assets meet certain criteria, SFAS 141 applies to all business combinations initiated after June 30, 2001, and for purchase business combinations completed on or after July 1, 2001. It also requires, upon adoption of SFAS 142, that the Company reclassify the carrying amounts of intangible assets and goodwill based on the criteria in SFAS 141.

SFAS 142 requires, among other things, that companies no longer amortize goodwill, but instead test goodwill for impairment at least annually. In addition, SFAS 142 requires that the Company identify reporting units for the purposes of assessing potential future impairments of goodwill, reassess the useful lives of other existing recognized intangible assets, and cease amortization of intangible assets with an indefinite useful life. An intangible asset with an

indefinite useful life should be tested for impairment in accordance with the guidance in SFAS 142. SFAS 142 is required to be applied in fiscal years beginning after December 15, 2001, to all goodwill and other intangible assets recognized at that date, regardless of when those assets were initially recognized. SFAS 142 requires the Company to complete a transitional goodwill impairment test six months from the date of adoption. The Company is also required to reassess the useful lives of other intangible assets within the first interim quarter after adoption of SFAS 142.

The Company's previous business combinations were accounted for using the purchase method. As of December 31, 2001, the net carrying amount of goodwill is approximately \$6,509,000 and other intangible assets are approximately \$20,765,000. Amortization expense during the years ended December 31, 2001, 2000 and 1999, was approximately \$1,575,000, \$948,000 and \$675,000, respectively. Effective January 1, 2002, the Company will discontinue amortizing indefinite life intangible assets, and is in the process of evaluating intangible assets for impairment. At this time, the Company does not expect there to be an impairment of the intangible assets.

In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 143 ("FAS 143"), Accounting for Asset Retirement Obligations, effective for the fiscal years beginning after June 15, 2002. This statement provides the accounting for the cost of legal obligations associated with the retirement of long-lived assets. FAS 143 requires that companies recognize the fair value of a liability for asset retirement obligations in the period in which the obligations are incurred and capitalize that amount as a part of the book value of the long-lived asset. That cost is then depreciated over the remaining life of the underlying long-lived asset. The Company is currently evaluating the impact of the adoption of FAS 143.

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" ("FAS 144"). This statement supersedes FAS 121 "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed of" and Accounting Principals Board Opinion No. 30, "Reporting Results of Operations - Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions." This Statement retains the fundamental provisions of FAS 121 for recognition and measurement of impairment, but amends the accounting and reporting standards for segments of a business to be disposed of. The provisions of this statement are required to be adopted no later than fiscal years beginning after December 31, 2001, with early adoption encouraged. The Company is currently evaluating the impact of the adoption of FAS 144.

## NOTE 3 DISCONTINUED OPERATIONS

On January 27, 1997, an explosion and resulting tank fire occurred at the PFM facility, a hazardous waste storage, processing and blending facility, located in Memphis, Tennessee, which resulted in damage to

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certain hazardous waste storage tanks located on the facility and caused certain limited contamination at the facility. As a result of the damage and the related cost to rebuild this operating unit, we decided to discontinue this line of business. Upon evaluation of the above business decision, and given the loss of both the existing line of business and its related customer base, we previously reported the Memphis segment as a discontinued operation, pursuant to Paragraph 13 of APB 30. The Company reclassified PFM balance sheet items to the corresponding accounts in continuing operations for the periods ending December 31, 2001 and 2000, as the remaining balances are solely for long-term remediation and closure purposes and are better represented in the corresponding accounts.

Net assets and liabilities of PFM at the end of 2001 and 2000 as reclassified to continuing operations, in thousands of dollars, consisted of the following:

	2001		2000	)
Current assets:				
Accounts receivable	\$		\$	42
	\$		\$	42
Current liabilities:				
Accounts payable	\$	10	\$	46
Accrued environmental costs		300		236
	\$	310	\$	282
Long-term liabilities:				
Accrued closure cost	\$	225	\$	220
Accrued environmental costs		673		333
	\$	898	\$	553

Accounts receivable were extinguished during 2001 from payments and writeoffs of uncollectible accounts. Accounts payable represents payables associated with the remediation project at PFM. Accrued closure costs related to PFM increased \$5,000 to \$225,000 at December 31, 2001, as a result of adjustments for inflationary factors (see Note 8). Accrued current and long-term environmental costs were \$973,000, at December 31, 2001 (see Note 9).

#### NOTE 4 ACQUISITIONS

Acquisition - Perma-Fix of Orlando, Inc., Perma-Fix of South Georgia, Inc. and Perma-Fix of Michigan, Inc. On May 27, 1999, (i) the Company, Perma-Fix of Orlando, Inc. (f/k/a Chemical Conservation Corporation), a Florida corporation ("PFO"); Perma-Fix of South Georgia, Inc. (f/k/a Chemical Conservation of Georgia, Inc.), a Georgia corporation ("PFSG"); The Thomas P. Sullivan Living Trust, dated September 6, 1978 ("TPS Trust"); The Ann L. Sullivan Living Trust, dated September 6, 1978 ("ALS Trust"); Thomas P. Sullivan, an individual ("TPS"); and Ann L. Sullivan, an individual ("ALS"), entered into a Stock Purchase Agreement ("Chem-Con Stock Purchase Agreement"), wherein the Company agreed to purchase all of the outstanding capital stock of PFO and PFSG from the ALS Trust pursuant to the terms of the Chem-Con Stock Purchase Agreement, and (ii) the Company, Perma-Fix of Michigan, Inc. (f/k/a Chem-Met Services, Inc.), a Michigan corporation ("PFMI"), the TPS Trust, the ALS Trust, TPS and ALS entered into a Stock Purchase Agreement ("Chem-Met Stock Purchase Agreement"), whereby the Company agreed to purchase all of the outstanding capital stock of PFMI from the TPS Trust pursuant to the terms of the Chem-Met Stock Purchase Agreement. The Chem-Con Stock Purchase Agreement and the Chem-Met Stock Purchase Agreement are collectively referred to as the "Stock Purchase Agreements." TPS and ALS are husband and wife.

On May 27, 1999, the Stock Purchase Agreements and related transaction documents ("Documents") were executed

and placed into escrow pending satisfaction of certain conditions precedent to closing. On June 1, 1999, the conditions precedent to closing of the Stock Purchase Agreements were completed, the Stock Purchase Agreements were consummated and the Documents were released from escrow.

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Under the terms of the Stock Purchase Agreements, the purchase price paid by the Company in connection with the acquisition of PFO, PFSG and PFMI was \$8,700,000, consisting of (i) \$1,000,000 in cash paid at closing, (ii) three promissory notes ("Promissory Notes"), in the aggregate amount of \$4,700,000, to be paid in equal monthly installments of principal and interest of approximately \$90,000 over five years and having an interest rate of 5.5% for the first three years and 7% for the remaining two years, with payment of such Promissory Notes being guaranteed by PFMI under a non-recourse guaranty, which non-recourse guaranty is secured by certain real estate owned by PFMI, and (iii) \$3,000,000 paid in the form of 1,500,000 shares of Perma-Fix Common Stock, par value \$.001 per share ("Common Stock"), paid to the ALS Trust at closing; however, if the ALS Trust owns any of such shares of Common Stock at the end of eighteen (18) months from the June 1, 1999, closing date (the "Guarantee Period") and the market value (as determined below) per share of Common Stock at the end of the Guarantee Period is less than \$2.00 per share, the Company shall pay the ALS Trust, within ten (10) business days after the end of the Guarantee Period, an amount equal to the sum determined by multiplying the number of shares of Common Stock issued to the ALS Trust under the Stock Purchase Agreements that are still owned by the ALS Trust at the end of the Guarantee Period by \$2.00 less the market value (as determined below) of such shares of Common Stock owned by the ALS Trust at the end of the Guarantee Period, with such amount, if any, payable by the Company to the ALS Trust, at the Company's option, in cash or in Common Stock or a combination thereof. Notwithstanding anything to the contrary, the aggregate number of shares of Common Stock issued or issuable under the Stock Purchase Agreements for any reason whatsoever shall not exceed eighteen percent (18%) of the number of issued and outstanding shares of Common Stock on the date immediately preceding the June 1, 1999, closing date. The market value of each share of Common Stock at the end of the Guarantee Period will be determined based on the average of the closing sale price per share of Common Stock as reported on the NASDAQ SmallCap Market ("NASDAQ") for the five (5) consecutive trading days ending with the trading day immediately prior to the end of the Guarantee Period. Under the Company's loan agreement, the Company could only pay any such amount due the ALS Trust at the end of the Guarantee Period in Common Stock unless the lender agrees that the Company may satisfy all or part of such in cash. In December 2000, 55,904 shares of Common Stock were issued pursuant to the guarantee with the average price for the five days proceeding the end of the guarantee period being \$1.93.

The cash portion of the purchase price for PFO, PFSG and PFMI was obtained through borrowing from the Company's then primary lender. The Company anticipates that the Promissory Notes will be paid with working capital generated from operations and/or borrowing under the Company's current revolving credit facility with PNC Bank. In connection with the closing, using funds borrowed from its then lender, the Company paid an aggregate of approximately \$3,843,000 to satisfy certain obligations of PFMI.

The acquisition was accounted for using the purchase method effective June 1, 1999, and accordingly, the assets and liabilities as of this date are included in the accompanying consolidated financial statements. As of December 31, 1999, the Company has performed a purchase price allocation. Accordingly, the purchase price was allocated to the net assets acquired and net liabilities assumed based on their estimated fair values. Included in this allocation were acquired assets of approximately \$15,831,000 and assumed liabilities of approximately \$15,039,000, against total consideration of \$8,700,000. This allocation resulted in goodwill and intangible permits of \$2,714,000 and \$5,194,000, respectively. The goodwill and intangible permits are being amortized on a straight line basis over 20 years. The results of the acquired businesses have been included in the consolidated financial statements since the date

of acquisition.

The Company accrued for the estimated closure costs, determined pursuant to RCRA guidelines, for the three regulated facilities acquired. This accrual, recorded at \$218,000, represents the potential future liability to close and remediate such facilities, should such a cessation of operations ever occur. The Company also recognized long-term environmental accruals totaling \$4,319,000. See Note 9 regarding environmental activities.

At the date of acquisition, the Company also initiated the payoff of a Small Business Administration ("SBA") loan, in the full amount of \$971,000. Prior to the acquisition, as required by a loan agreement between the SBA and the previous owners ("SBA Loan Agreement"), the previous owners had placed approximately

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\$331,000 of restricted cash into an SBA trust account. Pursuant to the acquisition and terms of the SBA Loan Agreement, the Company placed the remaining payoff amount (\$640,000) into the SBA trust account (restricted cash), thereby fully funding the loan repayment. The SBA loan repayment process requires various filings and notifications which take approximately sixty days, at which time funds are withdrawn from the trust account. Effective August 1, 1999, restricted cash was withdrawn from the SBA trust account and the SBA loan was repaid in full.

#### Acquisition - Diversified Scientific Services, Inc.

On May 16, 2000, the Company and Waste Management Holdings, Inc., a Delaware corporation ("Waste Management Holdings") entered into a Stock Purchase Agreement which was subsequently amended on August 31, 2000 (together, the "Stock Purchase Agreement"), wherein the Company agreed to purchase all of the outstanding capital stock of DSSI from Waste Management Holdings pursuant to the terms of the Stock Purchase Agreement. On August 31, 2000, the conditions precedent to closing of the Stock Purchase Agreement were completed and the Stock Purchase Agreement was consummated.

Under the terms of the Stock Purchase Agreement, the purchase price paid by the Company in connection with the DSSI acquisition was \$8,500,000, consisting of (i) \$2,500,000 in cash at closing, (ii) a guaranteed promissory note (the "Guaranteed Note"), guaranteed by DSSI, with the DSSI guarantee secured by certain assets of DSSI (except for accounts receivable, general intangibles, contract rights, cash, real property and proceeds thereof), executed by the Company in favor of Waste Management Holdings in the aggregate principal amount of \$2,500,000 and bearing interest at a rate equal to the prime rate charged on August 30, 2000, as published in the *Wall Street Journal* plus 1.75% per annum and having a term of the lesser of 120 days from August 31, 2000, or the business day that the Company acquires any entity or substantially all of the assets of an entity (the "Guaranteed Note Maturity Date"), with interest and principal due in a lump sum at the end of the Guaranteed Note Maturity Date, and (iii) an unsecured promissory note (the "Unsecured Promissory Note"), executed by the Company in favor of Waste Management Holdings in the aggregate principal amount of \$3,500,000, and bearing interest at a rate of 7% per annum and having a five-year term with interest to be paid annually and principal due at the end of the term of the Unsecured Promissory Note. The guaranteed note in the principal amount of \$2,500,000 was subsequently repaid in full in December 2000, in conjunction with the new PNC Bank credit facility. See Note 6 for additional discussion of this PNC Bank credit facility.

The cash portion of the purchase price for DSSI was obtained pursuant to the terms of a short term bridge loan agreement (the "\$3,000,000 RBB Loan Agreement") with Capital Bank- Grawe Gruppe AG (f/k/a RBB Bank Aktiengesellschaft), a bank organized under the laws of Austria ("Capital Bank"), whereby Capital Bank loaned (the "\$3,000,000 Capital Loan") the Company the aggregate principal amount of \$3,000,000, as evidenced by a

Promissory Note (the "\$3,000,000 Capital Promissory Note") in the face amount of \$3,000,000, having a maturity date of July 1, 2001, and bearing an annual interest rate of 12%. The Capital Loan was exchanged for common stock in July 2001 (see Note 6).

The principal business of DSSI, conducted at its facility in Kingston, Tennessee, is the permitted transportation, storage and treatment of hazardous waste and mixed waste (waste containing both low level radioactive and hazardous waste) and the disposal of or recycling of mixed waste in DSSI's treatment unit located at DSSI's facility. The Company is using the DSSI facility for substantially the same purposes as such was being used prior to the acquisition by the Company.

The acquisition was accounted for using the purchase method effective August 31, 2000, and accordingly, the assets and liabilities as of this date are included in the accompanying consolidated financial statements. As of September 1, 2000, the Company had performed a preliminary purchase price allocation based upon information available as of this date. Accordingly, the purchase price had been preliminarily allocated to the net assets acquired and net liabilities assumed based on their estimated fair values. Included in this preliminary allocation were acquired assets of approximately \$9,165,000 and assumed liabilities of approximately \$6,007,000, against total consideration of \$8,500,000. This preliminary allocation resulted in an excess purchase price over the fair value of the net assets acquired of \$5,400,000 which was assigned to

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permits. The permits are being amortized on a straight line basis over 20 years. The results of the acquired business have been included in the consolidated financial statements since the date of acquisition.

The Company accrued for the estimated closure costs, determined pursuant to the Resource Conservation and Recovery Act of 1976, as amended ("RCRA") guidelines and the Boiler and Industrial Furnace Regulations under RCRA ("BIF"), for the regulated facility acquired. This accrual, originally recorded at \$4,106,000, represents the potential future liability to close and remediate such facilities, should such a cessation of operations ever occur. In conjunction with the final purchase price allocation, as completed in August 2001, the Company reevaluated the accrued closure costs recorded at acquisition through purchase accounting. The recalculation of closure costs, pursuant to state regulatory guidelines, resulted in a decrease in accrued closure costs of approximately \$2,480,000 and an offsetting decrease in the value assigned to permits. No insurance or third party recovery was taken into account in determining the Company's cost estimates or reserve, nor do the Company's cost estimates or reserve reflect any discount for present value purposes.

#### **Acquisition - East Tennessee Materials and Energy Corporation**

On June 25, 2001, the Company completed the acquisition of M&EC, pursuant to the terms of the Stock Purchase Agreement, dated January 18, 2001, (the "Purchase Agreement"), between the Company, M&EC, all of the shareholders of M&EC and Bill Hillis. Pursuant to the terms of the Purchase Agreement, all of the outstanding voting stock of M&EC was acquired by the Company and M&EC with (a) M&EC acquiring 20% of the outstanding shares of voting stock of M&EC (held as treasury stock), and (b) the Company acquiring all of the remaining outstanding shares of M&EC voting stock (collectively, the "M&EC Acquisition"). As a result, the Company now owns all of the issued and outstanding voting capital stock of M&EC.

The purchase price paid by the Company for the M&EC voting stock was approximately \$2,396,000, which was paid by the Company issuing 1,597,576 shares of the Company's Common Stock to the shareholders of M&EC, with each share of Common Stock having an agreed value of \$1.50, the closing price of the Common Stock as represented on

the NASDAQ on the date of the initial letter of intent relating to this acquisition. In addition, as partial consideration of the M&EC Acquisition, M&EC issued shares of its newly created Series B Preferred Stock to shareholders of M&EC having a stated value of approximately \$1,285,000. The Series B Preferred Stock is non-voting and non-convertible, has a \$1.00 liquidation preference per share and may be redeemed at the option of M&EC at any time after one year from the date of issuance for the per share price of \$1.00. Following the first 12 months after the original issuance of the Series B Preferred Stock, the holders of the Series B Preferred Stock will be entitled to receive, when, as, and if declared by the Board of Directors of M&EC out of legally available funds, dividends at the rate of 5% per year per share applied to the amount of \$1.00 per share, which shall be fully cumulative. As a condition to the closing of the acquisition, the Company also issued 346,666 shares of the Company's Common Stock to certain creditors of M&EC in satisfaction of \$520,000 of M&EC's liabilities.

Prior to the date of acquisition, the Company was operating under a subcontract agreement for the design and construction of M&EC's facility. Pursuant to the subcontract agreement, the Company, as of the date of acquisition, had loaned and advanced M&EC approximately \$2.3 million for working capital purposes and had billed approximately \$9.8 million related to the construction of the new facility. At the date of closing, the Company advanced funds to M&EC to pay certain liabilities to the IRS, 401(k) plans and several debt holders, in the aggregate amount of \$2,048,000. During 2001, the net cash used for acquisition, including the above noted construction and advanced funds, totaled approximately \$10,083,000.

As a condition to the closing of the M&EC Acquisition, M&EC entered into an installment agreement with the Internal Revenue Service (the "IRS") relating to various withholding taxes owing by M&EC in the amount of approximately \$923,000 ("M&EC Installment Agreement"). The M&EC Installment Agreement provides for the payment of such withholding taxes over a term of approximately eight years. In addition, as a condition to such closing, one of M&EC's shareholders, Performance Development Corporation, a Tennessee corporation ("PDC") and two corporations affiliated with PDC, PDC Services Corporation ("PDC Services") and Management Technologies, Inc. ("MTI") each entered into an installment agreement with the IRS relating to withholding taxes owing by each of PDC, PDC Services and MTI ("PDC Installment Agreement"). The PDC Installment Agreement provides for the payment of semiannual installments over a

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term of eight years in the aggregate amount of approximately \$3,714,000. The M&EC Installment Agreement and the PDC Installment Agreement provides that (a) the Company does not have any liability for any taxes, interest or penalty with respect to M&EC, PDC, PDC Services or MTI; (b) M&EC will be solely liable for paying the obligations of M&EC under the M&EC Installment Agreement; (c) the IRS will not assert any liability against the Company, M&EC or any current or future related affiliate of the Company for any tax, interest or penalty of PDC, PDC Services or MTI; and (d) as long as the payments of M&EC under its installment agreement are made timely, pursuant to the terms of the installment agreement, the IRS will not file a notice of a federal tax lien, change or cancel the installment agreement, or take any other type of action against M&EC with respect to the withholding taxes and interest set forth in the installment agreement. The Company did not acquire any interest in PDC, PDC Services or MTI.

Prior to the closing of the M&EC Acquisition, PDC had advanced monies to, and performed certain services for M&EC totaling an aggregate of \$3.7 million. In payment of such advances and services and as a condition to closing, M&EC issued a Promissory Note, dated June 7, 2001, to PDC in the principal amount of approximately \$3.7 million. The promissory note is payable over eight years to correspond to payments due to the IRS under the PDC Installment Agreement. PDC has directed M&EC to make all payments under the promissory note directly to the IRS to be applied to PDC's obligations under its installment agreement with the IRS.

In connection with the closing of the M&EC Acquisition, the Company also made certain corrective contributions to M&EC's 401(k) Plan and to the 401(k) Plan of PDC. The total amount of corrective contributions made to the M&EC 401(k) Plan and the PDC 401(k) Plan was \$1.8 million. The Company utilized a portion of the proceeds of its private placement offering described in Note 11 and a portion of its working capital line of credit to fund the corrective contributions to the 401(k) Plans described above.

The acquisition was accounted for using the purchase method effective June 25, 2001, and accordingly, the fair values of the assets and liabilities of M&EC as of this date are included in the accompanying consolidated financial statements. As of June 25, 2001, the Company has performed a preliminary purchase price allocation based upon information available as of this date. Accordingly, the purchase price has been preliminarily allocated to the net assets and net liabilities of M&EC based on their estimated fair values. Included in this preliminary allocation were assets of approximately \$18,160,000, liabilities of approximately \$11,171,000 and \$12,124,000 due to the Company from M&EC pursuant to its subcontract agreement, against total consideration of \$4,014,000, consisting of \$2,396,000 for Common Stock issued, \$1,285,000 for M&EC Preferred Series B liquidation value and \$333,000 for the forgiveness of a receivable from an M&EC related party. This preliminary allocation has resulted in an excess purchase price assigned to intangible permits of \$9,149,000. The intangible permits are being amortized on a straight line basis over 10 years. The preliminary purchase price allocation is subject to completing the valuation of certain assets, which have not been finalized, and may or may not result in a change to the estimated fair market values assigned. The results of the acquired businesses have been included in the consolidated financial statements since the date of acquisition.

The Company accrued for the estimated closure costs, determined pursuant to RCRA guidelines, for the acquired facility. This accrual, recorded at \$2,025,000, represents the potential future liability to close and remediate the facility, should such a cessation of operations ever occur. No insurance or third party recovery was taken into account in determining the Company's cost estimates or reserve, nor do the Company's cost estimates or reserves reflect any discount for present value purposes.

