

The logo for PermaFix environmental services. It features the word "PermaFix" in a bold, sans-serif font, with a red swoosh above the "F". Below "PermaFix" is the phrase "environmental services" in a smaller, lowercase font. To the right of the text is a blue circular graphic consisting of concentric rings and a central dot.

**PermaFix**<sup>®</sup>  
environmental services

2 0 0 2   a n n u a l   r e p o r t

solutions

# vision

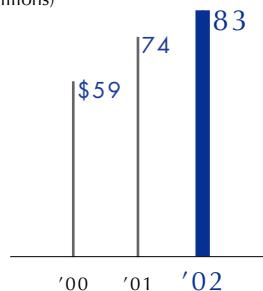
To be recognized by our commercial and government clients as the leading provider of compliant, economically viable waste management solutions for unique, complex waste streams. We will gain this position with our clients by being flexible in our approach and through the application of new and existing technologies at our permitted/licensed sites or at our clients' sites. We will strive to always meet the needs of our clients, while performing work in a safe, environmentally sound manner.

## CORPORATE PROFILE

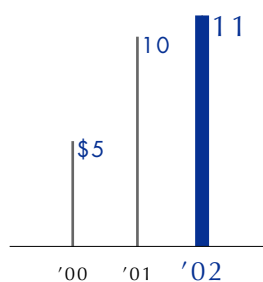
Perma-Fix Environmental Services, Inc. is a national environmental technology company, providing unique mixed waste and industrial waste management services. The Company has increased its focus on the nuclear services segment, which provides radioactive and mixed waste treatment services to hospitals, 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.

## FINANCIAL HIGHLIGHTS

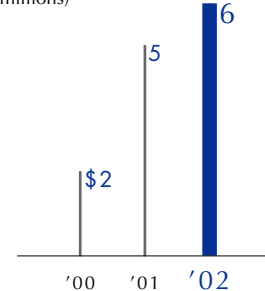
Net Revenues  
(in millions)



EBITDA  
(in millions)



Operating Income  
(in millions)



(Amounts in Thousands, Except for Share Amounts)

	2002	2001	2000	1999	1998
YEAR END					
Net Revenues	\$ 83,404	\$74,492	\$59,139	\$46,464	\$30,551
Gross Profit	24,349	22,050	15,790	13,223	7,909
EBITDA	10,684	10,035	5,464	4,894	2,640
Operating Income	6,440	5,419	1,813	2,116	531
Total Assets	105,825	99,137	72,771	54,644	28,748
Stockholders' Equity	44,585	41,841	22,020	19,819	15,953

# commitment



We are well positioned as the only company with the licenses, technologies, and necessary experience to treat a wide range of difficult mixed waste streams.

## TO OUR SHAREHOLDERS:

I am pleased to report that for a sixth consecutive year, Perma-Fix Environmental Services increased its revenue, to an all-time record high of \$83.4 million, a 12% increase over 2001. Our nuclear services segment grew 46% and our industrial services segment began treating waste utilizing our revolutionary Bio-Fix process. In addition, we increased our operating income 19%, enabling us to return to profitability—generating \$2.2 million in net income. We also strengthened our balance sheet in 2002, by improving our working capital, reducing our debt, and increasing our shareholders' equity.

We achieved these results despite some major challenges. The downturn in the economy had a major impact on our industrial customers who scaled back on production and generated less waste. However, we have since refocused our sales efforts on more complex waste streams, which contributed to the 23% increase in our industrial services segment revenues during the first quarter of 2003.

Second, faced with the ongoing war on terrorism, our government clients delayed shipments to address a number of security concerns, including the transportation of nuclear materials during elevated security levels.

Lastly, we realized limited returns on the corporate resources invested in the Bio-Fix process at our Dayton facility, as the system did not reach full throughput until the last quarter of the year.

## INDUSTRIAL WASTE MANAGEMENT

Our new Bio-Fix process represents an important growth opportunity for our industrial business. In June of 2002, we completed the construction of the Bio-Fix process at our Dayton facility and began accepting commercial wastewater for treatment.

The Bio-Fix process is a new technology that we developed utilizing our current biological treatment process in conjunction with several proprietary chemical pretreatment processes. The Bio-Fix process is designed to treat heavily contaminated wastewater streams, such as waste oils, phenols, and "lean" waters. The Bio-Fix process enables us to treat these wastes in a more environmentally sound manner and at more competitive prices than traditional methods. Furthermore, the Bio-Fix process enables our facilities to meet the EPA's new centralized treatment standards that become effective in December of 2003, providing us with another potential advantage over our competitors.

We also won a sizeable contract with the Army to utilize the Bio-Fix process, and a modification of the Perma-Fix II process, to treat secondary waste containing complex organics from the chemical weapons program, and convert them into harmless carbon dioxide, water, and salts. With our new technologies and treatment processes in place, we were awarded this opportunity and anticipate similar opportunities in the future.



## NUCLEAR WASTE MANAGEMENT

While we have ramped up rapidly, there have been two challenges to overcome. First, it has taken time for the Department of Energy (DOE) to finalize their procedures for transporting waste to our facilities. Although the waste is now being shipped, the flow to our facilities has been irregular. We are working with the DOE to better schedule their shipments throughout their fiscal year, which will allow us to operate more efficiently.

The second challenge has been establishing specific processes for handling and treating the varied types of mixed waste the Department of Energy has in storage. DOE mixed waste contains a wide variety of hazardous substances that require unique treatment processes. As a result, we have had a backlog of waste in our facilities, while waiting for new treatment processes to come online. We now have treatment processes for many of the relevant mixed waste streams. For example, this year we became the first company to treat radioactive materials that are also contaminated with mercury.

We are well positioned as the only company with the licenses, technologies, and necessary experience to treat virtually all of these difficult mixed waste streams. We experienced a 46% increase in our mixed waste business in 2002, and we expect continued growth as we refine our processes, improve our efficiency, and accept more waste streams.

## CONCLUSION

In 2002, we developed new treatment processes while growing revenue and returning to profitability. We have now increased shareholders' equity for five straight years, despite an extremely challenging market. Through our strategic planning process, we are now refocusing our efforts to accelerate growth and profitability in all segments by leveraging and applying our core competences to projects performed at our fixed based facilities and on our clients' site.

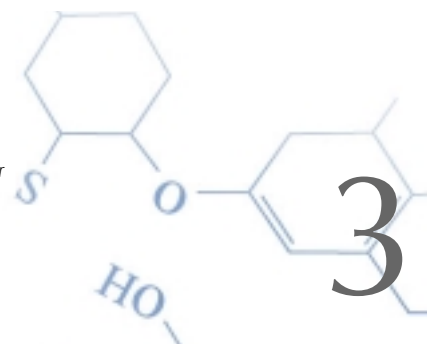
I would like to extend my appreciation to our outstanding employees for their continued hard work and dedication. It is through their efforts that we have performed so well and accomplished so much.

During 2003, we have assembled an enhanced team and unmatched technologies to capitalize on a large market for our services. Furthermore, the competitive barriers to entry are nearly insurmountable. As a result, I am more enthusiastic now, than ever, about the future of our business.

Sincerely,

**Dr. Louis F. Centofanti**

*Chairman, President and Chief Executive Officer*







## TECHNOLOGY

The Perma-Fix knowledge and experience in the application of existing and new technologies to treat unique, complex waste streams is one of our greatest strengths. Some of the technologies we employ include chemical neutralization, precipitation, oxidation, macro and micro encapsulation, thermal desorption, and the latest addition to our tool box, biological treatment. With these "tools" we have been able to solve numerous complex waste management issues for our commercial and government clients.

For example, since the 1950s, mercury has been widely used throughout the Department of Energy (DOE). DOE estimates their inventory to be more than 50,000 cubic meters of radioactive wastes co-contaminated with mercury. Perma-Fix has implemented treatment solutions based upon available technologies to address these problematic wastes.

\* For lower levels of mercury contamination, the Perma-Fix I stabilization process is used for treating soluble mercury. This process chemically reduces the mercury to an insoluble form, which is then solidified into a compliant waste form appropriate for safe disposal as a non-hazardous solid waste.

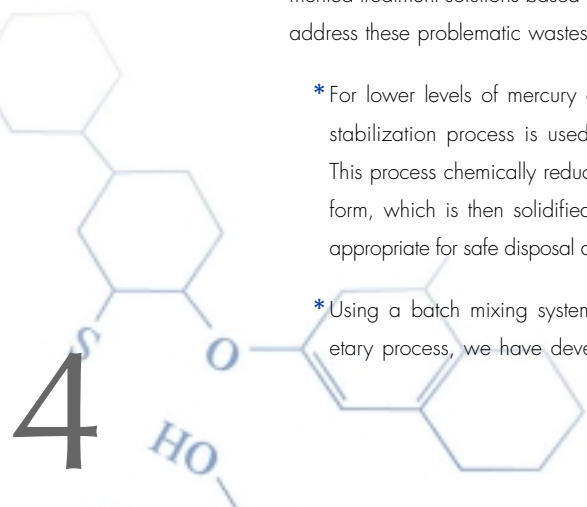
\* Using a batch mixing system together with a new proprietary process, we have developed a treatment method for

soils contaminated with high levels of mercury under the EPA's alternative treatment standards.

\* Perma-Fix in conjunction with our technology partner, ADA Technologies, has developed, tested and installed a process that features direct amalgamation/stabilization of elemental mercury.

\* EPA regulations mandate incineration and retorting technology-based treatment of DOE waste (non-soils) containing high mercury levels. In 2003, Perma-Fix plans to demonstrate and qualify its existing vacuum thermal desorber as a mercury retort system for non-soil materials containing high levels of mercury.

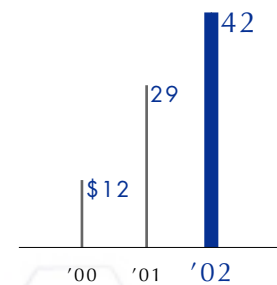
Another example of solutions that Perma-Fix developed for DOE waste is the treatment of uranium and thorium metal chips. The Oak Ridge National Laboratory was given the charter by the DOE to conduct a nationwide procurement to treat approximately 190,000 kg of such metallic wastes stored at 26 locations throughout the DOE complex. In addition to being highly reactive (pyrophoric), some of the metal chips were also contaminated with PCB's, RCRA metals, and/or organics. Perma-Fix developed a multi-step process for separating the uranium and thorium



# technology

Through our expertise, we have the ability to develop innovative solutions to complex waste problems.

Nuclear Revenue  
(in millions)



metal chips from these various contaminants and then inerting, solidifying, and stabilizing the chips into a waste form acceptable for disposal. Perma-Fix also developed receiving, inspection, and handling procedures to ensure that the material would be transported and handled safely. After an extensive technical review and evaluation of all the proposals received, the Oak Ridge National Laboratory's managing contractor, UT-Battelle, issued Perma-Fix a task-order-based Basic Ordering Agreement that could be used by all of the Department's sites for the transportation, treatment and disposal of these metallic wastes. The task-order is contingent upon completing a first article test program of 450 kg of various types of these materials. We are nearing successful completion of this first article test and are preparing for receipt of materials from several sites.

As this example demonstrates, the treatment of mixed waste is a very complex process involving multiple steps and processes to address all the different material types and combinations of radioactive and hazardous contaminants.

Another example of our ability to develop innovative solutions is the approach developed by Perma-Fix for the Department of Defense to treat liquids contaminated with complex organic

compounds. This new approach involves the use of a chemical pretreatment of the complex organic compounds to make them amenable for treatment in our biological system at our Dayton, Ohio facility. This combined chemical and biological treatment process is unique to Perma-Fix and produces water that can be released to a local publicly owned treatment works (POTW). Our chemical know-how complements and enhances the biological treatment process, which in itself is a new, emerging technology for the treatment of industrial wastewater. We have proposed to use variations of our combined chemical and biological treatment process to treat other complex, organic waste streams for other Department of Defense projects. In addition, some of the technologies developed for mixed waste processing may also be utilized to treat hazardous waste for the Department of Defense.

Our expertise in the application of existing technologies combined with our chemical know-how enables Perma-Fix to develop innovative solutions for complex waste problems that are cost-effective and environmentally sound for our clients while being safe for the public and our workers.