M&EC completed the initial phase of construction of its low-level radioactive and hazardous waste ("mixed waste") treatment facility in Oak Ridge, Tennessee, during the third quarter of 2001. The 150,000 square-foot facility, located on the grounds of the Oak Ridge K-25 Weapons Facility of the Department of Energy ("DOE"), uses Perma-Fix's various proprietary technologies to treat mixed waste coming from governmental, institutional and commercial generators nationwide. M&EC operates under both a hazardous waste treatment and storage permit and a license to store and treat low-level radioactive waste, one of only a few such facilities in the country. M&EC also has three subcontracts with Bechtel-Jacobs Company, LLC,

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DOE's site manager, which were awarded in 1998 and covers the treatment of millions of cubic feet of legacy, operational and remediation nuclear waste. The facility began accepting waste in June 2001, and became operational in the third quarter of 2001.

The following unaudited pro forma information presents the consolidated statement of operations of the Company as if the acquisition had taken place on January 1, 2000. M&EC had a December 31 fiscal year end and therefore for purposes of the following pro forma information, their results for the years ended December 31, 2001 and 2000, have been consolidated with the Company's results for the years ended December 31, 2001 and 2000, and DSSI's results for January 1, 2000 through August 30, 2000, prior to the Company's acquisition of DSSI.

Year Ended December 31,

		,
(Amount in thousands, except per share amounts (unaudited))	2001	2000
Net revenues	\$74,659	\$63,426
Net loss applicable to Common Stock	(3,603)	(3,818)
Net loss per share:		
Basic	(.13)	(.16)
Diluted	(.13)	(.16)
Weighted average number of common shares outstanding		
Basic	28,173	23,502
Diluted	28,173	23,502

These unaudited pro forma results have been prepared for comparative purposes only and include certain adjustments, such as additional amortization expense as a result of intangible permits, additional dividend expense on the Series B Preferred, elimination of interest expense related to debt retired with Common Stock, elimination of Preferred Stock dividends from the M&EC Series A Preferred exchanged prior to closing and elimination of management fees paid to DSSI's parent prior to the August 2000 acquisition. They do not purport to be indicative of the results of operations that actually would have resulted on the date indicated, or which may result in the future.

## NOTE 5 PREFERRED STOCK ISSUANCE AND CONVERSION

As of January 1, 2001, 4,187 shares of the Company's Preferred Stock were issued and outstanding. During 2001, 1,735 of such shares were converted into 1,171,336 shares of Common Stock including 14,670 shares issued in payment of accrued dividends, with the remaining 2,452 shares of Preferred Stock exchanged for 2,500 shares of a new Series 17 Preferred Stock issued and outstanding as of December 31, 2001.

The Preferred Stock issuances and activity for the year ended December 31, 2001, are as follows:

Preferred Stock Description	Preferred Stock Holder	Dividend Rate	Preferred Shares	Converted Common Shares
<b>Series 14</b> (Exchanged for Series 3 and 11)	Capital Bank(1)	6%		
Balance at December 31, 2000			1,769	
Conversion - April 2001			(1,314)	876,000
Exchange - April 2001			(455)	
Balance at December 31, 2001			0	
Series 15 (Exchanged for Series 4,6,8, and 12)	Capital Bank(1)	4%		

Balance at December 31, 2000 Conversion - April 2001 Exchange - April 2001 Balance at December 31, 2001			616 (416) (200)	277,333
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Series 16 (Exchanged for Series 10 and 13)  Balance at December 31, 2000  Conversion - January 2001  Exchange - April 2001	Capital Bank(1)	4%	1,802 (5) (1,797)	3,333
Balance at December 31, 2001			0	
<b>Series 17</b> (Exchanged for Series 14, 15 and 16) Balance at December 31, 2001	Capital Bank(1)	5%	2,500	

<sup>(1)</sup> Capital Bank (f/k/a RBB Bank) is a banking institution which holds the Company's shares of stock on behalf of numerous clients.

#### Series 3 Preferred/Series 11 Preferred/Series 14 Preferred

On July 17, 1996, we issued to RBB Bank 5,500 shares of newly-created Series 3 Class C Convertible Preferred Stock ("Series 3 Preferred") at a price of \$1,000 per share in a private placement under Sections 4(2) and/or 3(b) and/or Rule 506 of Regulation D under the Securities Act of 1933, as amended (the "Securities Act"). The Series 3 Preferred had a liquidation preference over the Common Stock equal to \$1,000 consideration per outstanding share of Series 3 Preferred, plus an amount equal to all unpaid dividends accrued thereon. As of January 1, 1999, 4,000 shares of Series 3 Preferred remained issued and outstanding as a result of prior conversions of the Series 3 Preferred. On April 20, 1999, the holder of the Series 3 Preferred converted 2,231 shares of the Series 3 Preferred into 3,090,563 shares of Common Stock of the Company, leaving 1,769 shares of Series 3 Preferred issued and outstanding.

On July 15, 1999, the Company exchanged the 1,769 outstanding shares of Series 3 Preferred, all of which were held by Capital Bank, for an equal number of shares of newly created Series 11 Class K Convertible Preferred Stock par value \$.001 per share ("Series 11 Preferred"). On August 3, 1999, the Company exchanged the 1,769 outstanding shares of Series 11 Preferred, all of which were held by Capital Bank, for an equal number of shares of newly created Series 14 Class N Convertible Preferred Stock par value \$.001 per share ("Series 14 Preferred"). The terms of the Series 3 Preferred, Series 11 Preferred and Series 14 Preferred were substantially the same and the fair value of the new Series did not exceed the fair value of the Series exchanged. On April 6, 2001, Capital Bank converted 1,314 shares of the Series 14 Preferred into 876,000 shares of Common Stock of the Company and exchanged the remaining 455 shares of the Series 14 Preferred into a new Series 17 Class Q preferred Stock ("Series 17 Preferred"). The

exchanges were made in private placements under Section 4(2) and/or Section 3(a)(9) of the Securities Act.

The Series 3 Preferred, Series 11 Preferred and Series 14 Preferred each accrued dividends on a cumulative basis at a rate of six percent (6%) per annum, which dividends were payable semiannually when and as declared by the Board of Directors. Dividends are paid, at the Company's option, in the form of cash or Common Stock. During 2001, accrued dividends on the Series 3 Preferred, Series 11 Preferred and Series 14 Preferred in the combined total of approximately \$35,000 were paid in the form of 16,307 shares of Common Stock of the Company.

# Series 4 Preferred/Series 6 Preferred/Series 8 Preferred/Series 12 Preferred/Series 15 Preferred

On or about February 28, 1998, the Company issued to Capital Bank 2,500 shares of newly-created Series 8 Class H Preferred Stock, par value \$.001 per share ("Series 8 Preferred") in exchange for 2,500 shares of Series 6 Class F Preferred Stock, par value \$.001 per share ("Series 6 Preferred") which had been issued to Capital Bank in 1997. The Series 6 Preferred, along with certain Warrants allowing the purchase of 375,000 shares of Common Stock at an exercise price of \$1.8125 per share and the purchase of 281,250 shares of Common Stock at the exercise price of \$2.125 per share had been issued to Capital Bank in exchange for an equal number of shares of Series 4 Class D Preferred Stock, par value \$.001 per share ("Series 4

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Preferred") and Warrants allowing the purchase of 187,500 shares of Common Stock at an exercise price of \$2.10 per share and the purchase of 187,500 shares of Common Stock at the exercise price of \$2.50 per share.

The Series 8 Preferred had a liquidation preference over the Common Stock equal to \$1,000 consideration per outstanding share of Series 8 Preferred, plus an amount equal to all unpaid dividends accrued thereon. As of January 1, 1999, 2,500 shares of Series 8 Preferred remained issued and outstanding. On April 20, 1999, the holder of the Series 8 Preferred converted 1,584 shares of the Series 8 Preferred into 2,057,143 shares of Common Stock of the Company, leaving 616 shares of Series 8 Preferred issued and outstanding.

On July 15, 1999, (i) the outstanding shares of Series 8 Preferred, all of which were held by Capital Bank, were exchanged for an equal number of shares of newly created Series 12 Class L Convertible Preferred Stock, par value \$.001 per share ("Series 12 Preferred"), and (ii) 300 shares of Series 12 Preferred were redeemed by the Company for \$1,000 per share, leaving 616 shares of Series 12 Preferred issued and outstanding. On August 3, 1999, the 616 outstanding shares of Series 12 Preferred, all of which were held by Capital Bank, were exchanged for an equal number of shares of newly created Series 15 Class O Convertible Preferred Stock, par value \$.001 per share ("Series 15 Preferred"). The terms of the Series 8 Preferred, Series 12 Preferred and Series 15 Preferred were substantially the same and the fair value of the new Series did not exceed the fair value of the Series exchanged. On April 6, 2001, Capital Bank converted 416 shares of the Series 15 Preferred into 277,333 shares of the Company's Common Stock and exchanged the remaining 200 shares of the Series 15 Preferred into the new Series 17 Preferred. The exchanges were made in private placements under Section 4(2) and/or Section 3(a)(9) of the Securities Act.

The Series 8 Preferred, Series 12 Preferred and Series 15 Preferred each accrued dividends on a cumulative basis at a rate of four percent (4%) per annum which dividends were payable semiannually when and as declared by the Board of Directors. During 2001, accrued dividends on the Series 8 Preferred, Series 12 Preferred and Series 15 Preferred, in the combined total of approximately \$64,000 were paid in the form of 3,786 shares of Common Stock of the Company.

# Series 10 Preferred/Series 13 Preferred/Series 16 Preferred

On or about June 30, 1998, the Company issued to Capital Bank 3,000 shares of newly-created Series 10 Class J Preferred Stock, par value \$.001 per share ("Series 10 Preferred") at a price of \$1,000 per share in a private placement under Section 4(2) of the Securities Act and/or Rule 506 of Regulation D under the Securities Act. The Series 10 Preferred has a liquidation preference over the Common Stock equal to \$1,000 consideration per outstanding share of Series 10 Preferred, plus an amount equal to all unpaid dividends accrued thereon. As of January 1, 1999, there were 3,000 shares of Series 10 Preferred which were issued and outstanding. On April 20, 1999, the holder of the Series 10 Preferred converted 748 shares of Series 10 Preferred into 971,429 shares of Common Stock, leaving 2,252 shares of Series 10 Preferred issued and outstanding.

On July 15, 1999, (i) the outstanding shares of Series 10 Preferred, all of which were held by Capital Bank, were exchanged for an equal number of shares of newly created Series 13 Class M Convertible Preferred Stock, par value \$.001 per share ("Series 13 Preferred"), and (ii) 450 shares of Series 13 Preferred were redeemed by the Company for \$1,000 per share, leaving 1,802 shares of Series 13 Preferred issued and outstanding. On August 3, 1999, the 1,802 outstanding shares of Series 13 Preferred, all of which were held by Capital Bank, were exchanged for an equal number of shares of newly created Series 16 Class P Convertible Preferred Stock, par value \$.001 per share ("Series 16 Preferred"). On January 2, 2001, Capital Bank converted 5 shares of the Series 16 Preferred for 3,333 shares of the Company's Common Stock. The terms of the Series 10 Preferred, Series 13 Preferred and Series 16 Preferred were substantially the same and the fair value of the new Series did not exceed the fair value of the Series 17 Preferred. The exchanges were made in private placements under Section 4(2) and/or Section 3(a)(9) of the Securities Act.

The Series 10 Preferred, Series 13 Preferred and Series 16 Preferred each accrued dividends on a cumulative basis at a rate of four percent (4%) per annum which dividends were payable semiannually when

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and as declared by the Board of Directors. During 2001, accrued dividends on the Series 10 Preferred, Series 13 Preferred and Series 16 Preferred, in the combined total of approximately \$19,000 were paid in the form of 11,044 shares of Common Stock of the Company.

### **Series 17 Preferred**

Effective as of April 6, 2001, The Company and Capital Bank entered into a Conversion and Exchange Agreement, whereby Capital Bank converted a portion of the Company's Preferred Stock owned of record by Capital Bank, as agent for certain of its accredited investors, for shares of the Company's Common Stock and exchanged the remaining Preferred Stock held by Capital Bank for shares of the Company's newly designated Series 17 Preferred Stock.

Prior to the consummation of the Conversion and Exchange Agreement, Capital Bank owned of record, as its agent for certain of its accredited investors, 1,769 shares of the Company's Series 14 Preferred, 616 shares of the Company's Series 15 Preferred, and 1,797 shares of the Company's Series 16 Preferred. Capital Bank converted 1,314 shares of Series 14 Preferred and 416 shares of Series 15 Preferred into an aggregate of 1,153,333 shares of the Company's Common Stock on April 6, 2001. Capital Bank then exchanged the remaining shares of Series 14 Preferred, Series 15 Preferred, and Series 16 Preferred for a total of 2,500 shares of the Series 17 Preferred. As a result of the consummation of the Conversion and Exchange Agreement, no shares of Series 14 Preferred, Series 15 Preferred remain outstanding.

The Series 17 Preferred may be converted into shares of Common Stock at any time at a conversion price of \$1.50 per share, subject to adjustment as set forth in the Certificate of Designations relating to the Series 17 Preferred. The Series 17 Preferred has a "stated value" of \$1,000 per share. The Corporation may, at its sole option, redeem, in whole or in part, at any time, and from time to time the then outstanding Series 17 Preferred at the following cash redemption prices if redeemed during the following periods: (a) within 12 months from June 1, 2001 - \$1,100 per share, and (b) after June 1, 2002 - \$1,200 per share. Upon any notice of redemption, Capital Bank shall have only five business days to exercise its conversion rights regarding the redeemed shares.

The Series 17 Preferred accrues dividends on a cumulative basis at a rate of five percent (5%) per annum which dividends are payable semiannually when and as declared by the Board of Directors. During 2001, accrued dividends on the Series 17 Preferred of approximately \$92,000 were paid in the form of 36,718 shares of the Company's Common Stock, of which 24,217 were issued in March 2002.

The issuance of the Series 17 Preferred under the terms of the Conversion and Exchange Agreement was made in a private placement under Section 4(2) and/or Regulation D of the Securities Act of 1933, as amended. The Warrants previously issued to Capital Bank in connection with the Series 14 Preferred, Series 15 Preferred, and Series 16 Preferred have not changed. The Company performed a calculation of the carrying value of the new Series 17 Preferred and determined that it does not exceed the carrying value of the exchanged Series of Preferred (Series 14, 15 and 16) and therefore no beneficial conversion dividends were recorded as a result of this exchange.

The Conversion and Exchange Agreement, dated May 25, 2001 (the "Series 17 Agreement") was extensively negotiated between the Company and holders of the Series 14 Preferred, Series 15 Preferred, and Series 16 Preferred for many weeks prior to April 6, 2001. Although the terms of the Series 17 Agreement were agreed on April 6, 2001, the Series 17 Agreement was not memorialized in the form of a written agreement until May 25, 2001. The delay in memorializing the Series 17 Agreement was primarily due to the fact that the Company's executive officers and its counsel were focused upon, and devoting substantially all of their time to, completing the acquisition by the Company of M&EC and completing a \$7.7 million private placement. In executing the Series 17 Agreement, the Company's counsel advised the Company, and the Company agreed that, rather than "back-dating" the Series 17 Agreement, it was appropriate to note that the Series 17 Agreement was executed on May 25, 2001, even though the terms of the agreement had been reached and the parties became committed to the agreement on April 6, 2001.

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Both the Company and the holders of the Series 17 Preferred have relied upon April 6, 2001, as being the effective date of the Series 17 Agreement. In fact, the beneficial holders of 1,314 shares of PESI's Series 14 Preferred and 416 shares of the Series 15 Preferred converted such shares of preferred stock into PESI common stock on April 6, 2001, in reliance on the completion on the Series 17 Agreement and in accordance with the terms of the Series 17 Agreement as agreed to on that date and memorialized on May 25, 2001.

# Series 5 Preferred/Series 7 Preferred/Series 9 Preferred

On or about April 30, 1998, the Company issued to The Infinity Fund, L.P. ("Infinity") 350 shares of newly-created Series 9 Class I Preferred Stock, par value \$.001 per share ("Series 9 Preferred") in exchange for 350 shares of Series 7 Class G Preferred Stock, par value \$.001 per share ("Series 7 Preferred") which had been issued to Infinity in 1997. The Series 7 Preferred, along with certain Warrants allowing the purchase of 35,000 shares of Common Stock at an exercise price of \$1.8125 per share were issued to RBB Bank in exchange for an equal number of shares of Series 5 Class E Preferred Stock, par value \$.001 per share ("Series 5 Preferred") and Warrants allowing the purchase of 187,500 shares of Common Stock at an exercise price of \$2.10 per share and the purchase of 187,500 shares of

Common Stock at the exercise price of \$2.50 per share. The exchanges were made in private placements under Section 4(2) and/or Section 3(a)(9) of the Securities Act. The terms of the Series 9 Preferred are substantially the same as the terms of the Series 7 Preferred and Series 5 and the fair value of the new Series did not exceed the fair value of the Series exchanged. As of January 1, 2000, there were 350 shares of Series 9 Preferred which were issued and outstanding.

The Series 9 Preferred had a liquidation preference over the Common Stock equal to \$1,000 consideration per outstanding share of Series 9 Preferred, plus an amount equal to all unpaid dividends accrued thereon. The Series 9 Preferred accrued dividends on a cumulative basis at a rate of four percent (4%) per annum. Such dividends were payable semiannually when and as declared by the Board of Directors. Dividends were paid, at the Company's option, in the form of cash or Common Stock.

In February and March 2000 all of the 350 shares of Series 9 Preferred were converted to 324,610 shares of Common Stock, including 2,259 shares issued in payment of accrued dividends on the Series 9 Preferred from January 1, 2000, until the dates of conversion. As a result of the conversions, the Series 9 Preferred are no longer outstanding.

# **Reasons for Exchanges**

The Company engaged in the various exchanges of its then outstanding preferred stock for a newly issued series of preferred stock in order to provide conversion terms more favorable to the Company and to improve the Company's capital structure. Prior to the most recent exchanges, the floating conversion price of the Company's preferred stock resulted in the holders of the preferred stock realizing decreasing conversion prices for an increasing number of shares of common stock. By engaging in the exchanges, the Company has set the conversion price at a fixed price, and the total number of shares issuable upon conversion of the preferred stock is now fixed at a specified number. The exchanges have also enabled the Company to simplify its capital structure. The Company previously had up to three separate series of convertible preferred stock outstanding at one time. As a result of the series of exchanges and conversions of a certain number of preferred stock, ending in the exchange for the currently outstanding Series 17 Preferred, the Company now has only one series of preferred stock outstanding, and instead of floating conversion rates, the Series 17 Preferred has a fixed rate. The Company believes that this simplified capital structure (a) helps facilitate the Company's borrowing and capital raising efforts, and (b) improves the ability of the Company's investors and market professionals to analyze the Company's financial status.

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NOTE 6 LONG-TERM DEBT

Long-term debt at December 31 includes the following (in thousands):

2001 2000

Revolving loan facility dated December 22, 2000, borrowings based upon eligible accounts receivable, subject to monthly borrowing base calculation, variable interest paid monthly at prime rate plus 1% (5.75% at December 31, 2001), balance due in December 2005.	\$ 7,663	\$ 7,078
Term Loan Agreement dated December 22, 2000, payable in equal monthly installments of principal of \$83, balance due in December 2005, variable interest paid monthly at prime rate plus 1 1/2% (6.25% at December 31, 2001).	6,083	7,000
Revolving loan facility dated January 15, 1998, as amended May 27, 1999, borrowings based upon eligible accounts receivable, subject to monthly borrowing base calculation, variable interest paid monthly at prime rate plus 1 3/4%.		(1,253)
Three promissory notes dated May 27, 1999, payable in equal monthly installments of principal and interest of \$90 over 60 months, due June 2004, interest at 5.5% for the first three years and 7% for remaining two years.	2,495	3,413
Promissory note dated July 14, 2000, as amended December 19, 2000, repaid in full on September 10, 2001, interest paid at annual rate of 10%.		750
Promissory note dated August 29, 2000, as amended December 19, 2000, repaid in full effective July 9, 2001, through conversion to Common Stock, interest paid at annual rate of 12%.		3,000
Promissory note dated August 31, 2000, payable in lump sum in August 2005, interest paid annually at 7%.	3,500	3,500
Senior subordinated notes dated July 31, 2001, payable in lump sum on July 31, 2006, interest payable quarterly at an annual interest rate of 13.5%, net of unamortized debt discount of \$1,487.	4,138	
Promissory note dated June 25, 2001, payable in semiannual installments on June 30 and December 31 through December 31,		

2008, variable interest accrues at the applicable federal rate determined under the IRS Code Section (8.0% on December 31,

2001) and is payable in lump sum at the end of installment period.	3,634	
Promissory note dated June 25, 2001, payable in semiannual installments on June 30 and December 31 through December 31, 2008, variable interest accrues at the applicable federal rate determined under the IRS Code Section (8.0% on December 31, 2001)		
and is payable in lump sum at the end of installment period.	903	
Various capital lease and promissory note obligations, payable 2002 to 2006, interest at rates ranging from 7.5% to 17.9%.	2,730	2,002
Less current portion of long-term debt	31,146 2,989	25,490 6,402
	\$28,157	\$19,088

On December 22, 2000, the company entered into a Revolving Credit, Term Loan and Security Agreement ("Agreement") with PNC Bank, National Association, a national banking association ("PNC") acting as agent ("Agent") for lenders, and as issuing bank. The Agreement provides for a term loan in the amount of \$7,000,000, which requires principal repayments based upon a seven-year amortization, payable over five

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years, with monthly installments of \$83,000 and the remaining unpaid principal balance due on December 22, 2005. Payments commenced on February 1, 2001. The Agreement also provided for a revolving line of credit ("Revolving Credit") with a maximum principal amount outstanding at any one time of \$15,000,000. The revolving credit advances are subject to limitations of an amount up to the sum of a) up to 85% of Commercial Receivables aged 90 days or less from invoice date, b) up to 85% of Commercial Broker Receivables aged up to 120 days from invoice date, c) up to 85% of acceptable Government Agency Receivables aged up to 150 days from invoice date, and d) up to 50% of acceptable unbilled amounts aged up to 60 days, less e) reserves Agent reasonably deems proper and necessary. The Revolving Credit advances shall be due and payable in full on December 22, 2005. As of December 31, 2001, our availability under the revolving credit facility was \$4,080,000 based on our eligible receivables.