# compliance

## COMPLIANCE

While technology is an important element in developing waste management solutions, compliance with federal, state and local laws and regulations is also a major factor. Paramount to the regulations is the requirement that facilities and processes be licensed and/or permitted to perform the work. Perma-Fix maintains nine facilities that are permitted under Resource Conservation and Recovery Act of 1976 regulations, three of which are also licensed under Nuclear Regulatory Commission regulations. Our broad-based licenses and permits and our ability to use facilities in combination, provide our clients with the greatest degree of flexibility for processing their waste. The compliance and operations staff within our nuclear and industrial segments reviews the clients' waste profiles to ensure compliance with our permits, ensure the safety of our workers and facilities, and to identify any potential permit modifications that would allow us to expand our services. For major plant expansions and renewals, our staff is supplemented with personnel from our engineering firm, SYA, who is nationally known for its permitting experience and capabilities.

The comprehensive compliance review of the clients' waste profiles also protects Perma-Fix and its permits, licenses, and facilities by ensuring that we have identified all of the hazardous characteristics of the waste before it is brought into our facilities.

We combine our technical abilities with an in-depth understanding of environmental regulations to provide our clients with innovative, cost-effective solutions to their waste management problems. The compliance and operations personnel from our nuclear and industrial segments are experts in the federal, state and local laws and regulations covering the handling, transportation, treatment and disposal of hazardous, low-level radioactive, and mixed wastes.





## VALUE

Perma-Fix Environmental Services is dedicated to providing value to our clients in every service offered by the Company. In our quest to bring value to our clients, we first evaluate their individual waste streams and needs and then develop custom solutions based upon their criteria. This requires our Company to be technologically capable, knowledgeable and adaptable to all of the federal, state, and local environmental laws.

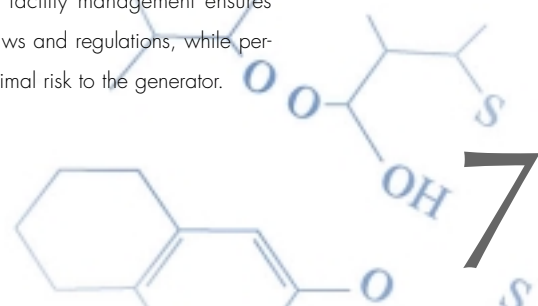
While all of our clients value cost-effective solutions, we are also seeing more clients that are environmentally conscious and value solutions with the minimum impact on the environment, even if they are more costly. These “green” clients are looking for alternatives to traditional treatment methods, such as incineration, that release greenhouse gases and provide no other benefits such as energy recovery. The Department of Defense is an example of a client that is looking for alternative solutions which are more acceptable to the general public.

Many of our clients are becoming more risk-conscious and are only contracting with well-established, stable, and reputable organizations. The generator of the waste is, by regulation, fully responsible for the appropriate handling and disposal of their waste, all the way through its final disposition. Therefore, our

clients value the risk reduction that results from our many years of experience, technical ability and regulatory expertise, which we apply to every waste stream we process.

We have continued to pursue clients that value the safe performance of the work. The Department of Energy and their prime contractors are examples of clients that require superior safety performance. Very simply put, an organization must have a safety record that is superior to their industry standard (as measured by an experience modification rate for workers' compensation insurance less than 1.0) in order to qualify to do work for the government.

Perma-Fix has positioned itself to provide value to our clients in all of these areas. Our technical experience and capabilities provide cost-effective solutions that minimize the impact to the environment. Our facilities have broad-based permits and licenses that allow us flexibility in the waste treatment processes that we can provide. In conclusion, our facility management ensures compliance with environmental laws and regulations, while performing work safely and with minimal risk to the generator.





# accomplishments

## ACCOMPLISHMENTS

Through the skill, dedication and work of our management and staff, Perma-Fix attained a number of milestones and major accomplishments during 2002:

- \* The M&EC facility completed its first full year of operations, processing over 555,000 kg of mixed waste.
- \* The nuclear services segment developed and placed into operation new treatment processes for radioactive materials contaminated with mercury.
- \* The Dayton facility placed into operation the new Bio-Fix process for the environmentally sound treatment of wastewater.
- \* The industrial services segment developed chemical pre-treatment processes to enhance the applicability of the Bio-Fix process to complex organic compounds, which resulted in a major contract from the Army.
- \* The nuclear services segment developed and placed into operation new techniques and processes for the treatment of uranium and thorium metal chips, which enabled Perma-Fix to win a system-wide Basic Ordering Agreement from the Department of Energy.
- \* For the fourth consecutive year, the Company improved its safety performance as measured by its Experience Modification Rate for workers' compensation insurance.
- \* The Company returned to profitability, generating \$2.2 million in net income.

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

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

For the fiscal year ended December 31, 2002

or

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

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

Commission File No. 1-11596

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

*(Exact name of registrant as specified in its charter)*

**Delaware**

*(State or other jurisdiction  
of incorporation or organization)*

**58-1954497**

*(IRS Employer Identification Number)*

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

*(Address of principal executive offices)*

**32653**

*(Zip Code)*

**(352) 373-4200**

*(Registrant's telephone number)*

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

Title of each class  
Common Stock, \$.001 Par Value

Name of each exchange on which registered  
Boston Stock Exchange

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

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

Indicate by check mark whether the registrant is an accelerated file (as defined in Rule 12b-2 of the Act). Yes ☒ No ☐

The aggregate market value of the Registrant's voting and non-voting common equity held by nonaffiliates of the Registrant computed by reference to the closing sale price of such stock as reported by NASDAQ as of the last business day of the most recently completed second fiscal quarter (June 28, 2002), was approximately \$86,487,000. For the purposes of this calculation, all officers and directors of the Registrant (as indicated in Item 12) are deemed to be affiliates. Capital Bank Grawe Gruppe AG is not considered an affiliate based on representations made to the Registrant by Capital Bank. Such determination should not be deemed an admission that such directors or officers, are, in fact, affiliates of the Registrant. The Company's Common Stock is listed on the NASDAQ SmallCap Market and the Boston Stock Exchange.

As of March 24, 2003, there were 34,699,254 shares of the registrant's Common Stock, \$.001 par value, outstanding, excluding 988,000 shares held as treasury stock.

Documents incorporated by reference: none

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

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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), an environmental technology and knowhow company, 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
  - wastewater management services, including the collection, treatment, processing and disposal of hazardous and non-hazardous wastewater.
- Nuclear Waste Management Services, which includes:
  - treatment, storage, processing and disposal of mixed waste (which is both low-level radioactive and hazardous waste) which includes on and off-site waste remediation and processing;
  - nuclear and low-level radioactive waste treatment, processing and disposal; and
  - research and development of innovative ways to process low-level radioactive and mixed waste.
- 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, evaluate strategic acquisitions within both the nuclear and industrial segments, 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.

#### Website access to Company's reports

Our internet website address is [www.perma-fix.com](http://www.perma-fix.com). Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to section 13(a) or 15(d) of the Exchange Act are available free of charge through our website as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission.

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

During 2002, 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.



Pursuant to FAS 131 we have aggregated our operating segments into three reportable segments for 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 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.

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 2002.

### **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 processing 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, including the new Bio-Fix process, 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.

Perma-Fix of Orlando, Inc. ("PFO"), is a RCRA permitted TSD facility located in Orlando, Florida. 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"), is a RCRA permitted TSD facility located in Valdosta, Georgia. 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"), is a permitted TSD facility located in Detroit, Michigan. 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 treatment. 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") 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 four field service offices, located throughout the United States. PFGS currently manages five 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 2002, the Company's Industrial Waste Management Services segment accounted for approximately \$37,641,000 (or 45.1%) of the Company's total revenue, as compared to approximately \$42,355,000 (or 56.9%) for 2001. 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 radioactive 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 substantially increased the amount and type of mixed waste and low level radioactive waste that it can store and treat. 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. 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.

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 radioactive 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 such a 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 radioactive 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.

The Company is currently negotiating for the acquisition of another mixed waste treatment and storage facility that operates under both a hazardous waste permit and a nuclear materials license. As of the date of this report, it is unknown as to whether the Company will be successful in acquiring this facility and no agreements have been executed relating to this proposed acquisition. See "Management's Discussion and Analysis of Financial Condition and Results of Operation -- Potential Acquisition."

For 2002, the Company's nuclear waste management services business accounted for \$42,260,000 (or 50.7%) of total revenue for 2002, as compared to \$28,932,000 (or 38.8%) of total revenue for 2001. 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 2002, environmental engineering and regulatory compliance consulting services accounted for approximately \$3,503,000 (or 4.2%) of our total revenue, as compared to approximately \$3,205,000 (or 4.3%) in 2001. 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. 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."

In September 2002, we completed the construction of our new Bio-Fix process at PFD. The facility has begun accepting commercial wastewater for treatment through this process. The Bio-Fix process is a new technology which we developed utilizing our variable depth biological treatment process and several proprietary water treatment processes. The Bio-Fix process is designed to remove certain organic constituents from highly organic, contaminated wastewaters. The Bio-Fix process enables us to treat heavily contaminated wastewater streams, such as waste oils, phenols, and "lean" waters, at more competitive prices than traditional methods. The Bio-Fix process meets the EPA's new centralized treatment standards that become effective in December of 2003, potentially giving us an advantage over competing treatment facilities.

### **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 to ten 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. 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 waste disposal injection well, and a pre-treatment permit in order to discharge industrial wastewaters to the local Publicly Owned Treatment Works ("POTW"). 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 POTW.

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 POTW 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 waste treatment and storage facility under various permits, including a RCRA Part B permit, issued by the State of Florida.

PFSG operates a hazardous waste 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 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 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 2002 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. However, 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. PFGS currently manages five 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 2002 total \$6,642,000 (or 8.0%) of total revenue, as compared to \$5,996,000 (or 8.0%) for the year ended December 31, 2001, which resulted in an increase of \$646,000 for 2002.

M&EC was awarded three subcontracts ("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 contractor 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 at any time 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 2002 total \$9,664,000 or 11.6% of total revenues, as compared to \$6,300,000 or 8.5% 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."

During the first quarter of 2003, M&EC filed a lawsuit against Bechtel Jacobs seeking approximately \$4.3 million in surcharges under the Oak Ridge Contracts. Since the filing of the lawsuit, Bechtel Jacobs has continued to deliver waste to M&EC under the Oak Ridge Contracts. There are no assurances that this filing of the lawsuit will not result in Bechtel Jacobs canceling the Oak Ridge Contracts, which contracts are cancelable at any time by either party.

#### **Newport Contract Award**

The Company's subsidiary, PFD was awarded a subcontract and limited notice to proceed with the post-treatment of the neutralized VX byproduct called hydrolysate by Parsons. Parsons is currently contracted by the Army to destroy the nerve agent VX stockpile at Newport Chemical Depot, Newport, Indiana. Finalization of this subcontract is subject to Perma-Fix and Parsons entering into a definitive agreement.

Perma-Fix will be responsible for transporting the hydrolysate material from Newport Chemical Depot to its facility for disposal. In addition, Perma-Fix will perform initial demonstration studies and conduct associated public outreach activities in their community.

Parsons will neutralize the stockpile in the Newport Chemical Agent Disposal Facility now under construction at the depot. The neutralization process, which irreversibly destroys the chemical agent, will create a byproduct with characteristics similar to household liquid drain cleaner. Prior to off-site shipment, the hydrolysate will be analyzed to ensure that all of the agent has been destroyed. The neutralization process is expected to create approximately 900,000 gallons of hydrolysate that will be biologically treated, utilizing the Company's Bio-Fix process, at an approximate value of \$9.0 million. Destruction of the Newport chemical agent stockpile is expected to begin in the fall of 2003 and will take approximately nine months to complete.

#### **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, certain 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, in conjunction with the current economic downturn, 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 are only two other facilities in the United States that provide mixed waste processing which 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. 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. We believe that there are no formidable barriers to entry into certain of the on-site treatment businesses, and certain of the non-hazardous waste operations which do not require such permits. 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. However, management believes that environmental laws will tighten, creating even stronger barriers to obtaining a permit and entry into the market.

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 2002, we spent approximately \$5,822,000 in capital expenditures, which was principally for the expansion and improvements to our operating facilities. This 2002 capital spending total includes \$1,061,000 which was financed. We have budgeted approximately \$6,500,000 for 2003 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. We have also budgeted approximately \$982,000 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."

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. The contamination of the leased property occurred prior to PFD being acquired by us or Quadrex. 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 \$211,000 for the estimated, remaining costs of remediating the Leased Property used by EPS, which will extend over the next year.

PFD has filed a lawsuit for contribution in connection with the remediation of the EPS site against the owners of the Leased Property and the parties that owned EPS prior to its acquisition by Quadrex. Recently, PFD and the defendants entered into an agreement in principal to settle this lawsuit, and under the terms of this settlement the defendants would pay PFD \$400,000. This settlement is subject to the parties entering into definitive settlement documents.