Pursuant to the Agreement the Term Loan bears interest at a floating rate equal to the prime rate plus 1 1/2%, and the Revolving Credit at a floating rate equal to the prime rate plus 1%. The Company incurred approximately \$2,190,000 in financing fees relative to the solicitation and closing of this Agreement which are being amortized over the term of the Agreement. Included in such financing fees are (i) PNC Bank commitment fee of \$220,000, (ii) investment banking fees of \$559,000, (iii) investment banking Warrants valued at \$867,000 (non-cash), (iv) legal fees of approximately \$275,000 and (v) appraisals, valuations and other closing related expenses of approximately \$269,000. The Agreement also contains certain management and credit limit fees payable throughout the term. The loans are subject to a prepayment fee of 1 1/2% in the first year, 1% in the second and third years and 3/4% after the third anniversary until termination date.

As security for prompt payment and performance of the Agreement, the Company granted a security interest in all receivables, equipment, general intangibles, inventory, investment property, real property, subsidiary stock and other assets of the Company and subsidiaries. The Agreement contains affirmative covenants including, but not limited to, maintenance of indebtedness and collateral, management reports and disclosures and fair presentation of financial statements and disclosures. The Agreement also contains a tangible adjusted net worth covenant and a fixed charge coverage ratio covenant, both of which begin effective March 31, 2001, as defined in the Agreement, and which the Company was in compliance at December 31, 2001.

The proceeds of the Agreement were utilized to repay in full on December 22, 2000 the outstanding balance of the Congress revolver and term loan, and to repay in full the guaranteed promissory note to Waste Management Holding, dated August 31, 2000 in the principal amount of \$2,500,000 as incurred pursuant to the DSSI acquisition. The balance of the Congress revolving loan on December 22, 2000, as repaid pursuant to the PNC Agreement was \$5,491,000. Subsequent to closing, additional funds in the amount of \$1,253,000 were deposited in the Congress revolver and subsequently forwarded to PNC in January 2001. The balance of the Congress term loan on December 22, 2000 as report pursuant to the PNC Agreement was \$2,266,000.

In December 2000, the Company entered into an interest rate swap agreement related to its term loan. This hedge, has effectively fixed the interest rate on the notional amount of \$3,500,000 of the floating rate \$7,000,000 PNC term loan debt. The Company will pay the counterparty interest at a fixed rate equal to the base rate of 6.25%, for a period from December 22, 2000, through December 22, 2005, in exchange for the counterparty paying the Company one month LIBOR rate for the same term (2.14% at December 31, 2001). The value of the interest rate swap at January 1, 2001, was deminimus. At December 31, 2001, the market value of the interest rate swap was in an unfavorable value position of \$158,000 and was recorded as a liability and the loss was recorded as other comprehensive loss on the Statement of Stockholders' Equity.

Pursuant to the terms of the Stock Purchase Agreements in connection with the acquisition of Perma-Fix of Orlando, Inc. ("PFO"), Perma-Fix of South Georgia, Inc. ("PFSG") and Perma-Fix of Michigan, Inc. ("PFMI"), a portion of the consideration was paid in the form of the Promissory Notes, in the aggregate amount of \$4,700,000 payable to the former owners of PFO, PFSG and PFMI. The Promissory Notes are paid in equal monthly installments of principal and interest of approximately \$90,000 over five years with the first installment due on July 1, 1999, and having an interest rate of 5.5% for the first three years and 7% for the remaining two years. The aggregate outstanding balance of the Promissory Notes total \$2,495,000 at December 31, 2001, of which \$957,000 is in the current portion. Payments of such Promissory Notes are

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guaranteed by PFMI under a non-recourse guaranty, which non-recourse guaranty is secured by certain real estate owned by PFMI. These Promissory Notes are subject to subordination agreements with the Company's senior and subordinated lenders.

On July 14, 2000, the Company entered into a letter agreement ("\$750,000 Capital Loan Agreement") with Capital Bank-Grawe Gruppe AG (f/k/a RBB Bank Aktiengesellschaft) organized under the laws of Austria ("Capital Bank"), pursuant to which Capital Bank, acting as agent for certain investors who provided the funds, loaned (the "\$750,000 Capital Loan") the Company the aggregate principal amount of \$750,000, as evidenced by the \$750,000 Capital Promissory Note in the face amount of \$750,000, bearing an annual interest rate of 10.0% per annum. The purpose of the \$750,000 Capital Loan is to provide interim financing to facilitate the acquisition of DSSI and M&EC (see Note 4) and to fund certain capital expansions at the Company's existing facilities. The principal amount of this Note and

accrued interest thereon was initially payable in full upon the earlier of (i) December 31, 2000, or (ii) ten business days after the Company raises \$3,000,000 or more through a private placement of capital securities. On December 19, 2000, this agreement was amended pursuant to the terms of the PNC Revolving Credit and Term Loan Agreement, which extended the due date of the principal and interest to July 1, 2001. On September 11, 2001, the Company paid the principal balance of \$750,000 and accrued interest of \$87,000 with proceeds from the exercise of Warrants.

On August 29, 2000, the Company entered into a short term bridge loan agreement with Capital Bank in connection with the Company's acquisition of DSSI. This loan agreement (the "\$3,000,000 Capital Loan Agreement") was between the Company and Capital Bank, pursuant to which Capital Bank, acting as agent for certain investors who provided the funds, loaned (the "\$3,000,000 Capital Loan") the Company the aggregate principal amount of \$3,000,000, as evidenced by a Promissory Note (the "\$3,000,000 Capital Promissory Note") in the face amount of \$3,000,000, having an initial maturity date of November 29, 2000, and bearing an annual interest rate of 12%. On December 19, 2000, this agreement was also amended pursuant to the terms of the PNC Revolving Credit and Term Loan Agreement, which extended the due date of the principal and interest to July 1, 2001.

The Company entered into an agreement (the "Exchange Agreement") with Capital Bank, to issue to Capital Bank, as agent for certain of its accredited investors, 1,893,505 shares of the Company's Common Stock and a Warrant to purchase up to 1,839,405 shares of Common Stock at an exercise price of \$1.75 per share (the "Capital Bank Warrant"), in satisfaction of all amounts due or to become due under the \$3,000,000 Capital Loan Agreement and the related \$3,000,000 Capital Promissory Note, including the Company's obligations to issue to Capital Bank shares of Common Stock if the \$3,000,000 Capital Promissory Note was not paid by certain due dates. The \$3,000,000 Capital Promissory Note became due on July 1, 2001. The Exchange Agreement was completed effective as of July 9, 2001.

Upon the closing of the Exchange Agreement, the Company (a) paid to Capital Bank a closing fee of \$325,000, payable \$75,000 cash and by the issuance by the Company of 105,932 shares of the Company's Common Stock, such number of shares being equal to the quotient of \$250,000 divided by the last closing bid price of the Common Stock as quoted on the NASDAQ on June 26, 2001, and (b) issued certain five year Warrants for the purchase of up to 625,000 shares of Common Stock at a purchase price of \$1.75 per share.

On August 31, 2000, as part of the consideration for the purchase of DSSI, the Company issued to Waste Management Holdings a long term unsecured promissory note (the "Unsecured Promissory Note") in the aggregate principal amount of \$3,500,000, bearing interest at a rate of 7% per annum and having a five-year term with interest to be paid annually and principal due at the end of the term of the Unsecured Promissory Note.

On January 31, 2001, the Company entered into a definitive loan agreement (the "Loan Agreement"), with BHC Interim Funding, L.P. ("BHC"). Pursuant to the terms of the Loan Agreement, BHC agreed to loan to the Company the principal amount of \$6 million (the "BHC Loan"), with \$3.5 million of the BHC Loan funded at the closing of the BHC Loan on February 2, 2001, and an additional \$2.5 million funded in March

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2001. The outstanding principal amount of the BHC Loan was payable on March 30, 2002, with interest payable monthly on the outstanding principal balance of the BHC Loan at the annual rate of \$13.75%. The proceeds from the BHC Loan were used for the Company's working capital purposes and for construction of M&EC's facility. On July 31, 2001, the Company paid off the BHC Loan, including interest and early termination fees, with new long term debt as discussed below in the amount of \$5,625,000 and with proceeds from the Private Placement Offering as discussed in Note 11. Of the original prepaid financing fees of \$2,041,000, the unamortized balance of \$1,440,000 was

written-off in the quarter ended September 30, 2001.

On July 31, 2001, the Company issued approximately \$5.6 million of its 13.50% Senior Subordinated Notes due July 31, 2006 (the "Notes"). The Notes were issued pursuant to the terms of a Note and Warrant Purchase Agreement, dated July 31, 2001 (the "Purchase Agreement"), between the Company, Associated Mezzanine Investors - PESI, L.P. ("AMI"), and Bridge East Capital, L.P. ("BEC"). The Notes are unsecured and are unconditionally guaranteed by the subsidiaries of the Company. The Company's payment obligations under the Notes are subordinate to the Company's payment obligations to its primary lender and to certain other debts of the Company up to an aggregate amount of \$25 million. The net proceeds from the sale of the Notes were used to repay the BHC short-term loan agreement.

Under the terms of the Purchase Agreement, the Company also issued to AMI and BEC Warrants to purchase up to 1,281,731 shares of the Company's Common Stock ("Warrant Shares") at an initial exercise price of \$1.50 per share (the "Warrants"), subject to adjustment under certain conditions. The Warrants were valued at \$1,622,000 using the Black-Sholes Pricing Model and such valuation was recorded as a discount to the Notes to be amortized over the term of the Notes. The Warrants may be exercised at any time during a seven-year term and provide for cashless exercise. The number of shares issuable upon exercise of the Warrants is subject to adjustment pursuant to certain anti-dilution provisions.

The Notes may be prepaid at any time, subject to a 13.50% premium prior to July 31, 2003, a 6.75% premium prior to July 31, 2004, a 3.375% premium prior to July 31, 2005, and no premium thereafter. Upon a Change of Control of the Company (as defined in the Purchase Agreement) or if Dr. Louis F. Centofanti ceases for any reason to be the President and Chief Executive Officer of the Company, the holders of the Notes have the option to require the Company to prepay all amounts owing under the Notes plus, if the prepayment is a result of a Change of Control, the applicable prepayment premium.

The holders of at least 25% of the Warrants or the Warrant Shares may, at any time and from time to time during the term of the Warrants, request on two occasions registration with the Securities and Exchange Commission ("SEC") of the Warrant Shares. In addition, the holders of the Warrants are entitled, subject to certain conditions, to include the Warrant Shares in a registration statement covering other securities which the Company proposes to register. On October 1, 2001, the Company filed an S-3 Registration Statement with the SEC covering the Warrants.

The Notes and Warrants were sold pursuant to an exemption from registration under Section 4(2) of the Securities Act of 1933, as amended (the "Act"), and/or Rule 506 of Regulation D promulgated under the Act, and, therefore, were not registered under the Act. Accordingly, the Notes may not be offered or sold in the United States absent registration or pursuant to an applicable exemption from the registration requirements of the Act. The Company incurred prepaid financing fees of approximately \$1,296,000 for the closing of the AMI and BEC Notes, which will be amortized over the term of the notes. Included in such financing fees are (a) closing fees of \$200,000 to AMI and \$75,000 to Bridge East Management, LLC; (b) investment banking fees of \$291,000; (c) investment banking Warrants of \$389,000 (non-cash); (d) legal fees of \$269,000; and (e) other closing related costs of approximately \$72,000.

In connection with the sale of the Notes, the Company, AMI, and BEC entered into an Option Agreement, dated July 31, 2001 (the "Option Agreement"). Pursuant to the Option Agreement, the Company granted each Purchaser an irrevocable option requiring the Company to purchase any or all of the Warrants or the shares of Common Stock issuable under the Warrants (the "Warrant Shares") then held by the Purchaser (the "Put Option"). The Put Option may be exercised at any time commencing July 31, 2004, and ending

July 31, 2008. In addition, each Purchaser granted to the Company an irrevocable option to purchase all the Warrants or the Warrant Shares then held by the Purchaser (the "Call Option"). The Call Option may be exercised at any time commencing July 31, 2005, and ending July 31, 2008. The purchase price under the Put Option and the Call Option is based on the quotient obtained by dividing (a) the sum of six times the Company's consolidated EBITDA for the period of the 12 most recent consecutive months minus Net Debt plus the Warrant Proceeds by (b) the Company's Diluted Shares (as the terms EBITDA, Net Debt, Warrant Proceeds, and Diluted Shares are defined in the Option Agreement). Pursuant to the guidance under EITF 00-19 on accounting for and financial presentation of securities that could potentially be settled in a Company's own stock. The put warrants would be classified outside of equity based on the ability of the holder to require cash settlement. Also, EITF Topic D-98 discusses the accounting for a security that will become redeemable at a future determinable date and its redemption is variable. This is the case with the Warrants as the date is fixed, but the put or call price varies. The EITF gives two possible methodologies for valuing the securities. The Company has selected to account for the changes in redemption value immediately as they occur and the Company will adjust the carrying value of the security to equal the redemption value at the end of each reporting period. On December 31, 2001, the purchase price under the Put Option was in a negative position and as such no liability was recorded for the redemption of the Put Option.

In connection with the sale of the Notes, Ann L. Sullivan Living Trust, dated September 6, 1978, and the Thomas P. Sullivan Living Trust, dated September 8, 1978 (collectively the "Sullivan Trusts") each have entered into a certain Subordination Agreement, dated July 30, 2001. Thomas P. Sullivan, a trustee of the Thomas P. Sullivan Living Trust, is a director of the Company. Under the terms of the Subordination Agreement, the Sullivan Trusts have subordinated all amounts owing by the Company to the Sullivan Trusts in favor of the Company's obligations under the Notes. Notwithstanding the subordination, the Company may (a) as long as no event of default under the Purchase Agreement has occurred and is continuing and if such payments would not create an event of default, continue to make regularly scheduled payments of principal and interest owing under certain promissory notes, dated May 28, 1999, in the original aggregate principal amount of \$4.7 million, which were issued to the Sullivan Trusts in connection with the Company's acquisition of Perma-Fix of Michigan, Inc., Perma-Fix of South Georgia, Inc., and Perma-Fix of Orlando, Inc.; and (b) make such payments as may be required pursuant to a certain Mortgage, dated May 28, 1999, by Perma-Fix of Michigan, Inc. in favor of the Sullivan Trusts. The outstanding principal amount due to the Sullivan Trusts is approximately \$2.5 million.

In conjunction with the Company's acquisition of M&EC, M&EC entered into an installment agreement with the Internal Revenue Service ("IRS") for a principal amount of \$923,000 dated June 7, 2001, for certain withholding taxes owed by M&EC. The installment agreement is payable over eight years on a semiannual basis on June 30 and December 31. Interest is accrued at the applicable law rate ("Applicable Rate") pursuant to the provisions of section 6621 of the Internal Revenue Code of 1986 as amended. Such rate is adjusted on a quarterly basis and payable in lump sum at the end of the installment period. On December 31, 2001, the rate was 8% (see Note 4). On December 31, 2001, the outstanding balance is \$941,000 including accrued interest of approximately \$38,000.

M&EC also issued a promissory note for a principal amount of \$3.7 million to PDC, dated June 7, 2001, for monies advanced to M&EC for certain services performed by PDC. The promissory note is payable over eight years on a semiannual basis on June 30 and December 31. Interest is accrued at the applicable rate (8.00% on December 31, 2001) and payable in lump sum at the end of the loan period. On December 31, 2001, the outstanding balance is \$3,809,000 including accrued interest of approximately \$175,000. PDC has directed M&EC to make all payments under the promissory note directly to the IRS to be applied to PDC's obligations under its installment agreement with the IRS (see Note 4).

The aggregate amount of the maturities of long-term debt maturing in future years as of December 31, 2001, is \$2,989,000 in 2002; \$3,161,000 in 2003; \$2,371,000 in 2004; \$15,550,000 in 2005; and \$7,075,000 in 2006.

# NOTE 7 ACCRUED EXPENSES

Accrued expenses at December 31 include the following (in thousands):

	2001	2000
	<b>*</b> • • • • •	<b></b>
Salaries and employee benefits	\$ 2,342	\$ 1,857
Accrued sales, property and other tax	735	782
Waste disposal and other operating related expenses	4,840	4,331
Other	514	337
Total accrued expenses	\$ 8,431	\$ 7,307

# NOTE 8 ACCRUED CLOSURE COSTS

The Company accrues for the estimated closure costs as determined pursuant to RCRA guidelines for all fixed-based regulated facilities, even though the Company does not intend to or have present plans to close any of the Company's existing facilities. The permits and/or licenses define the waste which may be received at the facility in question and the treatment or process used to handle and/or store the waste. In addition, the permits and/or licenses specify, in detail, the process and steps that a hazardous waste or mixed waste facility must follow should the facility be closed or cease operating as a hazardous waste or mixed waste facility. Closure procedures and cost calculations in connection with closure of a facility are based on guidelines developed by the federal and/or state regulatory authorities under RCRA and the other appropriate statutes or regulations promulgated pursuant to the statutes. The closure procedures are very specific to the waste accepted and processes used at each facility. The Company recognizes the closure cost as a contingent liability on the balance sheet. Since all the Company's facilities are acquired facilities, the closure cost for each facility was recognized pursuant to a business combination and recorded as part of the purchase price allocation to assets acquired and liabilities assumed.

The closure calculation is increased annually for inflation based on RCRA guidelines, and for any approved changes or expansions to the facility, which may result in either an increase or decrease in the approved closure amount. An increase resulting from changes or expansions is recorded to expense over the term of such a renewed/expanded permit, generally five (5) years, and annual inflation factor increases are expensed during the current year.

During 2001, the accrued long-term closure cost decreased by \$419,000 to a total of \$4,919,000 as compared to the 2000 total of \$5,338,000. This decrease is principally a result of the reevaluation of the purchase price allocation in 2001 of the acquisition of DSSI during 2000, of approximately \$2,480,000 with an offsetting decrease to intangible assets (see Note 4 regarding the acquisition of DSSI). This decrease was partially offset by an increase in accrued closure costs of \$2,025,000 as a result of the acquisition of M&EC, and normal inflation factor increases accounted for the remaining increase of \$36,000.

# NOTE 9 ENVIRONMENTAL LIABILITIES

The Company has four (4) remediation projects, which are currently in progress at four (4) of the permitted facilities owned and operated by subsidiaries of the Company. These remediation projects, principally entail the removal of contaminated soil and remediation of surrounding ground water. All of the remedial clean-up projects in question were an issue for that facility for years prior to the acquisition by the Company of the facility and were recognized pursuant to a business combination and recorded as part of the purchase price allocation to assets acquired and liabilities assumed. Due to the fact that these are RCRA permitted facilities, the remediation activities are closely reviewed and monitored by the applicable state regulators. Although the Company has recognized certain environmental liabilities as a result of environmental concerns at, or due to the operations of, a particular facility at the time of acquisition as part of the acquisition cost, subsequent to

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the acquisition of these facilities by the Company, the Company has not recognized new environmental liabilities as a result of the operations of the facilities after acquisition because, in part, due to the stringent operational procedures instituted at the facilities after they have been acquired by the Company.

At December 31, 2001, the Company had accrued environmental liabilities totaling \$3,534,000, which reflects a decrease of \$808,000 from the December 31, 2000, balance of \$4,342,000. The decrease represents payments on remediation projects. The December 31, 2001 current and long-term accrued environmental balance is recorded as follows:

	PFD	PFMI	PFSG	PFM	Total
Current accrual Long-term accrual	\$287,000 254,000	\$507,000 113,000	\$ 108,000 1,292,000	\$300,000 673,000	\$1,202,000 2,332,000
Total	\$541,000	\$620,000	\$1,400,000	\$973,000	\$3,534,000

In June 1994, the Company acquired from Quadrex Corporation and/or a subsidiary of Quadrex Corporation (collectively, "Quadrex") three TSD companies, including the PFD facility. The former owners of PFD had merged EPS with PFD, which was subsequently sold to Quadrex. Through the Company's acquisition of PFD in 1994 from Quadrex, the Company was indemnified by Quadrex for costs associated with remediating a 1989 former RCRA facility leased by PFD ("Leased Property"), which entails remediation of soil and/or groundwater restoration. The Leased Property used by EPS to operate its facility is separate and apart from the property on which PFD's facility is located. In conjunction with the subsequent bankruptcy filing by Quadrex, and the Company's recording of purchase accounting for the acquisition of PFD, the Company recognized an environmental liability of approximately \$1,200,000 for the remediation of this leased facility. This facility has pursued remedial activities for the past seven years and after evaluating various technologies, is seeking approval from appropriate governmental authority for the final remedial process, through the utilization of third party consultants, which should extend for two (2) to three (3) years after approval by the appropriate governmental authorities of the final remedial process. For the year ended December 31, 2001, the Company incurred \$86,000 in remedial costs which reduced the reserve. The Company has estimated the potential liability related to the remaining remedial activity of the above property to be approximately

\$541,000, representing the remaining reserve balance, of which the Company anticipates spending approximately \$287,000 during 2002, with the remaining \$254,000 over the subsequent two-year period.

In conjunction with the acquisition of PFMI during 1999, the Company recognized an environmental accrual of \$2,120,000. This amount represented the Company's estimate of the long-term costs to remove contaminated soil at the PFMI acquired facility in Detroit, Michigan. The facility has pursued remedial activities over the past three (3) years, which have proceeded on schedule and are anticipated to be completed during 2003. For the year ended December 31, 2001, the Company incurred \$426,000 in remedial costs which reduced the reserve. The Company's estimate of the potential liability at December 31, 2001, for the PFMI remediation is \$620,000, of which the Company anticipates spending \$507,000 during 2002, with the remaining \$113,000 in 2003.