In conjunction with 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 \$918,000 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. The PFM facility is located in the down gradient 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.

In conjunction with 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 continued throughout 2002, with remedial activities beginning in 2003. For the year ended December 31, 2002, we have a remaining accrual of \$1,260,000, of which we anticipate spending \$126,000 during 2003, with the remaining \$1,134,000 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, 2002, for the PFMI remediation is \$307,000.

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 and technical knowhow 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 2000, 2001 and 2002, we spent approximately \$359,000, \$428,000, and \$388,000, 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, 2002, we employed approximately 490 full time persons, of which approximately 12 were assigned to our corporate office, approximately 23 were assigned to our Consulting Engineering Services segment, approximately 276 to the Industrial Waste Management Services segment of which 18 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.

### **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 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; 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 nine 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.

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.

PFPL 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 PFPL facility in Davie, Florida. However, studies conducted by, or under the direction of, the EPA, together with data previously provided to PFPL by the EPA, do not indicate that the PFPL 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, PFPL 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 Quadrex, the entity that sold PFD to the Company, for costs associated with remediating the Leased Property, which entails remediation of soil and/or groundwater restoration. However, during 1995, Quadrex filed for bankruptcy. Prior to the acquisition of PFD by the Company, Quadrex had established a trust fund ("Remediation Trust Fund"), which it funded with Quadrex'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 Quadrex's stock that comprised the Remediation Trust Fund, which stock had been sold by the trustee prior to Quadrex's filing bankruptcy. The Company has subsequently put an additional \$197,000 into the Remediation Trust Fund. PFD has filed a lawsuit 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. The lawsuit was filed in the United States District Court, for the Southern

District of Ohio, styled Perma-Fix of Dayton, Inc. v. R.D. Baker Enterprises, Inc., case no. C-3-99-469. PFD and the defendants have agreed in principal to settle the lawsuit, subject to finalization and execution of definitive settlement agreements. Under the proposed settlement, the defendants would pay PFD \$400,000 towards remediation of the Leased Property.

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. During the second quarter of 2002 PFMI, and other PRPs entered into an agreement to settle the suit. PFMI will pay approximately \$153,000 of the total settlement of which the total amount was accrued in September 2002. The settlement agreement was finalized in October 2002, and provides that the Company will pay its portion of the settlement over a twelve month period beginning in March 2003.

Patrick Sullivan ("P. Sullivan"), the son of a former member of our Board of Directors, Thomas P. Sullivan ("Mr. Sullivan"), was employed by a subsidiary of the Company, Perma-Fix of Orlando, Inc. ("PFO"), as an executive and/or general manager from the date of the Company's acquisition of PFO in June 1999 to June 2002, when he terminated his employment to go to work for a competitor of PFO in Orlando, Florida. P. Sullivan is subject to an agreement with the Company that provides, in part, that P. Sullivan would not solicit customers, suppliers or employees of the Company or PFO for a period of two years after termination of his employment. The Company has been advised that P. Sullivan violated the agreement and his duties to the Company and PFO prior to and after he terminated his employment with PFO. P. Sullivan reimbursed the Company for certain personal expenses charged to, and paid by, the Company after the Company notified P. Sullivan of the claims. In December 2002, the Company filed a lawsuit against P. Sullivan in the circuit court of the Ninth Judicial Circuit in Orange County, Florida, for injunction relief and damages related to the above. P. Sullivan has denied the allegations. Mr. Sullivan has denied committing any breach of his fiduciary duties to the Company in connection with these alleged actions by his son.

In October 2002, the Company's subsidiary Perma-Fix of Memphis, Inc. ("PFM"), a discontinued operation, entered into a settlement agreement with Mid-South Industrial, Inc. and CNA Insurance Company to settle a lawsuit PFM filed seeking damages resulting from an explosion and fire which occurred in January 1997. Under the settlement agreement PFM received approximately \$233,000 in October 2002, which was recorded as other income in the fourth quarter of 2002.

On February 24, 2003, East Tennessee Materials and Energy Corporation ("M&EC"), commenced legal proceedings against Bechtel Jacobs Company, LLC, in the chancery court for Knox County, Tennessee, seeking payment from Bechtel Jacobs of approximately \$4.3 million in surcharges relating to certain wastes that were treated by M&EC during 2001 and 2002. M&EC is operating primarily under three subcontracts with Bechtel Jacobs, which were awarded under contracts between Bechtel Jacobs and the U.S. Department of Energy. M&EC and Bechtel Jacobs have been discussing these surcharges under the subcontracts for many months. In 2002, the revenues generated by M&EC under the subcontracts with Bechtel Jacobs represented approximately 11.6% of Perma-Fix's 2002 total revenues. Bechtel Jacobs continues to deliver waste to M&EC for treatment and disposal, and M&EC continues to accept such waste. Although Perma-Fix does not believe that this lawsuit will have a material adverse effect on its operations, Bechtel Jacobs could terminate the subcontracts with M&EC, as the subcontracts may be terminated at any time by either party.

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 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

The Company's annual meeting of stockholders ("Annual Meeting") was held on November 6, 2002. At the Annual Meeting, the following matters were voted on and approved by the stockholders:

1. The election of six directors to serve until the next annual meeting of stockholders or until their respective successors are duly elected and qualified.
2. Approval and ratification of the appointment of BDO Seidman, LLP as the independent auditors of the Company for fiscal 2002.

The directors elected at the Annual Meeting and the votes cast for and withhold authority for each director are as follows:

	<u>For</u>	<u>Withhold Authority</u>
Dr. Louis F. Centofanti	23,661,671	2,094,642
Jon Colin	25,717,863	38,450
Thomas P. Sullivan <sup>(1)</sup>	25,711,680	44,633
Mark A. Zwecker	25,717,288	39,025
Jack Lahav	25,715,663	40,650
Alfred C. Warrington, IV	25,720,485	35,828

<sup>(1)</sup> Effective December 16, 2002, Thomas P. Sullivan resigned from the Board of Directors.

Also, at the Annual Meeting the stockholders approved the appointment of BDO Seidman, LLP as the independent auditors of the Company for fiscal 2002. The votes for, against and abstentions and broker non-votes are as follows:

	<u>For</u>	<u>Against</u>	<u>Abstentions and Broker Non-Votes</u>
Approval and Ratification of the Appointment of BDO Seidman, LLP as the Independent Auditors	25,723,476	23,203	9,624

#### 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	59	Chairman of the Board, President and Chief Executive Officer
Mr. Richard T. Kelecyc	47	Chief Financial Officer, Vice President and Secretary
Mr. Roger Randall	59	Vice President - Contract Management
Mr. Larry McNamara	53	President, Nuclear Services
Mr. William Carder	53	Vice President, Sales and Marketing

#### 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 from July 1994 until beginning his current positions. 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 currently serves as Vice President - Contract Management. He previously served as President of the Industrial Waste Management Services Segment from October 2000 to February 2003, 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. Prior 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 1995 and 1996, 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.

#### **MR. WILLIAM CARDER**

Mr. Carder joined the Company in January 2003 as Vice President of Sales and Marketing. Previously, Mr. Carder was Regional Manager for COGEMA, Inc. from June 1997 to July of 2002. From February 1992 to April 1997 he served in a number of positions for Scientific Ecology Group, a division of Westinghouse, including Vice President of Government Sales, Vice President of Business Development, and finally Vice President of Sales and Marketing. From 1987 through 1991, Mr. Carder served with Quadrex Corporation as Vice President of Sales and Marketing. Prior to joining Quadrex, he spent fifteen years (1971 to 1987) with the Nuclear Energy Business Operation of General Electric Company as field engineer, project engineer, service supervisor and manager, service sales engineer and manager and finally as the Commercial Program Manager for the northeast region. Mr. Carder has a B.S. in Nuclear Engineering from North Carolina State University.

## 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. Our Common Stock is also traded 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.

		2002		2001	
		<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>
Common Stock:	1 <sup>st</sup> Quarter	\$ 2.510	\$ 3.440	\$ 1.250	\$ 2.094
	2 <sup>nd</sup> Quarter	2.550	3.500	1.620	2.810
	3 <sup>rd</sup> Quarter	1.920	3.010	2.160	3.650
	4 <sup>th</sup> Quarter	2.090	2.650	2.400	3.890

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

As of March 18, 2003, there were approximately 319 stockholders 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 stockholders as of March 18, 2003, was approximately 3,444.

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 2002, as reported in our Forms 10-Q for the quarters ended March 31, 2002, June 30, 2002 and September 30, 2002, which were not registered under the Securities Act of 1933, as amended, we sold or issued during 2002 the following securities which were also not registered under the Act:

1. On or about June 3, 2002, pursuant to the terms of a certain Consulting Agreement ("Consulting Agreement") entered into effective as of January 1, 1998, the Company issued 4,397 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 2001 through March 11, 2002. The issuance of Common Stock pursuant to the Consulting Agreement was a private placement under Section 4(2) of the Act. The Consulting Agreement provided that Warrington be paid \$1,500 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 thirty-five percent in cash, or (iii) all in Common Stock. If Warrington elected to receive part or all of his compensation in Common Stock, such would 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 2001 through March 11, 2002 in Common Stock. Warrington represented and warranted in the Consulting Agreement, among other things, 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 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,				
	2002	2001 <sup>(3)</sup>	2000 <sup>(2)</sup>	1999 <sup>(1)</sup>	1998
Revenues	\$ 83,404	\$ 74,492	\$ 59,139	\$ 46,464	\$ 30,551
Net income (loss)	2,202	(602)	(556)	1,570	462
Preferred Stock dividends	(158)	(145)	(206)	(308)	(1,160)
Gain on Preferred Stock redemption	—	—	—	188	—
Net income (loss) applicable to Common Stock	2,044	(747)	(762)	1,450	(698)
Basic net income (loss) per common share	.06	(.03)	(.04)	.08	(.06)
Diluted net income (loss) per common share	.05	(.03)	(.04)	.07	(.06)
Basic number of shares used in computing net income (loss) per share	34,217	27,235	21,558	17,488	12,028
Diluted number of shares and potential common shares used in computing net income (loss) per share	42,618	27,235	21,558	21,224	12,028

### Balance Sheet Data:

	December 31,				
	2002	2001	2000	1999	1998
Working capital (deficit)	\$ 731	\$ 134	\$ (3,233)	\$ (1,455)	\$ 292
Total assets	105,825	99,137	72,771	54,644	28,748
Current and long-term debt	30,515	31,146	25,490	15,306	3,042
Total liabilities	59,955	56,011	50,751	34,825	12,795
Preferred Stock of subsidiary	1,285	1,285	—	—	—
Stockholders' equity	44,585	41,841	22,020	19,819	15,953

<sup>(1)</sup> 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.

<sup>(2)</sup> 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.

<sup>(3)</sup> 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:

*Allowance for Doubtful Accounts.* The carrying amount of accounts receivable is reduced by an allowance for doubtful accounts which is a valuation allowance that reflects management's best estimate of the amounts that will not be collected. Management regularly reviews all accounts receivable balances that exceed 60 days from the invoice date and based on an assessment of current credit worthiness, estimates the portion, if any, of the balance that will not be collected. This allowance was approximately 0.9%, 0.8% and 0.4% of revenue and approximately 4.2%, 3.9% and 1.5% of accounts receivable for 2002, 2001 and 2000, respectively.

*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 to determine whether current events and circumstances warrant adjustments to the carrying value. Effective January 1, 2002, the Company adopted SFAS 142. The Company hired an independent appraisal firm to test goodwill and permits, separately, for impairment. The report provided by the appraiser indicated that no impairment existed as of January 1, 2002. Goodwill and permits were again tested as of October 1, 2002, which also indicated no impairment. Effective January 1, 2002, the Company discontinued amortizing indefinite life intangible assets (goodwill and permits) as required by SFAS 142.