During 1999, the Company recognized an environmental accrual of \$2,199,000, in conjunction with the acquisition of PFSG. This amount represented the Company's estimate of the long- term costs to remove contaminated soil and to undergo groundwater remediation activities at the PFSG acquired facility in Valdosta, Georgia. PFSG, in conjunction with third party consultants, have over the past three (3) years, completed the initial valuation and selected the remedial process to be utilized. The planning and approval process will continue throughout 2002, with remedial activities beginning in 2003. For the year ended December 31, 2001, the Company incurred \$94,000 in environmental costs which reduced the reserve. The Company's estimate of the potential liability at December 31, 2001, for the PFSG remediation is \$1,400,000, of which the Company anticipates spending \$108,000 during 2002, with the remaining \$1,292,000 to be spent over the next five (5) to seven (7) years.

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Pursuant to the Company's acquisition, effective December 31, 1993, of Perma-Fix of Memphis, Inc. (f/k/a American Resource Recovery, Inc.), the Company assumed certain liabilities relative to the removal of contaminated soil and to undergo groundwater remediation at the facility. Prior to the Company's ownership of Perma-Fix of Memphis, Inc., the owners installed monitoring and treatment equipment to restore the groundwater to acceptable standards in accordance with federal, state and local authorities. The groundwater remediation at this facility has been ongoing since approximately 1990, and, subject to the approval of the appropriate agency, Perma-Fix of Memphis, Inc. intends to begin final remediation of this facility. For the year ended December 31, 2001, the Company incurred \$229,000 in remedial costs which reduced the reserve. The Company's estimate of the potential liability at December 31, 2001, for completion of this project is \$973,000, of which the Company anticipates spending \$300,000 in 2002 and the remaining \$673,000 over the next three (3) to five (5) years.

Prior to the acquisition of these facilities, the Company performed, or had performed, due diligence on each of these environmental projects, and also reviewed/utilized reports obtained form third party engineering firms who have been either engaged by the prior owners or by our Company to assist in our review. Based upon the Company's expertise and the analysis performed, the Company has accrued its best estimate of the cost to complete the remedial projects. No insurance or third party recovery was taken into account in determining the Company's cost estimates or reserve, nor do the Company's cost estimates or reserves reflect any discount for present value purposes. The Company does not believe that any adverse changes to its estimates would be material to the Company. The circumstances that could affect the outcome range from new technologies, that are being developed every day that reduce the Company's overall costs, to increased contamination levels that could arise as the Company completes remediation which could increase the Company's costs, neither of which the Company anticipates at this time.

# NOTE 10 INCOME TAXES

At December 31, 2001, we had temporary differences and net operating loss carry forwards which gave rise to deferred tax assets and liabilities at December 31, as follows (in thousands):

,384
505
560
189
,116)
522
(522)
(522)

A reconciliation between the expected tax benefit using the federal statutory rate of 34% and the provision for income taxes as reported in the accompanying consolidated statements of operations is as follows (in thousands):

	2001		2000	)	1999	
Tax expense (benefit) at statutory rate	\$	(205)	\$	(189)	\$	534
Goodwill amortization		440		241		155
Other		(651)		100		65
Deferred tax assets acquired		(1,184)		(2,392)		(855)
Increase (decrease) in valuation allowance		1,600		2,240		101
Provision for income taxes	\$		\$		\$	
Provision for income taxes	\$		\$		\$	

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We have recorded a valuation allowance to state our deferred tax assets at estimated net realizable value due to the uncertainty related to realization of these assets through future taxable income. Our valuation allowance increased by approximately \$1,600,000, \$2,240,000 and \$101,000 for the years ended December 31, 2001, 2000 and 1999, respectively, which represents the effect of changes in the temporary differences and net operating losses (NOLs), as

amended. Included in deferred tax assets is an impairment of assets for \$7,611,000 for 2001 and 2000, of which approximately \$7,051,000 is in conjunction with the Company's acquisition of DSSI in August 2000. This deferred tax asset is a result of an impairment charge related to fixed assets and goodwill of approximately \$24.5 million recorded by DSSI in 1997 prior to the Company's acquisition of DSSI. This write-off will not be deductible for tax purposes until the assets are disposed.

We have estimated net operating loss carryforwards for federal income tax purposes of approximately \$19,152,000 at December 31, 2001. These net operating losses can be carried forward and applied against future taxable income, if any, and expire in the years 2007 through 2021. However, as a result of various stock offerings and certain acquisitions, the use of these NOLs will be limited under the provisions of Section 382 of the Internal Revenue Code of 1986, as amended. Additionally, NOLs may be further limited under the provisions of Treasury Regulation 1.1502-21 regarding Separate Return Limitation Years.

# NOTE 11 CAPITAL STOCK, EMPLOYEE STOCK PLAN AND INCENTIVE COMPENSATION Private Placement Offering

On April 6, 2001, the Company commenced a private placement offering of units (the "Offering") to accredited investors. Each unit is comprised of one share of the Company's Common Stock and one Warrant to purchase one share of Common Stock. The purchase price for each unit was \$1.75, and the exercise price of each Warrant included in the units is \$1.75, subject to adjustment under certain conditions. On June 15, 2001, the Company revised the offering terms to comply with NASDAQ requirements. The maximum units were reduced to 4.4 million from the original 5 million. The amendment also required the Company to obtain shareholder approval prior to exercising the Warrants issued as part of the units. Pursuant to the terms of the Offering, the Company filed a preliminary proxy statement on October 19, 2001, for a Special Meeting of Shareholders to obtain approval for the exercise of the Warrants, which is currently under review by the SEC. The Offering was made pursuant to an exemption from registration under Section 4(2) of the Securities Act of 1933, as amended (the "Act"), and/or Rule 506 of Regulation D promulgated under the Act. The Offering was made only to accredited investors through one or more broker/dealer placement agents. At the completion of the offering, on July 30, 2001, 4,397,566 units were accepted for an aggregate purchase price of \$7,696,000. Expenses related to the offering subscriptions, were approximately \$814,000.

### **Employee Stock Purchase Plan**

At the Company's Annual Meeting of Stockholders ("Annual Meeting") as held on December 12, 1996, the stockholders approved the adoption of the Perma-Fix Environmental Services, Inc. 1996 Employee Stock Purchase Plan. This plan provides eligible employees of the Company and its subsidiaries, who wish to become stockholders, an opportunity to purchase Common Stock of the Company through payroll deductions. The maximum number of shares of Common Stock of the Company that may be issued under the plan will be 500,000 shares. The plan provides that shares will be purchased two (2) times per year and that the exercise price per share shall be eighty-five percent (85%) of the market value of each such share of Common Stock on the offering date on which such offer commences or on the exercise date on which the offer period expires, whichever is lowest. The first purchase period commenced July 1, 1997. The following table details the resulting employee stock purchase totals.

Purchase Period	Proceeds	Shares Purchased

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July 1 - December 31, 1997	\$ 16,000	8,276
January 1 - June 30, 1998	17,000	10,732
July 1 - December 31, 1998	22,000	17,517
January 1 - June 30, 1999	28,000	21,818
July 1 - December 31, 1999	49,000	48,204
January 1 - June 30, 2000	54,000	53,493
July 1 - December 31, 2000	52,000	46,632
January 1 - June 30, 2001	48,000	43,324
July 1 - December 31, 2001	69,000	33,814

The shares for the purchase period ending December 31, 2001, were purchased in February 2002.

# **Employment Options**

During October 1997, Dr. Centofanti entered into a three (3) year Employment Agreement with us which provided for, among other things, an annual salary of \$110,000, subject to annual inflationary increases and the issuance of Non-qualified Stock Options ("Non-qualified Stock Options"). The Non-qualified Stock Options provide Dr. Centofanti with the right to purchase an aggregate of 300,000 shares of Common Stock as follows: (i) after one year 100,000 shares of Common Stock at a price of \$2.25 per share, (ii) after two years 100,000 shares of Common Stock at a price of \$3.00 per share. The Non-qualified Stock Options expire in October 2007.

# **Stock Option Plans**

On December 16, 1991, we adopted a Performance Equity Plan (the "Plan"), under which 500,000 shares of the Company's Common Stock are reserved for issuance, pursuant to which officers, directors and key employees are eligible to receive incentive or Non-qualified stock options. Incentive awards consist of stock options, restricted stock awards, deferred stock awards, stock appreciation rights and other stock-based awards. Incentive stock options granted under the Plan are exercisable for a period of up to ten years from the date of grant at an exercise price which is not less than the market price of the Common Stock on the date of grant, except that the term of an incentive stock option granted under the Plan to a stockholder owning more than 10% of the then-outstanding shares of Common Stock may not exceed five years and the exercise price may not be less than 110% of the market price of the Common Stock on the date of grant. All grants of options under the Performance Equity Plan have been made at an exercise price not less than the market price of the Common Stock at the date of grant. On December 16, 2001, the Plan expired. No new options will be issued under the Plan, but the options issued under the Plan prior to the expiration date will remain in effect until their respective maturity dates.

Effective September 13, 1993, we adopted a Non-qualified Stock Option Plan pursuant to which officers and key employees can receive long-term performance-based equity interests in the Company. The maximum number of shares of Common Stock as to which stock options may be granted in any year shall not exceed twelve percent (12%) of the number of common shares outstanding on December 31 of the preceding year, less the number of shares covered by the outstanding stock options issued under the Company's 1991 Performance Equity Plan as of December 31 of such preceding year. The option grants under the plan are exercisable for a period of up to ten years from the date of grant at an exercise price which is not less than the market price of the Common Stock at date of grant.

Effective December 12, 1993, we adopted the 1992 Outside Directors Stock Option Plan, pursuant to which options to purchase an aggregate of 100,000 shares of Common Stock had been authorized. This plan provides for the grant of options on an annual basis to each outside director of the Company to purchase up to 5,000 shares of Common Stock. The options have an exercise price equal to the closing trading price, or, if not available, the fair market value of the Common Stock on the date of grant. The plan also provides for the grant of additional options to purchase up to 10,000 shares of Common Stock on the

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foregoing terms to each outside director upon election to the Board. During our annual meeting held on December 12, 1994, the stockholders approved the Second Amendment to our 1992 Outside Directors Stock Option Plan which, among other things, (i) increased from 100,000 to 250,000 the number of shares reserved for issuance under the plan, and (ii) provides for automatic issuance to each director of the Company, who is not an employee of the Company, a certain number of shares of Common Stock in lieu of sixty-five percent (65%) of the cash payment of the fee payable to each director for his services as director. The Third Amendment to the Outside Directors Plan, as approved at the December 1996 Annual Meeting, provided that each eligible director shall receive, at such eligible director's option, either sixty-five percent (65%) or one hundred percent (100%) of the fee payable to such director for services rendered to the Company as a member of the Board in Common Stock. In either case, the number of shares of Common Stock of the Company issuable to the eligible director shall be determined by valuing the Common Stock of the Company at seventy-five percent (75%) of its fair market value as defined by the Outside Directors Plan. The Fourth Amendment to the Outside Directors Plan, was approved at the May 1998 Annual Meeting and increased the number of authorized shares from 250,000 to 500,000 reserved for issuance under the plan.

We applied APB Opinion 25, "Accounting for Stock Issued to Employees," and related interpretations in accounting for options issued to employees and directors. Accordingly, no compensation cost has been recognized for options granted to employees and directors at exercise prices which equal or exceed the market price of the Company's Common Stock at the date of grant. Should options be granted at exercise prices below market prices, compensation cost is measured and recognized as the difference between market price and exercise price at the date of grant.

Statement of Financial Accounting Standards No. 123 ("FAS 123") "Accounting for Stock-Based Compensation," requires us to provide pro forma information regarding net income and earnings per share as if compensation cost for our employee and directors stock options had been determined in accordance with the fair market value-based method prescribed in FAS 123. We estimate the fair value of each stock option at the grant date by using the Black-Scholes option-pricing model with the following weighted-average assumptions used for grants in 2001, 2000 and 1999, respectively: no dividend yield for all years; an expected life of ten years for all years; expected volatility of 36.92%, 39.6%, and 40.0%; and risk-free interest rates of 4.60%, 6.08%, and 5.70%.

Under the accounting provisions of FASB Statement 123, our net income (loss) and net income (loss) per share would have been reduced to the pro forma amounts indicated below (in thousands except for per share amounts):

	2001		2000		1999	
Net income (loss) applicable to Common Stock						
As reported	\$	(747)	\$	(762)	\$	1,450
Pro forma		(1,703)		(1,186)		1,417
Basic net income (loss) per share						
As reported	\$	(.03)	\$	(.04)	\$	.08
Pro forma		(.06)		(.06)		.08
Diluted net income (loss) per share						
As reported	\$	(.03)	\$	(.04)	\$	.07
Pro forma		(.06)		(.06)		.07

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A summary of the status of options under the plans as of December 31, 2001, 2000 and 1999 and changes during the years ending on those dates is presented below:

	2001 2		2000		1999		
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	
Performance Equity Plan:							
Balance at beginning of year	251,149	\$2.33	260,149	\$2.28	341,832	\$2.23	
Exercised	(10,000)	1.00			(23,000)	1.00	
Forfeited	(67,144)	2.99	(9,000)	1.25	(58,683)	2.44	
Balance at end of year	174,005	2.14	251,149	2.33	260,149	2.28	
Options exercisable at year end	156,805	2.24	213,748	2.53	195,749	2.66	
Non-qualified Stock Option Plan:							
Balance at beginning of year	1,319,800	\$1.33	837,800	\$1.37	885,300	\$1.37	
Granted	918,000	1.75	510,000	1.27			
Exercised					(18,300)	1.17	
Forfeited			(28,000)	1.26	(29,200)	1.29	
Balance at end of year	2,237,800	1.50	1,319,800	1.33	837,800	1.37	
Options exercisable at year end	788,900	1.37	542,000	1.44	376,300	1.47	
Weighted average fair value of options granted during the year at exercise prices which equal market price of stock at date of grant	918,000	.99	510,000	.79			
Outside Directors Stock Option Plan:							
Balance at beginning of year	225,000	\$2.31	210,000	\$2.36	175,000	\$2.58	
Granted	30,000	2.59	15,000	1.69	35,000	1.24	
Balance at end of year	255,000	2.34	225,000	2.31	210,000	2.36	

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Options exercisable at year end	240,000	2.32	225,000	2.31	210,000	2.36
Weighted average fair value of options granted during the year at exercise prices which equal market price of stock at date of grant	30,000	1.47	15,000	1.06	35,000	.74

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The following table summarizes information about options under the plan outstanding at December 31, 2001:

Opt		Options Exercisable					
Description and Range of Exercise Prices	Number Outstanding at Dec. 31, 2001	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable at Dec. 31, 2001	Weighted Average Exercise Price		
Performance Equity Plan:							
1992 Awards (\$3.02)		79,505	.2 years	\$ 3.02	79,505	\$ 3.02	
1993 Awards (\$5.25)		6,500	1.8 years	5.25	6,500	5.25	
1996 Awards (\$1.00)		45,000	4.4 years	1.00	45,000	1.00	
1998 Awards (\$1.25)	_	43,000	6.8 years	1.25	25,800	1.25	
	_	174,005	4.4 years	2.14	156,805	2.24	
Non-qualified Stock Option Plan:					_		
1994 Awards (\$4.75)		300	2.2 years	\$4.75	300	\$4.75	
1995 Awards (\$2.88)		85,000	3.0 years	2.88	85,000	2.88	
1996 Awards (\$1.00)		270,000	4.4 years	1.00	270,000	1.00	
1997 Awards (\$1.375)		244,500	5.3 years	1.38	195,600	1.38	
1998 Awards (\$1.25)		235,000	6.8 years	1.25	141,000	1.25	
2000 Awards (\$1.25-\$1.50)		485,000	8.3 years	1.26	97,000	1.26	
2001 Awards (\$1.75)	_	918,000	9.3 years	1.75			
	_	2,237,800	7.8 years	1.50	788,900	1.37	

**Outside Directors Stock Option Plan:** 

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1993 Awards (\$3.02)	45,000	.5 years	\$ 3.02	45,000	\$ 3.02
1994 Awards (\$3.00-\$3.22)	45,000	2.8 years	3.04	45,000	3.04
1995 Awards (\$3.25)	20,000	3.0 years	3.25	20,000	3.25
1996 Awards (\$1.75)	35,000	4.9 years	1.75	35,000	1.75
1997 Awards (\$2.125)	15,000	5.9 years	2.13	15,000	2.13
1998 Awards (\$1.75)	15,000	6.4 years	1.38	15,000	1.38
1999 Awards (\$1.2188-\$1.25)	35,000	7.7 years	1.24	35,000	1.24
2000 Awards (\$1.688)	15,000	9.0 years	1.69	15,000	1.69
2001 Awards (\$2.43-\$2.75)	30,000	9.6 years	2.59	15,000	2.43
	255,000	5.5 years	2.34	240,000	2.32

# Warrants

We have issued various Warrants pursuant to acquisitions, private placements, debt and debt conversion and to facilitate certain financing arrangements. The Warrants principally are for a term of three to five years and entitle the holder to purchase one share of Common Stock for each warrant at the stated exercise price.

In connection with the Preferred Stock issuances as discussed fully in Note 5, we issued Warrants during 1997 for the purchase of 1,591,250 shares of Common Stock of which 1,157,750 shares are currently outstanding. During 1999 the Company entered into a consulting agreement for certain investor relations services whereby we agreed to pay a consulting fee and agreed to issue two Common Stock purchase Warrants for an aggregate of up to 480,000 shares of Common Stock (which were issued in fiscal 2000), with 240,000 exercisable at an exercise price equal to \$1.20 per share and 240,000 at \$1.40 per share. During 2000 the Company entered into a consulting agreement for certain investment banking services whereby we agreed to pay a consulting fee and initially agreed to issue Warrants in the aggregate amount of up to 150,000 shares of Common Stock exercisable at an exercise price equal to \$1.44 per share. During 2000 the Company entered into a financial advisory and consulting agreement to assist in preparing for a private placement offering of our Common Stock. Under the terms of the consulting agreement the Company issued two Warrants consisting of one Warrant in the amount of 250,000 shares of Common Stock for a period of five (5) years at an exercise price of \$1.50, and one Warrant in the amount of 360,000 shares of Common Stock for a period of five (5) years at an exercise price of \$1.75. During 2001 the Company entered into a consulting agreement, and pursuant to the terms of such agreement the Company issued a Warrant for the exercise of 20,000 shares of Common Stock for a period of five (5) years at an exercise

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price of \$2.35 per share. Upon completion of a new term loan and revolving credit line agreement (see note 6) Warrants were issued to certain investment banking firms and intermediaries for an aggregate amount of up to 1,283,332 shares of Common Stock exercisable at an exercise price equal to \$1.44 per share. During 2000 and 2001 pursuant to financing in relation to the DSSI acquisition, we issued seven (7) Warrants for an aggregate amount of up to 1,020,000 shares of Common Stock to Capital Bank, with 150,000 shares exercisable at an exercise price equal to \$1.50 per share, 150,000 shares exercisable at an exercise price equal to \$1.63 per share, 300,000 shares exercisable at an exercise price equal to \$1.88 per share, 105,000 shares exercisable at an exercise price equal to \$1.42 per share, 105,000 shares exercisable at an exercise price equal to \$1.94 per share and 105,000 shares exercisable at an exercise price equal to \$1.81 per share. During 2001 the Company issued, as part of completing the interim financing with BHC, warrants for an aggregate amount of

1,167,141 shares of Common Stock. One warrant was issued to BHC as partial payment for closing fees for the sub debt financing in the amount of 817,142 shares of Common Stock for a period of five (5) years and exercisable at an exercise price of \$1.46 per share, and other Warrants issued to certain investment banking firms and intermediaries in the aggregate amount of 349,999 shares of Common Stock for a period of five (5) years at an exercise price of \$1.44 per share. Pursuant to an agreement with Capital Bank in July 2001 for the satisfaction of all amounts due under the \$3 million loan agreement with Capital Bank, the Company issued two Warrants for an aggregate amount of 2,464,405 shares of Common Stock for a period of five (5) years at an exercise price of \$1.75 per share. During 2001 the Company issued Warrants to investors as part of a private placement offering ("Offering") and to appointed placement agents for assistance in completing the Offering, for an aggregate of 4,505,566 shares of Common Stock for a period of five (5) years at an exercise price of \$1.75 per share. The Warrants under the Offering are not exercisable until the Company obtains Shareholder approval for the exercise of the Warrants at a Special Stockholders' meeting to be held. On July 31, 2001, pursuant to closing the long-term financing with AMI and BEC, the Company issued Warrants in the aggregate amount of 1,609,858 shares of Common Stock consisting of two Warrants to AMI and BEC for an aggregate amount of 1,281,731 shares of Common Stock for a period of seven (7) years and exercisable at an exercise price of \$1.50 per share, and Warrants issued to certain investment banking firms and intermediaries in the aggregate amount of 328,127 shares of Common Stock for a period of five (5) years at an exercise price of \$1.44 per share. The Black-Scholes valuation of all warrants issued during 2001 and 2000 was approximately \$3,784,000 and \$1,160,000, respectively, using the following weighted average assumptions: no dividend yield, an expected life ranging from three (3) to seven (7) years, expected volatility ranging from 25.0% to 53.5% and a risk-free interest rate of 4.25% to 4.99%. During 2001, a total of 1,831,875 Warrants were exercised for proceeds in the amount of \$3,641,000 and 830,625 Warrants expired. During 2000, a total of 1,161,200 Warrants were exercised for proceeds in the amount of \$1,313,000 and 113,513 Warrants expired.