*Accrued Closure Costs.* Accrued closure costs represent a contingent environmental liability to clean up a facility in the event the Company ceases operations in an existing facility. 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, 2002, 2001 and 2000 have been approximately 2.2%, 2.1% and 1.5%, 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, external labor, analytical costs and processing costs, which are based on current market conditions. However, the Company has no intention, at this time, to close any of its 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 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 to 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, 2002, 2001 and 2000 (amounts in thousands, except for share amounts):

<u>(Consolidated)</u>	<u>2002</u>	<u>%</u>	<u>2001</u>	<u>%</u>	<u>2000</u>	<u>%</u>
Net Revenues	\$ 83,404	100.0	\$ 74,492	100.0	\$ 59,139	100.0
Cost of goods sold	<u>59,055</u>	<u>70.8</u>	<u>52,442</u>	<u>70.4</u>	<u>43,349</u>	<u>73.3</u>
Gross profit	24,349	29.2	22,050	29.6	15,790	26.7
Selling, general and administrative	17,909	21.5	16,631	22.3	13,977	23.7
Other income (expense):						
Interest income	16	—	29	—	41	.1
Interest expense	(2,903)	(3.5)	(3,038)	(4.1)	(2,132)	(3.6)
Interest expense-Warrants	—	—	(234)	(.3)	(344)	(.6)
Interest expense-financing fees	(1,044)	(1.2)	(2,732)	(3.6)	(181)	(.3)
Other	<u>(307)</u>	<u>(.4)</u>	<u>(46)</u>	<u>(.1)</u>	<u>247</u>	<u>.4</u>
Net income (loss)	2,202	2.6	(602)	(.8)	(556)	(1.0)
Preferred Stock dividends	<u>(158)</u>	<u>(.2)</u>	<u>(145)</u>	<u>(.2)</u>	<u>(206)</u>	<u>(.3)</u>
Net income (loss) applicable to Common Stock	<u>\$ 2,044</u>	<u>2.4</u>	<u>\$ (747)</u>	<u>(1.0)</u>	<u>\$ (762)</u>	<u>(1.3)</u>
Basic net income (loss) per common share	<u>\$ .06</u>		<u>\$ (.03)</u>		<u>\$ (.04)</u>	
Diluted net income (loss) per common share	<u>\$ .05</u>		<u>\$ (.03)</u>		<u>\$ (.04)</u>	

## Summary - Years Ended December 31, 2002 and 2001

### *Net Revenue*

Consolidated revenues increased \$8,912,000 or 12.0% for the year ended December 31, 2002, compared to the year ended December 31, 2001. This increase is principally attributable to an increase in the Nuclear Waste Management Services segment of approximately \$13,328,000 resulting from the favorable negotiation of certain contract changes, the completion of a large offsite mixed waste remediation project, and from growth in mixed waste revenues driven by the continued expansion within the new and unique mixed waste market. This increase also reflects the impact of a full year of additional revenues resulting from the acquisition of East Tennessee Materials & Energy Corporation (M&EC), effective June 25, 2001 and changes in pricing under the Oak Ridge Contracts. Consolidated revenues under the Oak Ridge Contracts for 2002 totaled \$9,664,000 or 11.6% of total revenues, as compared to \$6,300,000 or 8.5% for the year ended December 31, 2001. The backlog of stored waste within the nuclear segment at December 31, 2002, was approximately \$9,000,000 compared to \$5,873,000 at the end of 2001. The Company recognized during the second quarter of 2002 approximately \$2.2 million of revenue for work completed during the first six months of 2002, as a result of the favorable resolution of certain contract changes under the Oak Ridge Contracts. The pricing structure under the Oak Ridge Contracts was amended to allow M&EC to charge additional amounts for certain waste drums received primarily in connection with drum density and chemical content. The amended pricing structure applies to all waste received by M&EC under the Oak Ridge Contracts from January 1, 2002, and on all future waste received under the Oak Ridge Contracts. The Company also attempted to negotiate certain other surcharges under the Oak Ridge Contracts, which negotiations were not successful. See "Known Trends and Uncertainties" in this section for discussion on legal proceedings. Additionally, the Consulting Engineering Services segment experienced an increase of approximately \$297,000 which was primarily due to new projects that were awarded by nationally known cement companies. Offsetting these increases was a decrease in the Industrial Waste Management Services segment of approximately \$4,713,000 resulting from the downturn in the economy, the expiration of certain government contracts and the effect of the start-up of the new biological wastewater treatment system, which occurred over the first five months of 2002. Partly offsetting this decrease was an increase in revenue over the last six months of 2002 generated from the implementation of the biological wastewater treatment system.

### *Cost of Goods Sold*

Cost of goods sold increased \$6,613,000, or 12.6% for the year ended December 31, 2002, compared to the year ended December 31, 2001. This increase in cost of goods sold reflects principally an increase in the Nuclear Waste Management Services segment of approximately \$6,654,000 reflecting the increase in waste processing and disposal costs which directly correlates to the increase in revenues for this segment. Additionally, the Nuclear Waste Management Services segment experienced increased costs as it started up new processing lines, developed new processing techniques and added certain fixed costs in conjunction with its build-up. The Consulting Engineering Services segment also experienced an increase of approximately \$288,000 primarily due to increased staffing associated with the new projects awarded. Offsetting these increases, was a decrease in the Industrial Waste management Services segment of approximately \$329,000 which corresponds to the decrease in revenues for this segment, partially offset by additional operating costs associated with the development and installation of its new biological wastewater treatment technology.

### *Gross Profit*

Gross profit for the year ended December 31, 2002, increased to \$24,349,000, which as a percentage of revenue is 29.2%, reflecting a decrease over the 2001 percent of revenue of 29.6%. This decrease in gross percentage principally reflects a decrease in the Industrial Waste Management Services segment from 27.5% in 2001 to 19.2% in 2002. This decrease reflects the impact of the high fixed cost nature of the facilities in conjunction with reduced revenues in this segment, and the additional operating costs associated with the development and installation of the new wastewater treatment technology. Additionally, the Consulting Engineering Services segment experienced a decrease from 37.3% in 2001 to 34.4% in 2002. This decrease reflects the impact of additional staffing associated with the new projects, as noted above. Offsetting these decreases in gross profit percentage, was an increase in the Nuclear Waste Management Services segment from 31.9% in 2001 to 37.6% in 2002. This increase reflects the progress of the newly expanded mixed waste

facilities, increased activities under the Oak Ridge Contracts and the impact of the favorable negotiation of certain contract changes related to the Oak Ridge Contracts which were recorded in the second quarter of 2002. Furthermore, the gross profit percentage of 2001 was negatively affected by the low margin subcontract work performed by this segment during the completion of the M&EC facility.