The following details the Warrants currently outstanding as of December 31, 2001:

	Number of		
Warrant	Underlying	Exercise	Expiration
Series	Shares	Price	Date
Class D Preferred Stock Warrants	1,157,750	\$1.81 - \$3.00	6/02 - 6/03
Consulting Warrants	1,260,000	\$1.20 - \$2.35	4/03 - 1/05
PNC Financing Warrants	1,283,332	\$1.44	12/05
RBB Financing Warrants	1,020,000	\$1.42 - \$1.94	8/03 - 3/04
BHC Financing Warrants	1,167,141	\$1.44 - \$1.46	1/06 - 3/06
Debt for Equity Exchange Warrants	2,464,405	\$1.75	7/06
Private Placement Warrants	4,505,566	\$1.75	7/06
AMI and BEC Financing Warrants	1,609,858	\$1.44 - \$1.50	7/06 - 7/08
	14,468,052		

### **Shares Reserved**

At December 31, 2001, we were required to reserve approximately 19.1 million shares of Common Stock for future issuance under all of the above options and warrant arrangements and the convertible Series 17 Preferred Stock. (See Note 5.) As of December 31, 2001, 34,020,005 shares of Common stock were issued and outstanding, leaving only 15,979,995 authorized shares (including 988,000 treasury shares) available to satisfy our existing reserve obligations. We are preparing for a shareholder's meeting to vote on an increase to the number of Common shares authorized. If the stockholders do not approve the increase, we may be unable to fulfill all our obligations to issue Common Stock. This could put us in default under various obligations to issue Common Stock, which could initiate certain actions against us for losses and damages. Such actions could have a material adverse affect on the Company.

### **NOTE 12**

### COMMITMENTS AND CONTINGENCIES

### **Hazardous Waste**

In connection with our waste management services, we handle both hazardous and nonhazardous waste which we transport to our own or other facilities for destruction or disposal. As a result of disposing of hazardous substances, in the event any cleanup is required, we could be a potentially responsible party for the costs of the cleanup notwithstanding any absence of fault on our part.

### Legal

PFMI, which was purchased by the Company effective June 1, 1999, has been advised that it is considered a potentially responsible party ("PRP") in three Superfund sites, two of which had no relationship with PFMI according to PFMI records. The relationship of PFMI to the third site, if any, is currently being investigated by the Company. PFO, which was also purchased by the Company effective June 1, 1999, has been advised that it is a PRP in two Superfund sites. The Company is currently investigating the relationship of PFO to the two sites.

PFFL has been advised by the EPA that a release or threatened release of hazardous substances has been documented by the EPA at the former facility of Florida Petroleum Reprocessors (the "Site"), which is located approximately 3,000 feet northwest of the PFFL facility in Davie, Florida. However, studies conducted by, or under the direction of, the EPA, together with data previously provided to PFFL by the EPA, do not indicate that the PFFL facility in Davie, Florida, has contributed to the deep groundwater contamination associated with the Site. As a result, we are unable to determine with any degree of certainty what exposure, if any, PFFL may have as a result of the documented release from the Site.

PFD is required to remediate a parcel of leased property ("Leased Property"), which was formerly used as a Resource Conservation and Recovery Act of 1976 storage facility that was operated as a storage and solvent recycling facility by a company that was merged with PFD prior to the Company's acquisition of PFD. The Leased Property contains certain contaminated waste in the soils and groundwater. The Company was indemnified by the seller of PFD for costs associated with remediating the Leased Property, which entails remediation of soil and/or groundwater restoration. However, during 1995, the seller filed for bankruptcy. Prior to the acquisition of PFD by the Company, the seller had established a trust fund ("Remediation Trust Fund"), which it funded with the seller's stock to support the remedial activity on the Leased Property pursuant to the agreement with the Ohio Environmental Protection Agency ("Ohio EPA"). After the Company purchased PFD, it was required to advance \$250,000 into the Remediation Trust Fund due to the reduction in the value of the seller's stock that comprised the Remediation Trust Fund, which stock had been sold by the trustee prior to the seller's filing bankruptcy and has subsequently put an additional \$192,000 into the remediation trust fund. PFD brought action against the owners and former operators of the Leased Property to remediate the Leased Property and/or to recover any cost incurred by PFD in connection therewith.

PFMI was previously named as a PRP under the Indiana state equivalent to the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 at the Four County Landfill site near DeLong, Indiana. In March 1999, PFMI the Indiana Department of Environmental Management ("IDEM"), and the members of the Four County Landfill Group and the Four County Landfill Operable Unit One RD/RA Group (the "Groups") entered into an Agreed Order (the "Agreed Order") in an administrative proceeding before IDEM pursuant to which PFMI received a full and complete release from the Groups, a covenant from IDEM not to sue or take any administrative action against PFMI with respect to present or future liability relating to the site (with the exception of liability, if any, associated with loss of natural resources), and protection from contribution actions of third parties relating to the site.

On July 13, 2001, the United States of America (the "Government") filed an action against PFMI and others, including members of the group, seeking to recover response costs allegedly incurred by the United States Environmental Protection Agency ("EPA") in connection with the Four County Landfill site. According to the demand, the Government is seeking to recover approximately \$576,000, and the action is currently stayed while the parties pursue settlement negotiations. At this point we are unable to determine what exposure PFMI may have to the Government in this regard.

In addition to the above matters and in the normal course of conducting its business, we are involved in various other litigation. We are not a party to any litigation or governmental proceeding which our management believes could result in any judgments or fines against us that would have a material adverse affect on our financial position, liquidity or results of future operations.

### **Permits**

We are subject to various regulatory requirements, including the procurement of requisite licenses and permits at our facilities. These licenses and permits are subject to periodic renewal without which our operations would be adversely affected. We anticipate that, once a license or permit is issued with respect to a facility, the license or permit will be renewed at the end of its term if the facility's operations are in compliance with the applicable regulatory requirements.

### **Accrued Closure Costs and Environmental Liabilities**

We maintain various closure cost financial assurance instruments to guarantee the proper decommissioning of our RCRA facilities upon cessation of operations. Additionally, in the course of owning and operating on-site treatment, storage and disposal facilities, we are subject to corrective action proceedings to restore soil and/or groundwater to its original state. These activities are governed by federal, state and local regulations and we maintain the appropriate accruals for restoration. As discussed in Note 8 and 9, we have recorded accrued liabilities for estimated closure costs and identified environmental remediation costs.

### **Insurance**

Our business exposes us to various risks, including claims for causing damage to property or injuries to persons or claims alleging negligence or professional errors or omissions in the performance of its services, which claims could be substantial. We believe that our coverage is adequate to insure us against the various types of risks encountered.

# **Operating Leases**

We lease certain facilities and equipment under operating leases. Future minimum rental payments as of December 31, 2001, required under these leases are \$1,859,000 in 2002, \$1,573,000 in 2003, \$1,134,000 in 2004, \$960,000 in 2005 and \$672,000 in 2006.

Net rent expense relating to our operating leases was \$2,922,000, \$2,245,000 and \$1,958,000 for 2001, 2000 and 1999, respectively.

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# NOTE 13 PROFIT SHARING PLAN

We adopted the Perma-Fix Environmental Services, Inc. 401(k) Plan (the "401(k) Plan") in 1992, which is intended to comply under Section 401 of the Internal Revenue Code and the provisions of the Employee Retirement Income Security Act of 1974. All full-time employees who have attained the age of 18 are eligible to participate in the 401(k) Plan. Participating employees may make annual pretax contributions to their accounts up to 18% of their compensation, up to a maximum amount as limited by law. We, at our discretion, may make matching contributions based on the employee's elective contributions. Company contributions vest over a period of five years. We elected not to provide any matching contributions for the years prior to 1999. However, beginning January 1, 1999, we agreed to match up to 25% of our employees contributions, not to exceed 3% of a participants compensation. In conjunction with the PFMI, PFO and PFSG acquisition in 1999, a similar 401(k) Plan was assumed and maintained for such acquired companies, until such time as the plans were merged, which occurred on August 1, 2000. We contributed \$241,000 and \$166,000 in matching funds during 2001 and 2000, respectively.

# NOTE 14 OPERATING SEGMENTS

During 2001, we were engaged in eleven operating segments. Pursuant to FAS 131, we define an operating segment as:

- \* A business activity from which we may earn revenue and incur expenses;
- \* Whose operating results are regularly reviewed by the President of the segment to make decisions about resources to be allocated within the segment and assess its performance; and
- \* For which discrete financial information is available.

We therefore define our operating segments as each separate facility or location that we operate. These segments however, exclude the Corporate headquarters which does not generate revenue and Perma-Fix of Memphis, Inc., a discontinued operation, which is reported with Corporate headquarters as there were no earnings for PFM for the periods represented below and net balance sheet items are immaterial. See Note 3 regarding discontinued operations. The accounting policies of the operating segments are the same as in Note 2.

Pursuant to FAS 131 we have aggregated our operating segments into three reportable segments to ease in the presentation and understanding of our business. Each reportable segment has President who manages and makes decisions for the reportable segment as a whole. The results of the reportable segments are then reviewed by the Company's chief operating decision maker. We used the following criteria to aggregate our segments:

- \* The nature of our products and services;
- \* The nature of the production processes;
- \* The type or class of customer for our products and services;
- \* The methods used to distribute our products or provide our services; and
- \* The nature of the regulatory environment.

During 2000, in conjunction with the expansion of the Perma-Fix of Florida nuclear, mixed waste facility, the acquisition of Diversified Scientific Services, Inc. and expanded Oak Ridge, Tennessee, mixed waste activities, the Company has established a Nuclear Waste Management Services segment, in addition to the two previously reported

segments. Our reportable segments are now defined as follows:

The Industrial Waste Management Services segment, which provides on-and-off site treatment, storage, processing and disposal of hazardous and nonhazardous industrial and commercial and wastewater through

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our six TSD facilities; Perma-Fix Treatment Services, Inc., Perma-Fix of Dayton, Inc., Perma-Fix of Ft. Lauderdale, Inc., Perma-Fix of Orlando, Inc., Perma-Fix of South Georgia, Inc., and Perma-Fix of Michigan, Inc. We provide through Perma-Fix Government Services various waste management services to certain governmental agencies.

The Nuclear Waste Management Services segment, which provides treatment, storage, processing and disposal services. Included in such is research, development, on and off-site waste remediation of nuclear mixed and low-level radioactive waste through our three TSD facilities; Perma-Fix of Florida, Inc., Diversified Scientific Services, Inc., and the East Tennessee Materials and Energy Corporation ("M&EC").

The Consulting Engineering Services segment provides environmental engineering and regulatory compliance services through Schreiber, Yonley & Associates, Inc. which includes oversight management of environmental restoration projects, air and soil sampling and compliance and training activities, as well as, engineering support as needed by our other segments. During 1999, the business and operations of Mintech, Inc., our second engineering company located in Tulsa, Oklahoma, was merged into and consolidated with the SYA operations.

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The table below shows certain financial information by business segment for 2001, 2000 and 1999 and excludes the results of operations of the discontinued operations.

# Segment Reporting 12/31/01

Industrial	Nuclear				
Waste	Waste		Segments	Corporate	Consolidated
Services	Services	Engineering	Total	Other <sup>(2)</sup>	Total

Customers   S	Revenue from external						
Interest income   21		\$ 42,355	\$ 28,932	\$ 3,205	\$ 74,492	\$	\$ 74,492
Interest expense	Intercompany revenues	3,799	5,093	245	9,137		9,137
Interest expense-Warrants	Interest income	21			21	8	29
Interest expense-financing fees   1,787   90   4,536   80   4,616   80   80   4,616   80   80   4,616   80   80   4,616   80   80   80   80   80   80   80   8	Interest expense	932	1,909	36	2,877	161	3,038
Personation and a	Interest expense-Warrants					234	234
Revenue from external customers	-	6	605		611	2,121	2,732
Segment assets		2,659	1,787	90	4,536	80	4,616
Revenue from external customers   1,757   2,817   14   4,588   10   4,598   10   4,598   10   4,598   10   4,598   10   10   10   10   10   10   10   1	Segment profit (loss)	(150)	884	200	934	(1,681)	(747)
Revenue from external customers   Segment Reporting   12/31/00   Services   Engineering   Segment   Segment   Corporate of Other   O	Segment assets	41,838	51,079	2,100	95,017	4,120	99,137
Industrial Waste Services   Engineering   Segments   Corporate Other (3)   Corporate Other	-	1,757	2,817	14	4,588	10	4,598
Naste Services   Engineering   Segments   Corporate Other   Collection	Segment Reporting 12/3	1/00					
Customers   S		Waste	Waste	Engineering			
Customers   S							
Interest income		\$ 44,191	\$ 11,737	\$ 3,211	\$ 59,139	\$	\$ 59,139
Interest expense	Intercompany revenues	4,130	1,315	149	5,594		5,594
Interest expense-Warrants	Interest income	27			27	14	41
Interest expense-financing fees   173   181     Industrial Waste Services   170   181     Interest expense from external customers (9)   181   181     Interest expense from external customers (100   181   181     In		1,183	445	59	1,687	445	2,132
Depreciation and any amortization   2,793   703   83   3,579   72   3,651	•					344	344
Revenue from external customers   \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	8			8	173	181
Segment assets   Segment   Segment	•	2,793	703	83	3,579	72	3,651
Expenditures for segment assets   2,152   587   51   2,790   46   2,836	Segment profit (loss)	(1,296)	914	131	(251)	(511)	(762)
Revenue from external customers (5)   \$34,756   \$6,997   \$4,711   \$46,464   \$ \$46,464     Intercompany revenues   2,776   346   396   3,518   3,518     Interest expense Harants   67     Interest expense-financing fees	Segment assets <sup>(1)</sup>	46,546	19,816	2,483	68,845	$3,926^{(3)}$	72,771
Industrial Waste Waste Services   Engineering   Segments Total   Corporate Other   Consolidated Total	-	2,152	587	51	2,790	46	2,836
Revenue from external customers <sup>(5)</sup> \$ 34,756         \$ 6,997         \$ 4,711         \$ 46,464         \$         \$ 46,464           Intercompany revenues         2,776         346         396         3,518          3,518           Interest income         37         5          42         8         50           Interest expense         500         121         35         656         (6) <sup>(4)</sup> 650           Interest expense-Warrants                 Interest expense-financing fees             67         67           Depreciation and amortization         2,227         443         90         2,760         18         2,778           Segment profit (loss)         1,559         (34)         (75)         1,450          1,450	<b>Segment Reporting 12/3</b>	1/99					
customers <sup>(5)</sup> \$ 34,756         \$ 6,997         \$ 4,711         \$ 46,464         \$         \$ 46,464           Intercompany revenues         2,776         346         396         3,518          3,518           Interest income         37         5          42         8         50           Interest expense         500         121         35         656         (6) <sup>(4)</sup> 650           Interest expense-Warrants                  Interest expense-financing fees             67         67         67           Depreciation and amortization         2,227         443         90         2,760         18         2,778           Segment profit (loss)         1,559         (34)         (75)         1,450          1,450		Waste	Waste	Engineering			
Intercompany revenues         2,776         346         396         3,518          3,518           Interest income         37         5          42         8         50           Interest expense         500         121         35         656         (6)(4)         650           Interest expense-Warrants                  Interest expense-financing fees             67         67           Depreciation and amortization         2,227         443         90         2,760         18         2,778           Segment profit (loss)         1,559         (34)         (75)         1,450          1,450		\$ 34,756	\$ 6,997	\$ 4,711	\$ 46,464	\$	\$ 46,464
Interest income         37         5          42         8         50           Interest expense         500         121         35         656         (6)(4)         650           Interest expense-Warrants                  Interest expense-financing fees             67         67         67           Depreciation and amortization         2,227         443         90         2,760         18         2,778           Segment profit (loss)         1,559         (34)         (75)         1,450          1,450	Intercompany revenues						
Interest expense-Warrants                    67		37	5		42	8	
Interest expense-financing fees              67         67         67           Depreciation and amortization         2,227         443         90         2,760         18         2,778           Segment profit (loss)         1,559         (34)         (75)         1,450          1,450	Interest expense	500	121	35	656	$(6)^{(4)}$	650
fees  Depreciation and 2,227 443 90 2,760 18 2,778 amortization  Segment profit (loss) 1,559 (34) (75) 1,450 1,450	Interest expense-Warrants						
amortization  Segment profit (loss) 1,559 (34) (75) 1,450 1,450	-					67	67
	-	2,227	443	90	2,760	18	2,778
	Segment profit (loss)	1,559	(34)	(75)	1,450		1,450
	Segment assets <sup>(1)</sup>	44,494	6,433	2,565	53,492	$1,152^{(3)}$	54,644

Expenditures for segment 1,824 606 20 2,450 210 2,660 assets

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# NOTE 15 QUARTERLY OPERATING RESULTS

Unaudited quarterly operating results are summarized as follows (in thousands, except per share data):

Three Months Ended (unaudited)

	March 31	June 30	Santambar 20	December 31
	March 31	Julie 30	September 30	December 31
2001				
Revenues	\$18,712	\$17,840	\$17,386	\$20,554
Gross Profit	5,189	5,106	6,572	7,906
Net income (loss) applicable to				
Common Stock	(572)	(746)	(613)	1,184
Basic net income (loss) per common share	(.03)	(.03)	(.02)	.03
Diluted net income (loss) per common share	(.03)	(.03)	(.02)	.03
Shareholder's equity	23,258	30,289	40,408	41,841
Total assets	80,876	97,169	99,180	99,137

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<sup>(1)</sup> Segment assets have been adjusted for intercompany accounts to reflect actual assets for each segment.

<sup>(2)</sup> Amounts reflect the activity for corporate headquarters, and the activity for PFM, which is a discontinued operation, not included in the segment information (See Note 3).

<sup>(3)</sup> Amounts include segment assets for PFM of \$42,000 and \$377,000 for 2000 and 1999, respectively.

<sup>(4)</sup> Amount reflects interest expense adjustment to PFM allocated to discontinued operations.

<sup>&</sup>lt;sup>(5)</sup> The consolidated revenues within the Industrial Waste Management Services segment include DRMS contracts for 2001 which total \$5,996,000 (or 8.0%) of total revenue, \$7,606,000 (or 12.9%) for the year ended December 31, 2000, and \$5,277,000 (or 11.4%) for the year ended December 31, 1999.

Revenues	\$13,589	\$14,492	\$15,360	\$15,698
Gross Profit	4,047	4,485	5,170	4,527
Net income (loss) applicable to Common Stock	(491)	262	606	(1,139)
Basic net income (loss) per common share	(.02)	.01	.03	(.06)
Diluted net income (loss) per common share	(.02)	.01	.03	(.06)
Shareholder's equity	20,217	20,479	21,297	22,020
Total assets	55,551	55,271	70,866	72,771

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

None.

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### **PART III**

# ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth, as of the date hereof, information concerning the Directors and Executive Officers of the Company:

NAME	AGE	POSITION				
·	-	<del></del> _				
Dr. Louis F. Centofanti	58	Chairman of the Board, President and Chief Executive Officer				
Mr. Jon Colin	46	Director				
Mr. Thomas P. Sullivan	69	Director				
Mr. Mark A. Zwecker	51	Director				
Mr. Jack Lahav	53	Director				
Mr. Alfred C. Warrington, IV	67	Director				
Mr. Richard T. Kelecy	46	Chief Financial Officer, Vice President and Secretary				
Mr. Roger Randall	58	President, Industrial Services				
Mr. Larry McNamara	52	President, Nuclear Services				
Each director is elected to serve until the next annual meeting of stockholders.						

# DR. LOUIS F. CENTOFANTI

The information set forth under the caption "Executive Officers of the Company" on page 13 is incorporated by

reference.

# MR. JON COLIN

Mr. Colin has served as a Director of the Company since December 1996. Mr. Colin is currently Chief Operating Officer of Lifestar Response Corporation, a position he has held since October 2000. Previously Mr. Colin served as a consultant for Lifestar Response Corporation from September 1997 to October 2000. From 1990 to 1996, Mr. Colin served as President and Chief Executive Officer for Environmental Services of America, Inc., a publicly traded environmental services company. Mr. Colin also currently provides financial consulting services for a variety of technology-based companies. Mr. Colin has a B.S. degree in Accounting from the University of Maryland.

# MR. THOMAS P. SULLIVAN

Mr. Sullivan has served as a Director of the Company since June 1, 1999, the date of his election by the Board of Directors to fill a newly created directorship pursuant to the terms of the Stock Purchase Agreements. From 1976, when Mr. Sullivan purchased Chem-Met Services, Inc. ("CM"), until June 1, 1999, he served as Director and President of CM, one of the companies acquired by the Company under the Stock Purchase Agreements. Mr. Sullivan founded and served as Director and President of Chemical Conservation Corporation ("CCC"), one of the companies acquired by the Company under the Stock Purchase Agreements, from its inception in 1983 until June 1, 1999, when it was acquired by the Company under the Stock Purchase Agreements. From 1988, when Mr. Sullivan purchased Chemical Conservation of Georgia, Inc. ("CCG"), until June 1, 1999, he served as Director and President of CCG. From 1957 to 1973, Mr. Sullivan held various positions with Crown Zellerbach Corporation and since 1982 has served as a director of Charter National Bank, located in Detroit, Michigan. Mr. Sullivan has a degree from John Carroll University.

# MR. MARK A. ZWECKER

Mark Zwecker has served as a Director of the Company since its inception in January 1991. Mr. Zwecker is currently President of ACI Technology, LLC, a position he has held since 1997. Previously, Mr. Zwecker was Vice President of Finance and Administration for American Combustion, Inc., a position he held from 1986 until 1998. In 1983, Mr. Zwecker participated as a founder with Dr. Centofanti in the start up of PPM, Inc. He remained with PPM, Inc. until its acquisition in 1985 by USPCI. Mr. Zwecker has a B.S. in Industrial and Systems Engineering from the Georgia Institute of Technology and an M.B.A. from Harvard University.

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### MR. JACK LAHAV

Jack Lahav was elected to the Board of Directors of the Company on September 20, 2001 to fill a newly created directorship. Mr. Lahav is a private investor, specializing in launching and growing businesses. Previously, Mr. Lahav was founder and president of Remarkable Products, Inc. from 1980 to 1993; Co-Founder of Lamar Signal Processing, Inc.; President of Advanced Technologies, Inc., a robotics company and Director of Vocaltech Communications, Inc.

# MR. ALFRED C. WARRINGTON, IV

Mr. Warrington was elected to the Board of Directors on March 12, 2002, to fill a newly created directorship. Mr. Warrington was the founding chairman, co-chief executive officer and chief financial officer of Sanifill, Inc., a solid waste company that was eventually merged with Waste Management, Inc. and currently serves as vice-chairman of HC Industries, Inc., a manufacturer of health and beauty aids. He has also been very active in community affairs and higher education. Mr. Warrington served as co-chairman of the MARTA referendum that brought rapid transit to the city of Atlanta and has been a strong supporter of the University of Florida, where he was instrumental in starting the School of Accounting. In recognition of his efforts, the University of Florida has renamed the College of Business as

the Warrington College of Business. Most recently Mr. Warrington was appointed to the newly formed University of Florida Board of Trustees by Governor Jeb Bush. Prior to joining Sanifill, Mr. Warrington was a practicing CPA and a partner with Arthur Andersen & Co. Mr. Warrington holds a B.S.B.A. from the University of Florida.

### MR. RICHARD T. KELECY

The information set forth under the caption "Executive Officers of the Company" on page 14 is incorporated by reference.

### MR. ROGER RANDALL

The information set forth under the caption "Executive Officers of the Company" on page 14 is incorporated by reference.

### MR. LARRY MCNAMARA

The information set forth under the caption "Executive Officers of the Company" on page 14 is incorporated by reference.

# **Certain Relationships**

There are no family relationships between any of our existing Directors, executive officers, or persons nominated or chosen to become a Director or executive officer. Dr. Centofanti is the only Director who is our employee.

# Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the regulations promulgated thereunder require the Company's executive officers and directors and beneficial owners of more than ten percent (10%) of any equity security of the Company registered pursuant to Section 12 of the Exchange Act to file reports of ownership and changes of ownership of the Company's equity securities with the Securities and Exchange Commission, and to furnish the Company with copies of all such reports. Based solely on a review of the copies of such reports furnished to the Company and information provided to the Company, the Company believes that during 2001 none of the executive officers and directors of the Company failed to timely file reports under Section 16(a), except that (i) a Form 4 was not timely filed for Jon Colin to report three transactions in May 2001; (ii) a Form 4 was not timely filed for Roger Randall to report one transaction in April 2001; (iv) a Form 4 was not timely filed for Larry McNamara to report one transaction in April 2001; (v) a Form 4 was not timely filed for Louis Centofanti to report one transaction in April 2001; and (vi) a Form 5 for Thomas Sullivan was not timely filed for December 2001.

Capital Bank Grawe-Gruppe ("Capital Bank"), which may have become a beneficial owner (as that term is defined under Rule 13d-3 as promulgated under the Exchange Act) of more than ten percent (10%) of the

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Company's Common Stock on February 9, 1996, as a result of its acquisition of 1,100 shares of Series 1 Preferred (as defined in "Certain Relationships and Related Transactions") that were convertible into a maximum of 1,282,798 shares of Common Stock of the Company commencing 45 days after issuance of the Series 1 Preferred, failed to file a Form 3 to report such transaction, if required.

If Capital Bank became a beneficial owner of more than ten percent (10%) of the Company's Common Stock on February 9, 1996, the date of Capital's initial Preferred Stock Agreement, and thereby required to file reports under Section 16(a) of the Exchange Act, then Capital Bank also failed to file (i) any Form 4's or 5's for years 1996 through

2000; (ii) a Form 4 for two transactions which occurred in January 2001; (iii) a Form 4 for one transaction which occurred in February 2001; (iv) a Form 4 for six transactions which occurred in April 2001; (v) a Form 4 for four transactions which occurred in July 2001; (vi) a Form 4 for two transactions which occurred in August 2001; and (vii) a Form 4 for two transactions which occurred in September 2001.

As of the date of this report, Capital Bank has not filed a Schedule 13D or Schedule 13G, pursuant to Section 13(d) of the Exchange Act and Regulation 13D as promulgated thereunder, reporting Capital Bank as the beneficial owner of Common Stock of the Company. Capital Bank has advised the Company that it is a banking institution regulated by the banking regulations of Austria which holds the Company's shares of stock and Warrants to acquire shares of stock on behalf of numerous clients, and no one client is the beneficial owner of more than 4.9% of the Company's outstanding Common Stock. Capital Bank has further informed the Company that its clients (and not Capital Bank) maintain full voting and dispositive power over such shares. Consequently, Capital Bank has advised the Company that it believes it is not the beneficial owner, as such term is defined in Rule 13d-3 under the Exchange Act ("Rule 13d-3"), of the shares of stock registered in the name of Capital Bank because it has neither voting nor investment power, as such terms are defined in Rule 13d-3, over such shares. As a result, Capital Bank has informed the Company that it does not believe that it is required to file reports under Section 16(a) Schedule 13D or Schedule 13G in connection with the shares of the Company's Common Stock registered in the name of Capital Bank. See Item 12, "Potential Change in Control."

### ITEM 11. EXECUTIVE COMPENSATION

# **Summary Compensation Table**

The following table sets forth the aggregate cash compensation paid to our Chairman and Chief Executive Officer, Chief Financial Officer, the President of Industrial Services, and President of Nuclear Services.

	Annual Compensation				Long-Term		
Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Other Annual Compen- sation (\$)	Restricted Stock Award(s)	Securities Underlying Options/SARs (#)	All Other Compen- sation(\$) <sup>(5)</sup>
Dr. Louis F. Centofanti <sup>(1)</sup> Chairman of the Board, President and Chief Executive Officer	2001 2000 1999	138,667 130,000 123,421	40,000  	 	 	100,000 75,000 	9,000 9,000 4,500
Richard T. Kelecy <sup>(2)</sup> Vice President and Chief Financial Officer	2001 2000 1999	128,333 120,000 111,373	30,000  15,000		  	70,000 50,000	9,000 9,000 4,500
Roger Randall <sup>(3)</sup> President of Industrial Services	2001 2000 1999	123,333 115,000 106,231	25,000  15,000	  	  	70,000 50,000 	9,000 9,000 9,000
Larry McNamara <sup>(4)</sup> President of Nuclear Services	2001 2000 1999	127,667 116,448 104,191	30,000	  	  	120,000 50,000 	9,000 3,000 

- (1) Dr. Centofanti previously received compensation pursuant to an employment agreement dated October 1, 1997, which expired on September 30, 2000. As of the date of this report, Dr. Centofanti has not entered into a new employment agreement. Effective September 1, 2001, Dr. Centofanti's annual salary was increased from \$130,000, as established in July 1999, to \$156,000.
- (2) Effective September 1, 2001, Mr. Kelecy's annual salary was increased from \$120,000, as established in July 1999, to \$145,000.
- (3) Mr. Randall was appointed President of the Industrial Waste Management Services segment in October 2000, at an annual salary of \$115,000. Effective September 1, 2001, Mr. Randall's annual salary was increased to \$140,000.
- (4) Mr. McNamara was appointed President of the Nuclear Waste Management Services segment in October 2000, at an annual salary of \$120,000. Effective September 1, 2001, Mr. McNamara's annual salary was increased to \$143,000.
- (5) Each noted executive is provided a monthly automobile allowance in the amount of \$750.

# **Option Grants in 2001**

The following table sets forth certain information relating to individual grants of stock options made to each of the named executive officers in the above Summary Compensation Table during the last fiscal year and the potential realizable value of each grant of options, assuming that the market price of the underlying Common Stock appreciates in value during the ten-year option term at annualized rates of 5% and 10%.

Potential Poolizable

# **Individual Grants**

	~-	Granted to Employees			Value at Assumed Annual Rates of Stock Price Appreciation for Option Term <sup>(2)</sup>		_
Name	Underlying Options Granted		Exercise Price (\$/sh) <sup>(1)</sup>	Expiration Date	5%(\$)	10%(\$)	_
Dr. Louis F. Centofanti <sup>(3)</sup>	100,000	10.9%	\$1.75	04/03/	11	\$110,057	\$278,905
Richard T. Kelecy <sup>(4)</sup>	70,000	7.6	1.75	04/03/	11	77,040	195,233
Roger Randall <sup>(5)</sup>	70,000	7.6	1.75	04/03/	111	77,040	195,233
Larry McNamara <sup>(6)</sup>	120,000	13.1	1.75	04/03/	111	132,068	334,686

<sup>(1)</sup> All options were granted at or above market price (the closing bid price of the Common Stock on the NASDAQ Small Cap Market on the date of grant).

- (2) The potential realizable value of each grant of options assumes that the market price of the Company's Common Stock appreciates in value from the date of grant to the end of the option term at the annualized rates shown above each column. The actual value that an executive may realize, if any, will depend on the amount by which the market price of the Company's Common Stock at the time of exercise exceeds the exercise price of the option. As of December 31, 2001, the closing price of a share of the Company's Common Stock as quoted on NASDAQ was \$2.60. There is no assurance that any executive will receive the amounts estimated in this table.
- (3) The Company has adopted a 1993 Non-qualified Stock Option Plan (the "1993 Plan"). Dr. Centofanti was granted options to purchase 100,000 shares of the Company's Common Stock pursuant to the 1993 Plan. The 1993 Plan provides that the options granted vest at the end of years one through five in 20% increments.

<sup>(4)</sup> Mr. Kelecy was granted options to purchase 70,000 shares of the Company's Common Stock pursuant to the 1993 Plan. The 1993 Plan provides that the options granted vest at the end of years one through five in 20% increments.

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- (5) Mr. Randall was granted options to purchase 70,000 shares of the Company's Common Stock pursuant to the 1993 Plan. The 1993 Plan provides that the options granted vest at the end of years one through five in 20% increments.
- <sup>(6)</sup> Mr. McNamara was granted options to purchase 120,000 shares of the Company's Common Stock pursuant to the 1993 Plan. The 1993 Plan provides that the options granted vest at the end of years one through five in 20% increments.

# Aggregated Option Exercised in 2001 and Fiscal Year-end Option Values

The following table sets forth information concerning each exercise of stock options during the last completed fiscal year by each of the executive officers named in the Summary Compensation Table and the fiscal year-end value of unexercised options:

Shares	Shares Value			Value of Unexercised in-the-Money Options at Fiscal Year End (\$) <sup>(2)</sup>		
Acquired on Exercise (#) <sup>(1)</sup>	Realized (\$) <sup>(1)</sup>	Exercisable	Unexercisable	Exercisable	Unexercisable	
-	-	335,000	160,000	62,25	0 166,000	
-	-	150,000	130,000	173,00	0 139,500	
-	-	130,000	130,000	173,00	0 139,500	
-	-	10,000	160,000	13,50	0 156,000	
	Acquired on Exercise (#) <sup>(1)</sup>	Acquired on Exercise (#) <sup>(1)</sup>	Options at Fisca (#)   Shares	Shares Acquired on Exercise (#) <sup>(1)</sup> (\$) <sup>(1)</sup> Exercisable Unexercisable  335,000 160,000 - 150,000 130,000 - 130,000 130,000	Coptions at Fiscal year-end   in-the-Money Oat Fiscal Year Fisca	

<sup>(1)</sup> No options were exercised during 2001.

### 401(k) Plan

The Company adopted the Perma-Fix Environmental Services, Inc. 401(k) Plan (the "401(k) Plan") in 1992, which is intended to comply with Section 401 of the Internal Revenue Code and the provisions of the Employee Retirement Income Security Act of 1974. All employees who have attained the age of 18 are eligible to participate in the 401(k) Plan. Participating employees may make annual pretax contributions to their accounts up to 18% of their compensation, up to a maximum amount as limited by law. The Company, at its discretion, may make matching contributions based on the employee's elective contributions. Company contributions vest over a period of five years. We elected not to provide any matching contributions for the years ended December 31, 1998 and 1997. However, beginning January 1, 1999, the Company currently matches up to 25% of our employee's contributions, not to exceed 3% of a participant's compensation. The Company contributed \$241,000 in matching funds during 2001.

<sup>(2)</sup> Represents the difference between \$2.60 (the closing price of the Company's Common Stock reported on the National Association of Securities Dealers Automated Quotation ("NASDAQ") Small Cap Market on December 31, 2001), and the option exercise price. The actual value realized by a named executive officer on the exercise of these options depends on the market value of the Company's Common Stock on the date of exercise.

### **Employee Stock Purchase Plan**

The Company has adopted the Perma-Fix Environmental Services, Inc. 1996 Employee Stock Purchase Plan (the "1996 Plan") which is intended to comply with Section 423 of the Code. All full-time employees who have completed at least six (6) months of continuous service, other than those that are deemed, for the purpose of Section 423(b)(3) of the Code, to own stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company, are eligible to participate in the 1996 Plan. Participating employees ("Participants") may authorize for payroll periods beginning on or after January 1, 1997, payroll deductions from compensation for the purpose of funding the Participant's stock purchase account ("Stock Purchase Account"). This deduction shall be not less than one percent (1%) nor more than five percent (5%) of the Participant's gross amount of compensation. The purchase price per share of the Common Stock to be sold to Participants pursuant to the 1996 Plan is the sum of (a) eighty-five percent (85%) of the fair market value of each share on the offering date on which such Offering commences or on the Exercise Date (as defined in the 1996 Plan) on which such offering expires, whichever is the lower, and (b) any transfer, excise or similar tax imposed on the transaction pursuant to which shares of Common

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Stock are purchased. The "Offering Date" means the first day of each January and July during which the 1996 Plan is in effect, commencing with January 1, 1997. There is no holding period regarding Common Stock purchased under the 1996 Plan, however, in order for a participant to be entitled to the tax treatment described in Section 423 of the Code with respect to the Participant's sale of Common Stock purchased under the 1996 Plan, such Stock must not be sold for at least one (1) year after acquisition under the 1996 Plan, except in the case of death. Any Participant may voluntarily withdraw from the 1996 Plan by filing a notice of withdrawal with the Board of Directors prior to the fifteenth (15th) day of the last month in a Purchase Period (as defined in the 1996 Plan). Upon such withdrawal, there shall be paid to the Participant the amount, if any, standing to the Participant's credit in the Participant's Stock Purchase Account. If a Participant ceases to be an eligible employee, the entire amount standing to the Participant's credit in the Participant's Stock Purchase Account on the effective date of such occurrence shall be paid to the Participant. The first purchase period commenced July 1, 1997. The following table details the resulting employee stock purchase totals, which includes 33,814 shares for the purchase period July 1 through December 31, 2001, which were issued in February 2002.

Purchase Period	Proceeds	Shares Purchased
July 1 - December 31, 1997	\$ 16,000	8,276
January 1 - June 30, 1998	17,000	10,732
July 1 - December 31, 1998	22,000	17,517
January 1 - June 30, 1999	28,000	21,818
July 1 - December 31, 1999	49,000	48,204
January 1 - June 30, 2000	54,000	53,493
July 1 - December 31, 2000	52,000	46,632
January 1 - June 30, 2001	48,000	43,324
July 1 - December 31, 2001	69,000	33,814

### **Compensation of Directors**

In 2001, we paid our outside director's fees based on monthly payments of \$1,000 for each month of service from

January through September 2001, and \$1,500 for each month thereafter, resulting in the four outside directors earning annual director's fees in the total amount of \$45,000. Subject to the election of each director, either sixty-five percent (65%) or one hundred percent (100%) of each director's fee is payable, in shares of our Common Stock based on seventy-five percent (75%) of the fair market value of the Common Stock determined on the business day immediately preceding the date that the fee is due. The balance of each director fee, if any, is payable in cash. The aggregate amount of accrued director's fees paid during 2001 to the four outside directors (Messrs. Colin, Lahav, Sullivan and Zwecker) was \$24,000, paid by the issuance of 22,770 shares of Common Stock and \$3,000 in cash payment. The aggregate amount of accrued director fees at December 31, 2001, to be paid in 2002, totals \$18,000. Reimbursement of expenses for attending meetings of the Board are paid in cash at the time of the applicable Board meeting. The outside directors do not receive additional compensation for committee participation or special assignments except for reimbursement of expenses. We do not compensate the directors that also serve as our officers or employees of our subsidiaries for their service as directors.

We believe that it is important for our directors to have a personal interest in our success and growth and for their interests to be aligned with those of our stockholders. Therefore, under the Company's 1992 Outside Directors Stock Option and Incentive Plan ("Outside Directors Plan"), each outside director is granted an option to purchase up to 15,000 shares of Common Stock on the date such director is initially elected to the Board of Directors and receives on each reelection date an option to purchase up to another 5,000 shares of Common Stock, with the exercise price being the fair market value of the Common Stock on the date that the option is granted. No option granted under the Outside Directors Plan is exercisable until after the expiration of six months from the date the option is granted and no option shall be exercisable after the expiration of ten (10) years from the date the option is granted. As of December 31, 2001, options to purchase 255,000 shares of Common Stock had been granted under the Outside Directors Plan.

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The Outside Directors Plan also provides that each eligible director shall receive, at such eligible director's option, either sixty-five percent (65%) or one hundred percent (100%) of the fee payable to such director for services rendered as a member of our Board in Common Stock. In either case, the number of shares of our Common Stock issuable to the eligible director shall be determined by valuing the Common Stock of the Company at seventy-five percent (75%) of its fair market value as defined by the Outside Directors Plan. As of the date of this report, we have issued 193,562 shares of the Company's Common Stock in payment of director fees, covering the period January 1, 1995 through December 31, 2001. The number of shares of Common Stock which may be issued in the aggregate under the Outside Directors Plan, either under options or stock awards, is 500,000 shares subject to adjustment.

Although Dr. Centofanti is not compensated for his services provided as a director, Dr. Centofanti is compensated for his services rendered as an officer of the Company. See "Employment Contracts, Termination of Employment and Change in Control Arrangements" and "EXECUTIVE COMPENSATION -- Summary Compensation Table."

The Company's 1991 Performance Equity Plan and the 1993 Non-qualified Stock Option Plan, described under "Report of the Compensation and Stock Option Committee-(c) Stock Options." (collectively, the "Plans") provide that in the event of a change in control (as defined in the Plans) of the Company, each outstanding option and award granted under the Plans shall immediately become exercisable in full notwithstanding the vesting or exercise provisions contained in the stock option agreement. As a result, all outstanding stock options and awards granted under the Plans to our executive officers shall immediately become exercisable upon such a change in control of the Company.

### **Compensation Committee Interlocks and Insider Participation**

During the period January - December 2001, the Compensation and Stock Option Committee for the Company's Board of Directors was composed of Mark Zwecker and Thomas P. Sullivan. Mr. Zwecker was neither an officer nor an employee during the year 1999, however, Mr. Zwecker did serve as our Secretary from June 1995 until June 30, 1996. Mr. Sullivan was neither an officer nor an employee of the Company during 2001.

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

### **Security Ownership of Certain Beneficial Owners**

The following table sets forth information as to the shares of voting securities beneficially owned as of March 26, 2002, by each person known by us to be the beneficial owner of more than five percent (5%) of any class of our voting securities. Beneficial ownership by our stockholders has been determined in accordance with the rules promulgated under Section 13(d) of the Securities Exchange Act of 1934, as amended. A person is deemed to be a beneficial owner of any securities of which that person has the right to acquire beneficial ownership of such securities within 60 days from March 26, 2002.

Name of Beneficial Owner	Title of Class	Amount and Nature of Ownership	Percent of Class <sup>(1)</sup>	
Capital Bank Grawe Gruppe <sup>(2)</sup>	Common	14,713,067(2)	37.47%	

<sup>(1)</sup> In computing the number of shares and the percentage of outstanding Common Stock "beneficially owned" by a person, the calculations are based upon 34,087,125 shares of Common Stock issued and outstanding on March 26, 2002 (excluding 988,000 Treasury Shares), plus the number of shares of Common Stock which such person has the right to acquire beneficial ownership of within 60 days.

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1,666,667 shares of Common Stock issuable upon the conversion of 2,500 shares of Series 17 Preferred held by Capital Bank. This amount does not include the shares of Common Stock which may be issuable for payment of dividends on the Series 17 Preferred. This amount also does not include the 842,995 shares which will be issuable upon approval of a proxy statement for a special meeting of stockholders currently in the process of being filed and the potential future exercise of the Warrants acquired by Capital Bank in the Private Offering. If exercise of the Warrants is approved by the stockholders, then Capital Bank will beneficially own 15,556,062 shares of Common Stock, representing 38.78% of the then outstanding Common Stock, assuming that the Company does not issue any shares of Common Stock except to Capital Bank, and Capital Bank does not sell or otherwise dispose of any shares of Common Stock. Capital Bank has also advised the Company that it is holding these Warrants, including the Warrants acquired in the Private Offering, and shares on behalf of numerous clients, all of which are accredited investors. Although Capital Bank is the record holder of the shares of Common Stock and Warrants described in this note, Capital Bank has advised the Company that it does not believe it is a beneficial owner of the Common Stock or that it is required to file reports under Section 16(a) or Section 13(d) of the Exchange Act. Because Capital Bank (a) has advised the Company that it holds the Common Stock as a nominee only and that it does not exercise voting or

<sup>(2)</sup> This amount includes 9,530,745 shares that Capital Bank owns of record and 3,515,655 shares that Capital Bank has the right to acquire within 60 days under certain Warrants. The Warrants are exercisable at exercise prices ranging from \$1.42 to \$1.97 per share of Common Stock. This amount also includes

investment power over the Common Stock held in its name and that no one investor of Capital Bank for which it holds Company Common Stock holds more than 4.9% of the issued and outstanding Common Stock of the Company; (b) has no right to, and is not believed to possess the power to, exercise control over the Company's management or its policies; (c) has not nominated, and has not sought to nominate, a director to the Company's board; and (d) has no representative serving as an executive officer of the Company, the Company does not believe that Capital Bank is an affiliate of the Company. Capital Bank's address is Burgring 16, 8010 Graz, Austria. Capital Bank has advised the Company that it is a banking institution regulated by the banking regulations of Austria. Capital Bank is a wholly owned subsidiary of Grazer Wechselseitige Versicherung Aktiengesellschaft ("Grazer"). Capital Bank has advised the Company that Grazer is wholly owned by GRAWE VERMOGENSVERWALTUNG, a mutual insurance association ("GRAWE"). Capital Bank has further advised the Company that the owners of GRAWE are all insurance holders of Grazer with an insurance agreement for more than one year. See "POTENTIAL CHANGE IN CONTROL."

#### **Security Ownership of Management**

The following table sets forth information as to the shares of voting securities beneficially owned as of March 26, 2002, by each Director and named executive officers of the Company listed in the Summary Compensation table and all Directors and executive officers of the Company as a group. Beneficial ownership by the Company's stockholders has been determined in accordance with the rules promulgated under Section 13(d) of the Exchange Act. A person is deemed to be a beneficial owner of any voting securities for which that person has the right to acquire beneficial ownership within sixty (60) days. All voting securities are owned both of record and beneficially unless otherwise indicated.

Number of Chance

Name of Beneficial Owner	of Common Stock Beneficially Owned	Percentage of Common Stock <sup>(1)</sup>		
Dr. Louis F. Centofanti <sup>(2)(3)</sup>	1,215,434 (3)	3.53%		
Mark A. Zwecker <sup>(2)(4)</sup>	245,003 (4)	*		
Jon Colin <sup>(2)(5)</sup>	53,489 (5)	*		
Thomas P. Sullivan <sup>(2)(6)</sup>	1,618,802 (6)	4.74%		
Jack Lahav <sup>(2)(7)</sup>	586,597 (7)	1.72%		
Alfred C. Warrington, IV(2)(8)	142,439 (8)	*		
Richard T. Kelecy <sup>(2)(9)</sup>	195,224 <sup>(9)</sup>	*		
Roger Randall <sup>(2)(10)</sup>	162,000 (10)	*		
Larry McNamara <sup>(2)(11)</sup>	44,000 (11)	*		
Directors and Executive Officers as a Group (9 persons)	4,262,988	12.18%		

<sup>\*</sup>Indicates beneficial ownership of less than one percent (1%).

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<sup>(1)</sup> See footnote (1) of the table under "Security Ownership of Certain Beneficial Owners."

- (2) The business address of such person, for the purposes hereof, is c/o Perma-Fix Environmental Services, Inc., 1940 N.W. 67th Place, Gainesville, Florida 32653.
- (3) These shares include (i) 541,434 shares held of record by Dr. Centofanti; (ii) options to purchase 70,000 shares granted pursuant to the 1991 Performance Equity Plan and the 1993 Non-qualified Stock Option Plan, which are immediately exercisable; (iii) 300,000 shares granted pursuant to Dr. Centofanti's employment agreement that expired in 2000, which are immediately exercisable; and (iv) 304,000 shares held by the wife of Dr. Centofanti. This amount does not include options to purchase 125,000 shares granted pursuant to the 1993 Non-qualified Stock Option Plan, which are not exercisable within sixty (60) days. Dr. Centofanti has sole voting and investment power of these shares, except for the shares held by Dr. Centofanti's wife, over which Dr. Centofanti shares voting and investment power.
- (4) Mr. Zwecker has sole voting and investment power over these shares which include: (i) 200,003 shares of Common Stock held of record by Mr. Zwecker; (ii) 5,000 options to purchase Common Stock pursuant to the 1993 Non-qualified Stock Option Plan, which are immediately exercisable; and (iii) options to purchase 40,000 shares granted pursuant to the 1992 Outside Directors Stock Option and Incentive Plan which are immediately exercisable.
- (5) Mr. Colin has sole voting and investment power over these shares which include: (i) 13,489 shares held of record by Mr. Colin, and (ii) options to purchase 40,000 shares granted pursuant to the 1992 Outside Directors Stock Option and Incentive Plan which are immediately exercisable.
- <sup>(6)</sup> These shares include (i) 32,898 shares held of record by Mr. Sullivan, (ii) options to purchase 30,000 shares granted pursuant to the 1992 Outside Directors Stock Option and Incentive Plan, which are immediately exercisable, and (iii) 1,555,904 shares held by the Ann L. Sullivan Living Trust, dated September 6, 1998 ("ALS Trust"), a trust established for the benefit of Ann L. Sullivan. Ann L. Sullivan is the wife of Mr. Sullivan and is the trustee and primary beneficiary of the ALS Trust.
- (7) Mr. Lahav has sole voting and investment power over these shares which include: (i) 571,597 shares of Common Stock held of record by Mr. Lahav; and (ii) 15,000 options to purchase Common Stock pursuant to the 1992 Outside Directors Stock Option and Incentive Plan which are immediately exercisable. This amount does not include 571,429 Warrants to purchase Common Stock purchased pursuant to our Private Offering held in 2001 which are exercisable only upon shareholder approval. If shareholder approval is obtained, Mr. Lahav would beneficially own 1,158,026 shares or 3.34% of the Company's issued and outstanding Common Stock assuming no other issuances.
- <sup>(8)</sup> Mr. Warrington has sole voting and investment power over 142,439 shares which include: (i) 112,439 shares of Common Stock held of record by Mr. Warrington; (ii) 20,000 options to purchase Common Stock pursuant to the 1992 Outside Directors Stock Option and Incentive Plan which are immediately exercisable, and (iii) 10,000 options to purchase Common Stock granted pursuant to the 1993 Non-qualified Stock Option Plan. Does not include options to purchase 15,000 shares of Common Stock granted pursuant to the 1992 Outside Directors Stock Option and Incentive Plan which are not exercisable within sixty (60) days.
- (9) Mr. Kelecy has sole voting and investment power over 13,224 shares of Common Stock held of record by Mr. Kelecy and 182,000 options to purchase Common Stock granted pursuant to the 1993 Non-qualified Stock Option Plan. This amount does not include options to purchase 98,000 shares of Common Stock granted pursuant to the 1993 Non-qualified Stock Option Plan which are not exercisable within sixty (60) days.
- (10) Mr. Randall has sole voting and investment power over these shares which include: (i) 162,000 options to purchase Common Stock pursuant to the 1993 Non-qualified Stock Option Plan, which are immediately exercisable. This amount does not include options to purchase 98,000 shares of Common Stock granted pursuant to the 1993 Non-qualified Stock Option Plan which are not exercisable within sixty (60) days.

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(11) Mr. McNamara has sole voting and investment power over these shares which include: (i) 44,000 options to purchase Common Stock pursuant to the 1993 Non-qualified Stock Option Plan which are exercisable within 60 days. This amount does not include Warrants to purchase 126,000 shares pursuant to the 1993 Non-qualified Stock Option Plan which are not exercisable within sixty (60) days.

#### **Potential Change in Control**

As of March 26, 2002, Capital Bank owned of record, as agent for certain accredited investors, 9,530,745 shares of Common Stock representing 37.47% of the Company's issued and outstanding Common Stock. Capital Bank has rights to acquire an additional 5,182,322 shares of Common Stock if exercise of the Warrants pursuant to the Private Offering is not approved at a special meeting of stockholders for which a proxy statement is currently in the process of being filed or 6,025,317 shares if the exercise of such Warrants are approved. The shares which Capital Bank has the right to acquire are the following: (i) 842,995 shares of Common Stock issuable upon exercise of the Warrants included in the units purchased in the Private Offering by Capital Bank as agent for certain investors assuming the stockholders approve the exercise of the Warrants issued in the Private Offering; (ii) 3,515,655 shares of Common Stock issuable under various other Warrants held by Capital Bank; and (iii) 1,666,667 shares of Common Stock issuable to Capital Bank upon the conversion of 2,500 shares of the Company's Series 17 Preferred held by Capital Bank. The Series 17 Preferred is not entitled to vote on proposals included in the Company's proxy statements.

If Capital Bank were to acquire all of the shares of Common Stock issuable upon exercise of the various Warrants held by Capital Bank and the shares of Common Stock issuable upon conversion of the Series 17 Preferred, then Capital Bank's record ownership as of March 26, 2002 would be, (a) 14,713,067 shares of Common Stock if the exercise of the Warrants issued in the Private Offering are not approved, representing 37.47% of the issued and outstanding Common Stock as of March 26, 2002; or (b)15,556,062 shares of Common Stock, representing 38.78% of the issued and outstanding Common Stock as of March 26, 2002, if the exercise of the Warrants issued in the Private Offering were approved by the stockholders.

The foregoing estimates assume that no other shares of Common Stock are issued by the Company, no other Warrants or Options are exercised, the Company does not acquire additional shares of Common Stock as treasury stock, and Capital Bank does not dispose of any shares of Common Stock.

If Capital Bank were to acquire the shares of Common Stock as described above, the Company may not be able to avoid an actual change in control of the Company if Capital Bank seeks such a change in control. Moreover, if such conversion and exercise results in Capital Bank acquiring more than 50% of the then outstanding Common Stock of the Company, the Company would not be able to avoid a change in control.

If Capital Bank acquires the shares of Common Stock described above, Capital Bank may be able to cause a change in at least 50% of the members of the Company's Board of Directors. Such a change in Board membership could be an event of default under the Company's \$22 million credit facility (the "Credit Facility") and its \$5.6 million outstanding Senior Subordinated Notes due July 31, 2006 (the "Notes"). In addition, if Capital Bank were to acquire such shares and cause Dr. Louis Centofanti to be removed from the Board of Directors or as the Company's president and chief executive officer, the removal could be an event of default under the Credit Facility and the Notes.

Capital Bank has advised the Company that it is a banking institution regulated by the banking regulations of Austria which holds the Company's shares of stock on behalf of numerous investors. Capital Bank has advised the Company that it is precluded by Austrian law from disclosing the identities of its investors, but that all of its investors are accredited investors under Rule 501 of Regulation D promulgated under the Act. In addition, Capital Bank has advised the Company that none of its investors beneficially own more than 4.9% of the Company's Common Stock.

Capital Bank has further informed the Company that its clients (and not Capital Bank) maintain full voting and dispositive power over such shares. Consequently, Capital Bank has advised the Company that it believes it is not the beneficial owner, as such term is defined in Rule 13d-3 under the Exchange Act ("Rule 13d-3"), of the shares of stock registered in the name of Capital Bank

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because it has neither voting nor investment power, as such terms are defined in Rule 13d-3, over such shares. As a result, Capital Bank has informed the Company that it does not believe that it is required to file reports under Section 16(a) of the Exchange Act or to file either a Schedule 13D or a Schedule 13G, as required by Rule 13d-1 of the Exchange Act, in connection with the shares of the Company's Common Stock registered in the name of Capital Bank.

#### ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

#### **Capital Bank Grawe Gruppe**

Preferred Stock Conversion and Exchange

Effective as of April 6, 2001, the Company and Capital Bank completed the Conversion and Exchange Agreement, whereby Capital Bank converted a portion of the Company's Preferred Stock owned of record by Capital Bank, as agent for certain of its accredited investors, for shares of the Company's Common Stock and exchanged the remaining Preferred Stock held by Capital Bank for shares of the Company's newly designated Series 17 Preferred Stock.

Prior to the consummation of the Conversion and Exchange Agreement, Capital Bank owned of record, as its agent for certain of its accredited investors, 1,769 shares of the Company's Series 14 Preferred, 616 shares of the Company's Series 15 Preferred, and 1,797 shares of the Company's Series 16 Preferred. Capital Bank converted 1,314 shares of Series 14 Preferred and 416 shares of Series 15 Preferred into an aggregate of 1,153,333 shares of the Company's Common Stock on April 6, 2001. Capital Bank then exchanged the remaining shares of Series 14 Preferred, Series 15 Preferred, and Series 16 Preferred for a total of 2,500 shares of the Series 17 Preferred. As a result of the consummation of the Conversion and Exchange Agreement, no shares of Series 14 Preferred, Series 15 Preferred remain outstanding.

The Series 17 Preferred may be converted into shares of Common Stock at any time at a conversion price of \$1.50 per share, subject to adjustment as set forth in the Certificate of Designations relating to the Series 17 Preferred. The Series 17 Preferred has a "stated value" of \$1,000 per share. The Company may, at its sole option, redeem, in whole or in part, at any time, and from time to time the then outstanding Series 17 Preferred at the following cash redemption prices if redeemed during the following periods: (a) within 12 months from June 1, 2001 - \$1,100 per share, and (b) after June 1, 2002 - \$1,200 per share. Upon any notice of redemption, Capital Bank shall have only five business days to exercise its conversion rights regarding the redeemed shares.

The Company engaged in the series of exchanges with Capital Bank for various series of Preferred Stock for a newly issued series of preferred stock in order to provide conversion terms more favorable to the Company and to improve the Company's capital structure. Prior to the exchanges, the floating conversion price of the Company's preferred stock resulted in the holders of the preferred stock realizing decreasing conversion prices for an increasing number of shares of common stock. By engaging in the exchanges, the Company has set the conversion price at a fixed price, and the total number of shares issuable upon conversion of the preferred stock is now fixed at a specified number. The exchanges have also enabled the Company to simplify its capital structure. As a result of the series of exchanges and conversions of a certain number of preferred stock, ending in the exchange for the currently outstanding Series 17 Preferred, the Company now has only one series of preferred stock outstanding, and instead of floating conversion

rates, the Series 17 Preferred has a fixed rate. The Company believes that this simplified capital structure (a) helps facilitate the Company's borrowing and capital raising efforts, and (b) improves the ability of the Company's investors and market professionals to analyze the Company's financial status.

The Series 17 Preferred accrues dividends on a cumulative basis at a rate of five percent (5%) per annum which dividends are payable semiannually when and as declared by the Board of Directors. During 2001, accrued dividends on the Series 17 Preferred of approximately \$92,000 were paid in the form of 36,718 shares of the Company's Common Stock, of which 24,217 were issued in March 2002.

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#### Debt for Equity Exchange

On August 29, 2000, the Company entered into a short term bridge loan agreement with Capital Bank in connection with the Company's acquisition of DSSI. This loan agreement (the "\$3,000,000 Capital Loan Agreement") was between the Company and Capital Bank, pursuant to which Capital Bank, acting as agent for certain investors who provided the funds, loaned (the "\$3,000,000 Capital Loan") the Company the aggregate principal amount of \$3,000,000, as evidenced by a Promissory Note (the "\$3,000,000 Capital Promissory Note") in the face amount of \$3,000,000, having an initial maturity date of November 29, 2000, and bearing an annual interest rate of 12%. On December 19, 2000, this agreement was also amended pursuant to the terms of the PNC Revolving Credit and Term Loan Agreement, which extended the due date of the principal and interest to July 1, 2001.

The Company entered into an agreement (the "Exchange Agreement") with Capital Bank, to issue to Capital Bank, as agent for certain of its accredited investors, 1,893,505 shares of the Company's Common Stock and a Warrant to purchase up to 1,839,405 shares of Common Stock at an exercise price of \$1.75 per share (the "Capital Bank Warrant"), in satisfaction of all amounts due or to become due under the \$3,000,000 Capital Loan Agreement and the related \$3,000,000 Capital Promissory Note, including the Company's obligations to issue to Capital Bank shares of Common Stock if the \$3,000,000 Capital Promissory Note was not paid by certain due dates. The \$3,000,000 Capital Promissory Note became due on July 1, 2001. The Exchange Agreement was completed effective as of July 9, 2001.

Upon the closing of the Exchange Agreement, the Company (a) paid to Capital Bank a closing fee of \$325,000, payable \$75,000 cash and by the issuance by the Company of 105,932 shares of the Company's Common Stock, such number of shares being equal to the quotient of \$250,000 divided by the last closing bid price of the Common Stock as quoted on the NASDAQ on June 26, 2001, and (b) issued certain five year Warrants for the purchase of up to 625,000 shares of Common Stock at a purchase price of \$1.75 per share.

#### **Private Placement Offering**

During July 2001, Jack Lahav, a current member of the Company's Board of Directors, purchased 571,429 units at \$1.75 per unit pursuant to the Company's Private Offering completed July 2001, and Capital Bank, as agent for certain of its accredited investors, purchased 842,995 units in the Private Offering. Each unit consists of one share of Common Stock and a Warrant to purchase one share of Common Stock at \$1.75 per share. Shareholder approval is required prior to any of the Warrants being exercised. The Company is in the process of filing a proxy statement for a special meeting of shareholders to vote on the approval of the exercise of the Warrants.

#### **PART IV**

## ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

The following documents are filed as a part of this report:

(a)(1) Consolidated Financial Statements

See Item 8 for the Index to Consolidated Financial Statements.

(a)(2) Financial Statement Schedules

See Item 8 for the Index to Consolidated Financial Statements (which includes the Index to Financial Statement Schedules)

(a)(3) Exhibits

The Exhibits listed in the Exhibit Index are filed or incorporated by reference as a part of this report.

(b) Reports on Form 8-K

No report on Form 8-K was filed by the Company during the fourth quarter of 2001.

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#### **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Perma-Fix Environmental Services, Inc.

By /s/ Dr. Louis F. Centofanti

Date April 12, 2002

Dr. Louis F. Centofanti Chairman of the Board Chief Executive Officer

> By /s/ Richard T. Kelecy Richard T. Kelecy

Date April 12, 2002

Chief Financial Officer

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

/s/ Jon Colin

Date April 12, 2002

By Jon Colin, Director

/s/ Jack Lahav Jack Lahav, Director Date April 12, 2002

By

/s/ Thomas P. Sullivan

Date April 12, 2002

By Thomas P. Sullivan, Director

/s/ Alfred C. Warrington, IV By Alfred C. Warrington, IV, Director Date April 12, 2002

/s/ Mark A. Zwecker

Mark A. Zwecker, Director

Date April 12, 2002

By

By /s/ Dr. Louis F. Centofanti

Dr. Louis F. Centofanti, Director

Date April 12, 2002

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#### **SCHEDULE II**

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

VALUATION AND QUALIFYING ACCOUNTS For the years ended December 31, 2001, 2000, and 1999

(Dollars in thousands)

Description	Baland Begin of Yea	ning	Additi Charge Costs, Expen and Ot	ed to	Deduc	tions	Balar at En of Ye	d
Year ended December 31, 2001: Allowance for doubtful accounts	\$	894	\$	399	\$	568	\$	725
Year ended December 31, 2000: Allowance for doubtful accounts	\$	952	\$	160	\$	218	\$	894
Year ended December 31, 1999: Allowance for doubtful accounts	\$	313	\$	1,039	\$	400	\$	952

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## **EXHIBIT INDEX**

No.	Description
<del></del>	<del></del>

- Stock Purchase Agreement dated as of May 16, 2000, between the Company and Waste Management
  Holdings, Inc. as incorporated by reference from Exhibit 2.1 to the Company's quarterly report on Form
  10-Q for the quarter ended March 31, 2000.
  - Stock Purchase Agreement, dated January 18, 2001, among the Company, East Tennessee Materials and Energy Corporation, Performance Development Corporation, Joe W. Anderson, M. Joy Anderson, Russell R. and Cindy F. Anderson, Charitable Remainder Unitrust of William Paul Cowell, Kevin Cowell, Trustee, Joe B. and Angela H. Fincher, Ken-Ten Partners, Michael W. Light, Management Technologies,
- Incorporated, M&EC 401(k) Plan and Trust, PDC 401(k) Plan and Trust, Robert N. Parker, James C. Powers, Richard William Schenk, Trustee of the Richard Schenk Trust dated November 5, 1998, Talahi Partners, Hillis Enterprises, Inc., Tom Price and Virginia Price, Thomas John Abraham, Jr. and Donna Ferguson Abraham as incorporated by reference from Exhibit 2.1 to the Company's Form 8-K dated January 31, 2001.

**Exhibit** 

First Amendment to Stock Purchase Agreement dated August 31, 2000, between the Company and Waste Management Holdings, Inc. as incorporated by reference from Exhibit 2.2 to the Company's Form 8-K dated September 15, 2000.

- Restated Certificate of Incorporation, as amended, and all Certificates of Designations are incorporated by reference from Exhibit 99.1 to the Company's Form 8-K, dated July 30, 2001.
- 3(ii) Bylaws are incorporated by reference from the Company's Registration Statement, No. 33-51874.
- Specimen Common Stock Certificate as incorporated by reference from Exhibit 4.3 to the Company's Registration Statement, No. 33-51874.
  - Loan and Security Agreement by and between the Company, subsidiaries of the Company as signatories
- 4.2 thereto, and PNC Bank, National Association, dated December 22, 2000, as incorporated by reference from Exhibit 99.1 to the Company's Form 8-K dated December 22, 2000.
- 4.3 Loan Agreement between the Company and RBB Bank Aktiengesellschaft, dated August 29, 2000, as incorporated by reference from Exhibit 4.1 to the Company's Form 8-K dated September 15, 2000 Letter Agreement between the Company and RBB Bank Aktiengesellschaft dated July 12, 2000, as
- 4.4 incorporated by reference from Exhibit 10.1 to the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2000.
- First Amendment to Loan Agreement and Consent, dated January 30, 2001, between the Company and PNC
- 4.5 Bank, National Association as incorporated by reference from Exhibit 99.7 to the Company's Form 8-K dated January 31, 2001.
- Note and Warrant Purchase Agreement, dated July 31, 2001, among the Company, AMI, and BEC is incorporated by reference from Exhibit 99.1 to the Company's Form 8-K, dated July 30, 2001.
- Form of 13.50% Senior Subordinated Note Due 2006 is incorporated by reference from Exhibit 99.2 to the Company's Form 8-K, dated July 30, 2001.
- Form of Common Stock Purchase Warrant, expiring July 31, 2008, issued by the Company to AMI and BEC to purchase up to 1,281,731 shares of the Company's Common Stock is incorporated by reference from Exhibit 99.3 to the Company's Form 8-K, dated July 30, 2001.
- Specimen Certificate relating to Series 17 Preferred as incorporated by reference from Exhibit 4.4 to the Company's Form 8-K, dated June 15, 2001.
- Conversion and Exchange Agreement, dated May 25, 2001, but effective as of April 6, 2001, between the Company and RBB Bank Aktiengesellschaft is incorporated by reference from Exhibit 4.5 to the Company's
- 4.10 Company and RBB Bank Aktiengesellschaft is incorporated by reference from Exhibit 4.5 to the Company's Form 8-K, dated June 15, 2001.
- Form of Subscription Agreement incorporated by reference from Exhibit 4.2 to Company's Form 8-K dated June 15, 2001.
- 4.12 Loan and Security Agreement by and between the Company and BHC Interim Funding, L.P., dated January 31, 2001, as incorporated by reference from Exhibit 99.1 to the Company's Form 8-K dated January 31, 2001.

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Exhibit	
No.	Description

10.1 1991 Performance Equity Plan of the Company as incorporated herein by reference from Exhibit 10.3 to the Company's Registration Statement, No. 33-51874.

- 10.2 1992 Outside Directors' Stock Option Plan of the Company as incorporated by reference from Exhibit 10.4 to the Company's Registration Statement, No. 33-51874.
- First Amendment to 1992 Outside Directors' Stock Option Plan as incorporated by reference from Exhibit 10.29 to the Company's Form 10-K for the year ended December 31, 1994.
- Second Amendment to the Company's 1992 Outside Directors' Stock Option Plan, as incorporated by reference from the Company's Proxy Statement, dated November 4, 1994.
- Third Amendment to the Company's 1992 Outside Directors' Stock Option Plan as incorporated by reference from the Company's Proxy Statement, dated November 8, 1996.
- Fourth Amendment to the Company's 1992 Outside Directors' Stock Option Plan as incorporated by reference from the Company's Proxy Statement, dated April 20, 1998.
- 10.7 1993 Non-qualified Stock Option Plan as incorporated by reference from the Company's Proxy Statement, dated October 12, 1993.
- 10.8 401(K) Profit Sharing Plan and Trust of the Company as incorporated by reference from Exhibit 10.5 to the Company's Registration Statement, No. 33-51874.
- Letter agreement, dated December 19, 2000, between the Company and RBB Bank Aktiengesellschaft, as incorporated by reference from Exhibit 99.2 to the Company's Form 8-K dated December 22, 2000.
- Loan Agreement between the Company and RBB Bank Aktiengesellschaft, dated August 29, 2000 as incorporated by reference from Exhibit 4.1 to the Company's Form 8-K dated September 15, 2000.

  Subordination Agreement, dated January 31, 2001, among the Company, PNC Bank, National Association,
- 10.11 and BHC Interim Funding, LP as incorporated by reference from Exhibit 99.4 to the Company's Form 8-K dated January 31, 2001.
  - Stand-Still Agreement, dated January 31, 2001, among the Company, Chem-Met Services, Inc., PNC Bank,
- 10.12 National Association, and RBB Bank Aktiengesellschaft as incorporated by reference from Exhibit 99.2 to the Company's Form 8-K dated December 22, 2000.
- Warrant dated August 29, 2000, issued by the Company to RBB Bank Aktiengesellschaft for the purchase of the Company's common stock as incorporated by reference from Exhibit 4.3 to the Company's Form 8-K dated September 15, 2000.
  - Warrant, dated November 29, 2000, issued to RBB Bank Aktiengesellschaft for the purchase of 300,000 shares of the Company's Common Stock as incorporated by reference from Exhibit 99.5 to the Company's Form 8-K dated December 22, 2000. A substantially similar warrant, dated October 30, 2000, for the
- 10.14 purchase of 150,000 shares of the Company's common stock issued to RBB Bank, as well as substantially similar warrants dated December 29, 2000, January 31, 2001, February 28, 2001 and March 31, 2001 for the purchase of 105,000 shares of the Company's common stock each will be provided to the Commission upon request.
- Warrant, dated December 22, 2000, issued by the Registrant to Ryan, Beck & Co., LLC (formerly Ryan, Beck & Co., Inc.) ("Ryan Beck") for the purchase of 213,889 shares of the Company's common stock, as incorporated by reference from Exhibit 99.6 to the Company's Form 8-K dated January 31, 2001. Substantially similar warrants for the purchase of an aggregate 191,067 shares of the Company's common stock assigned by Ryan Beck to each of Randy F. Rock and Michael J. Kollender, along with the remaining 98,768 warrants issued to Ryan Beck will be provided to the Commission upon request. Substantially similar warrants, dated March 9, 2001 issued to Ryan Beck for the purchase of an aggregate 27,344 shares of the Company's common stock will be provided to the Commission upon request, along with substantially similar warrants dated March 9, 2001, for the purchase of 16,710 shares of the Company's common stock assigned by Ryan Beck to each of Randy F. Rock and Michael J. Kollender. Substantially similar warrants, dated December 22, 2000 for the purchase of an aggregate 694,791 shares of the Company's common stock assigned by Larkspur Capital Corporation ("Larkspur") to the Christopher T. Goodwin Trust (3,000 shares), the Kelsey A. Goodwin Trust (3,000 shares), Meera Murdeshwar (36,000 shares), Paul Cronson (219,597)

shares), Robert C. Mayer, Jr. (219,597 shares) and Robert Goodwin (213,597 shares), along with the remaining 60,764 warrants issued to Larkspur on March 9, 2001 will be provided to the Commission upon request.

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10.28

Ex No	xhibit o.	Description
10	).16	Warrant, dated January 31, 2001, for the purchase of shares of the Company's common stock issued by the Company to BHC Interim Funding, L.P. as incorporated by reference from Exhibit 99.5 to the Company's Form 8-K dated January 31, 2001.
10	).17	Common Stock Purchase Warrant Certificate, dated July 19, 1996, granted to RBB Bank Aktiengesellschaft as incorporated by reference from Exhibit 10.1 to the Company's Form 10-Q for the quarter ended June 30, 1996
10	).18	Common Stock Purchase Warrant Certificate, dated July 19, 1996, granted to RBB Bank Aktiengesellschaft as incorporated by reference from Exhibit 10.2 to the Company's Form 10-Q for the quarter ended June 30, 1996.
10	).19	Common Stock Purchase Warrant dated June 9, 1997, between the Company and RBB Bank Aktiengesellschaft as incorporated by reference from Exhibit 4.4 to the Company's Form 8-K, dated June 11, 1997.
10	).20	Common Stock Purchase Warrant dated June 9, 1997, between the Company and RBB Bank Aktiengesellschaft as incorporated by reference from Exhibit 4.5 to the Company's Form 8-K, dated June 11, 1997.
10	).21	Common Stock Purchase Warrant (\$1.50) dated June 9, 1997, between the Company and J W Charles Securities, Inc. as incorporated by reference from Exhibit 4.6 to the Company's Form 8-K, dated June 11, 1997.
10	).22	Common Stock Purchase Warrant (\$2.00) dated June 9, 1997, between the Company and J W Charles Securities, Inc. as incorporated by reference from Exhibit 4.7 to the Company's Form 8-K, dated June 11, 1997.
10	).23	Stock Purchase Agreement, dated December 18, 2000, between the Company and Dr. Louis F. Centofanti as incorporated by reference from Exhibit 99.8 to the Company's Form 8-K dated December 22, 2000.
10		Basic Oak Ridge Agreement between East Tennessee Materials and Energy Corporation (M&EC) and Bechtel Jacobs Company, LLC No. 1GB-99446V dated June 23, 1998, as incorporated by reference from Exhibit 10.1 to the Company's Form 10-Q for the quarter ended September 30, 1998.
10	).25	Basic Oak Ridge Agreement between East Tennessee Materials and Energy Corporation (M&EC) and Bechtel Jacobs Company, LLC No. 1GB-99447V dated June 23, 1998, as incorporated by reference from Exhibit 10.2 to the Company's Form 10-Q for the quarter ended September 30, 1998.
10	).26	Basic Oak Ridge Agreement between East Tennessee Materials and Energy Corporation (M&EC) and Bechtel Jacobs Company, LLC No. 1GB-99448V dated June 23, 1998, as incorporated by reference from Exhibit 10.3 to the Company's Form 10-Q for the quarter ended September 30, 1998.
10	).27	General agreement between East Tennessee Materials and Energy Corporation (M&EC) and the Company dated May 27, 1998, as incorporated by reference from Exhibit 10.4 to the Company's Form 10-Q for the quarter ended September 30, 1998.
4.0	. • •	

Appendix B to general agreement between East Tennessee Materials and Energy Corporation (M&EC) and the Company dated November 6, 1998, as incorporated by reference from Exhibit 10.5 to the Company's Form 10-Q for the quarter ended September 30, 1998.

- Stock Purchase Agreement dated as of May 27, 1999, among the Company, Perma-Fix of Orlando, Inc.,
  Perma-Fix of South Georgia, Inc., the Thomas P. Sullivan Living Trust, dated September 6, 1978, the Ann
  L. Sullivan Living Trust, dated September 6, 1978, Thomas P. Sullivan, and Ann L. Sullivan as incorporated herein by reference from Exhibit 2.1 to the Company's Form 8-K dated June 1, 1999.
- Stock Purchase Agreement dated as of May 27, 1999, among the Company, Perma-Fix of Michigan, Inc., the Thomas P. Sullivan Living Trust, dated September 6, 1978, the Ann L. Sullivan Living Trust, dated September 6, 1978, Thomas P. Sullivan, and Ann L. Sullivan as incorporated herein by reference from Exhibit 2.2 to the Company's Form 8-K dated June 1, 1999.
- Promissory Note for \$1,230,000 issued to the Ann L. Sullivan Living Trust dated September 6, 1978, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K dated June 1, 1999.

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#### **Exhibit Description** No. Promissory Note for \$1,970,000 issued to the Ann L. Sullivan Living Trust dated September 6, 1978, as 10.32 incorporated by reference from Exhibit 10.2 to the Company's Form 8-K dated June 1, 1999. Promissory Note for \$1,500,000 issued to the Thomas P. Sullivan Living Trust dated September 6, 1978, as 10.33 incorporated by reference from Exhibit 10.3 to the Company's Form 8-K dated June 1, 1999. Non-recourse Guaranty dated May 28, 1999, by and among Perma-Fix of Michigan, Inc., the Thomas P. 10.34 Sullivan Living Trust dated September 6, 1978, and the Ann L. Sullivan Living Trust dated September 6, 1978, as incorporated by reference from Exhibit 10.4 to the Company's Form 8-K dated June 1, 1999. Mortgage dated May 28, 1999, by Perma-Fix of Michigan, Inc. to the Thomas P. Sullivan Living Trust dated 10.35 September 6, 1978 and the Ann L. Sullivan Living Trust dated September 6, 1978, as incorporated by reference from Exhibit 10.5 to the Company's Form 8-K dated June 1, 1999. Form of Guaranty Agreement, dated as of July 31, 2001, of each of the Company's subsidiaries, Perma-Fix of Florida, Inc., Perma-Fix of Fort Lauderdale, Inc., Perma-Fix of Dayton, Inc., Perma-Fix Treatment Services, Inc., Perma-Fix of Memphis, Inc., Perma-Fix, Inc., Perma-Fix of New Mexico, Inc., Reclamation 10.36 Systems, Inc., Industrial Waste Management, Inc., Schreiber, Yonley & Associates, Mintech, Inc., Perma-Fix of Orlando, Inc., Perma-Fix of South Georgia, Inc., Perma-Fix of Michigan, Inc., Diversified Scientific Services, Inc., and East Tennessee Materials and Energy Corporation, incorporated by reference from Exhibit 99.4 to the Company's Form 8-K, dated July 30, 2001. Registration Rights Agreement, dated July 31, 2001, among the Company, AMI, and BEC is incorporated by 10.37 reference from Exhibit 99.5 to the Company's Form 8-K, dated July 30, 2001. Subordination Agreement, dated July 30, 2001, among the Company, AMI, and the Sullivan Trusts. The Company and the Sullivan Trusts entered into a substantially similar Subordination Agreement, dated July 10.38 30, 2001, with BEC. A copy of this Subordination Agreement will be provided to the Commission upon request is incorporated by reference from Exhibit 99.6 to the Company's Form 8-K, dated July 30, 2001. Senior Subordination Agreement, dated July 31, 2001, among the Company, PNC Bank, National Association, AMI, and BEC is incorporated by reference from Exhibit 99.7 to the Company's Form 8-K, 10.39

dated July 30, 2001.

10.40

- Option Agreement, dated July 31, 2001, among the Company, AMI, and BEC is incorporated by reference from Exhibit 99.8 to the Company's Form 8-K, dated July 30, 2001.
- Promissory Note, dated June 7, 2001, issued by M&EC in favor of Performance Development Corporation is incorporated by reference from Exhibit 10.1 to the Company's Form 8-K, dated June 15, 2001.
- Form 433-D Installment Agreement, dated June 11, 2001, between M&EC and the Internal Revenue Service is incorporated by reference from Exhibit 10.2 to the Company's Form 8-K, dated June 15, 2001.
- Debt-For-Stock Exchange Agreement, dated effective July 9, 2001, between the Registrant and Capital Bank-Grawe Gruppe AG, as incorporated by reference from Exhibit 10.1 to the Registrant's Current Report
- on Form 8-K dated July 9, 2001, and filed on July 20, 2001.

  Common Stock Purchase Warrant, dated July 9, 2001, granted by the Registrant to Capital Bank-Grawe
- Gruppe AG for the right to purchase up to 1,839,405 shares of the Registrant's Common Stock at an exercise price of \$1.75 per share incorporated by reference from Exhibit 10.12 to the Company's Registration Statement, No. 333-70676.
- Common Stock Purchase Warrant, dated July 9, 2001, granted by the Registrant to Herbert Strauss for the right to purchase up to 625,000 shares of the Registrant's Common Stock at an exercise price of \$1.75 per share, incorporated by reference from Exhibit 10.13 to the Company's Registration Statement, No. 333-70676.

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# Exhibit No.

10.46

#### **Description**

Warrant Agreement, dated July 31, 2001, granted by the Registrant to Paul Cronson for the right to purchase up to 43,295 shares of the Registrant's Common Stock at an exercise price of \$1.44 per share, incorporated by reference from Exhibit 10.20 to the Company's Registration Statement, No. 333-70676. Substantially similar Warrants, dated July 31, 2001, for the right to purchase up to an aggregate 218,752 shares of the Registrant's Common Stock at an exercise price of \$1.44 per share were granted by the Registrant to Ryan Beck (6,836 shares), Ryan Beck (54,688), Michael Kollender (37,598 shares), Randy Rock (37,598 shares), Robert Goodwin (43,294 shares), Robert C. Mayer, Jr. (43,294 shares), and Meera Murdeshwar (6,837 shares). Copies will be provided to the Commission upon request.

Warrant to Purchase Common Stock, dated July 30, 2001, granted by the Registrant to David Avital for the purchase of up to 143,000 shares of the Registrant's Common Stock at an exercise price of \$1.75 per share, incorporated by reference from Exhibit 10.21 to the Company's Registration Statement, No. 333-70676. Substantially similar Warrants for the purchase of an aggregate 4,254,566 were issued to Capital Bank (842,995 shares), CICI 1999 Qualified Annuity Trust (85,715 shares), Gerald D. Cramer (85,715 shares), CRM 1999 Enterprise Fund 3 (200,000 shares), Craig S. Eckenthal (57,143 shares), Danny Ellis Living Trust (250,000 shares), Europa International, Inc. (571,428 shares), Harvey Gelfenbein (28,571 shares), A.

- Trust (250,000 shares), Europa International, Inc. (571,428 shares), Harvey Gelfenbein (28,571 shares), A. C. Israel Enterprises (285,715 shares), Kuekenhof Partners, L.P. (40,000), Kuekenhof Equity Fund, L.P. (60,000 shares), Jack Lahav (571,429 shares), Joseph LaMotta (28,571 shares), Jay B. Langner (28,571 shares), The F. M. Grandchildren Trust (42,857 shares), Mathers Associates (228,571 shares), Peter Melhado (115,000 shares), Pamela Equities Corp. (42,857 shares), Josef Paradis (143,000 shares), Readington Associates (57,143 shares), Dr. Ralph Richart (225,000 shares), Edward J. Rosenthal Profit Sharing Plan (28,571 shares), Yariv Sapir IRA (85,714 shares), and Bruce Wrobel (150,000 shares), respectively. Copies will be provided to the Commission upon request.
- 10.48 Common Stock Purchase Warrant, dated July 30, 2001, granted by the Registrant to Kennerman Associates for the purchase of 15,750 shares of the Registrant's Common Stock at an exercise price of \$1.75 per share,

incorporated by reference from Exhibit 10.22 to the Company's Registration Statement, No. 333-70676. Substantially similar Warrants, dated July 30, 2001, for the purchase of an aggregate 108,000 shares of the Registrant's Common Stock at an exercise price of \$1.75 per share were issued to Ryan, Beck & Co., L.L.C. (34,000 shares), Larkspur Capital Corporation (34,000 shares), and National Securities Corporation (40,000 shares). Copies will be provided to the Commission upon request.

Common Stock Purchase Warrant, dated July 31, 2001, granted by the Registrant to Associated Mezzanine Investors-PESI (I), L.P. for the purchase of up to 712,073 shares of the Registrant's Common Stock at an exercise price of \$1.50 per share, incorporated by reference from Exhibit 10.23 to the Company's

- 10.49 Registration Statement, No. 333-70676. A substantially similar Warrant was issued to Bridge East Capital L.P. for the right to purchase of up to 569,658 shares of the Registrant's Common Stock, and a copy will be provided to the Commission upon request.
- Subordination Agreement, dated January 31, 2001, among the Company, the Ann L. Sullivan Living Trust dated September 6, 1978, and BHC Interim Funding, L.P. as incorporated by reference from Exhibit 99.3 to the Company's Form 8-K dated January 31, 2001.
- 21.1 List of Subsidiaries
- 22.1 Consent of BDO Seidman, LLP

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# LIST OF SUBSIDIARIES OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. (THE "COMPANY")

## **Industrial Waste Management Services**

Perma-Fix of Fort Lauderdale, Inc. ("PFFL"), a Florida corporation, is a 100% owned subsidiary of the Company.

Perma-Fix of Dayton, Inc. ("PFD"), an Ohio corporation, is a 100% owned subsidiary of the Company.

Perma-Fix Treatment Services, Inc. ("PFTS"), an Oklahoma corporation, is a 100% owned subsidiary of the Company.

Perma-Fix of Memphis, Inc. ("PFM"), a Tennessee corporation, is a 100% owned subsidiary of the Company.

Perma-Fix of Orlando, Inc. ("PFO"), a Florida Corporation, is a 100% owned subsidiary of the Company.

Perma-Fix of South Georgia, Inc. ("PFSG"), a Georgia Corporation, is a 100% owned subsidiary of the Company.

Perma-Fix of Michigan, Inc., ("PFMI") a Michigan Corporation, is a 100% owned subsidiary of the Company.

#### **Nuclear Waste Management Services**

Perma-Fix of Florida, Inc. ("PFF"), a Florida corporation, is a 100% owned subsidiary of the Company.

Diversified Scientific Services, Inc., ("DSSI") a Tennessee Corporation, is a 100% owned subsidiary of the Company.

East Tennessee Materials and Energy Corporation, ("M&EC") a Tennessee Corporation, is a 100% owned subsidiary of the Company.

#### **Consulting Services**

Schreiber, Yonley & Associates ("SYA"), a Missouri corporation, is a 100% owned subsidiary of IWM.

Industrial Waste Management, Inc. ("IWM"), a Missouri corporation, is a 100% owned subsidiary of the Company.

Photograph of scenic view of mountains and lake

### CORPORATE INFORMATION

#### Executive Offices

1940 N.W. 67th Place Gainesville, Florida 32653 Telephone: (352) 373-4200 Fax: (352) 373-0040

6075 Roswell Road, Suite 602 Atlanta, Georgia 30328 Telephone: (404) 847-9990 Fax: (404) 847-9977

#### Transfer Agents and Registrars

Continental Stock Transfer & Trust Company 17 Battery Place

#### Annual Meeting

The Company has scheduled its Annual Meeting for Wednesday, November 6, 2002. The meeting will be held at the offices of Perma-Fix Environmental Services, Inc., 1940 N.W. 67th Place, Gainesville, Florida 32653, at 11:00 a.m. (EDST).

#### Stock Listing

The common stock of Perma-Fix Environmental Services, Inc. is listed on Nasdaqt where it is traded under the ticker symbol PESI.

The common stock of Perma-Fix Environmental Services, Inc. is listed on the Boston Stock Exchange where it is traded under the ticker symbol PES.

New York, New York 10004

## Independent Certified Public Accountants

BDO Seidman, LLP 233 N. Michigan Avenue Suite 2500 Chicago, Illinois 60601 The common stock of Perma-Fix Environmental Services, Inc. is listed on the Berlin Stock Exchange where it is traded under the ticker symbol PES.BE.

### Stockholder Inquiries

Inquiries concerning stockholder records should be addressed to the Transfer Agent listed above. Comments or questions concerning the operations of the Company should be addressed to the Secretary, Perma-Fix Environmental Services, Inc., 1940 N.W. 67th Place, Gainesville, Florida 32653.

Certain statements contained in the President's letter may be deemed forward-looking statements, including, but not limited to, positioning the Company to be one of the leaders in both mixed waste and industrial segments, objective to stay at the forefront of technology and to lead the industry in the development of proprietary and safe methods to treat waste, expanding existing facilities, positioning the Company for continued growth, expansion and new opportunities as a result of the 'Bio-Fix' process, and expansion of the Company's penetration into the water treatment market. See "Special Note Regarding Forward-Looking Statements" contained in the Form 10-K that is part of this Annual Report for discussion of factors which could cause future outcomes to differ materially from those described in the a President's letter.

Perma-Fix aims to
set the standard
for the development
of safe, effective, low-cost
technologies for the
treatment of
nuclear mixed waste
and industrial waste

## Perma**Fix**

environmental services

Perma-Fix Environmental Services, Inc. 1940 N.W. 67th Place Gainesville, Florida 32653