#### *Selling, General and Administrative*

Selling, general and administrative expenses increased \$1,278,000 or 7.7% for the year ended December 31, 2002, as compared to the corresponding period for 2001. The increase in selling, general and administrative expense is principally due to the acquisition of M&EC, which reflects additional expense of \$1,248,000 for this facility, as compared to the year ended December 31, 2001. Additionally, these expenses increased due to the impact of increasing the sales and marketing efforts within the Nuclear Waste Management Services segment in anticipation of the growth in the mixed waste market. This increase also reflects the impact of an increase in bad debt expense due to the need for additional reserve of \$514,000 associated with certain contract changes related to the Oak Ridge Contracts. Offsetting these increases, is an amortization expense decrease, across all segments, of approximately \$1,573,000 due to the adoption of SFAS 142, which eliminated the amortization expense on indefinite-life intangible assets (see "Recently Adopted Accounting Standards" later in this section). As a percentage of revenue, selling, general and administrative expenses decreased to 21.5% for the year ended December 31, 2002, compared to 22.3% for the same period of 2001.

#### *Interest Expense*

Interest expense decreased approximately \$135,000 for the year ended December 31, 2002, as compared to the corresponding period of 2001. This decrease is a result of lower interest rates and decreased borrowing levels on our PNC revolving credit and term loan which resulted in a decrease in interest expense of \$145,000. Additionally, interest expense decreased by \$545,000 due to the elimination of interim financing related to the mixed waste construction activities and a decrease of \$85,000 was due to the reduction in debt with other creditors. These decreases were partially offset by an increase in interest expense of \$199,000 associated with new debt obligations incurred in conjunction with the acquisition of M&EC and an increase of approximately \$441,000 related to the expansion of our mixed waste facilities.

#### *Interest Expense - Warrants*

No Warrants were issued during 2002 and therefore no interest expense-Warrants was recorded during the twelve months ended December 31, 2002, as compared to \$234,000 for the twelve months ended December 31, 2001. This 2001 expense reflects the Black-Scholes pricing valuation for certain Warrants issued to Capital Bank pursuant to a promissory note ("3,000,000 Capital Promissory Note") and an unsecured promissory note ("750,000 Capital Promissory Note"). The notes required that certain Warrants be issued upon the initial execution of the note and at monthly intervals if the debt obligations to Capital Bank had not been repaid in full. During 2001, these debt obligations were repaid in full by a debt to equity exchange agreement and through the payment of principal and interest with the use of Warrant proceeds.

#### *Interest Expense - Financing Fees*

Interest expense-financing fees decreased approximately \$1,688,000 for the year ended December 31, 2002, as compared to the corresponding period of 2001. This decrease is principally due to a write-off of prepaid financing fees of \$1,440,000 during the third quarter of 2001 related to short-term construction financing within the mixed waste segment, which was paid in full in July 2001. Additionally, interest expense-financing fees decreased by \$601,000 due to the elimination of the above discussed short-term construction financing expense as amortized for the period from January through July 2001. Partially offsetting these decreases was an increase principally associated with our Senior Subordinated Notes issued to Associated Mezzanine Investors - PESI, L.P. ("AMI") and Bridge East Capital, L.P. ("BEC") of \$340,000 when compared to prior year.

#### *Other Expense*

Other expense increased by \$261,000 for the year ended December 31, 2002, as compared to the same period of 2001. This increase was primarily due to an increase in miscellaneous state income and franchise taxes recorded during the year and from an additional remediation reserve for the Perma-fix of Michigan, Inc. site,

which was recorded in the amount of \$228,000. See "Environmental Contingencies" in this section for further discussion on this reserve. This increase was offset by a one-time insurance settlement of \$233,000, received in the fourth quarter of 2002, related to the Perma-Fix of Memphis, Inc. facility.

#### *Income Tax*

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, 2002 and 2001, we had no federal income tax expense, due to permanent and temporary book-tax timing differences.

#### *Preferred Stock Dividends*

Preferred Stock dividends increased approximately \$13,000 for the year ended December 31, 2002, as compared to the year ended December 31, 2001. This increase is due to the accrual for preferred dividends on the Series B Preferred, issued in conjunction with the acquisition of M&EC. Partially offsetting the increase was a decrease due to the conversion of \$1,730,000 (1,730 preferred shares) of the Preferred Stock into our Common Stock in April 2001 pursuant to a conversion and exchange agreement with Capital Bank.

### **Summary – Years Ended December 31, 2001 and 2000**

#### *Net Revenues*

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 performed 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*

Cost of goods sold increased \$9,093,000, or 21.0% 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 \$4,216,000 and \$4,056,000, 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 \$12,066,000 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 \$2,721,000 and in the Consulting Engineering Services segment totaling approximately \$252,000. These decreases were in conjunction with the decrease in revenues in these segments mentioned above and cost reduction programs.

#### *Gross Profit*

Gross profit for the year ended December 31, 2001, increased to \$22,050,000, which as a percentage of revenue is 29.6%, reflecting an increase over the 2000 percent of revenue of 26.7%. 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*

Selling, general and administrative expenses increased \$2,654,000 or 19.0% 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 \$768,000 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 \$1,232,000 and the remaining increase of \$654,000 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 22.3% for the year ended December 31, 2001, compared to 23.7% for the same period of 2000.

#### *Interest Expense*

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*

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.

#### *Interest Expense Financing Fees*

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.



#### *Income Tax*

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 expense.

#### *Preferred Stock Dividends*

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.

#### **Liquidity and Capital Resources of the Company**

Our capital requirements consist of general working capital needs, scheduled principal payments on our debt obligations and capital leases, remediation projects and planned capital expenditures. Our capital resources consist primarily of cash generated from operations and funds available under our revolving credit facility and proceeds from issuance of our common stock. Our capital resources are impacted by changes in accounts receivable as a result of revenue fluctuation, economic trends, and collection activities.

At December 31, 2002, we had cash of \$212,000. This cash total reflects a decrease of \$648,000 from December 31, 2001, as a result of net cash provided by operations of \$5,613,000 offset by cash used in investing activities of \$4,757,000 (principally purchases of equipment, net totaling \$4,761,000) and cash used in financing activities of \$1,504,000 (consisting of proceeds from issuance of stock of \$512,000, offset by net debt repayments of \$2,016,000). The Company is in a net borrowing position and therefore attempts to move all excess cash balances immediately to the revolving credit facility, so as to reduce debt and interest expense. During 2002 the Company implemented a centralized cash management system which included new remittance lock boxes and resulted in accelerated collection activities and reduced cash balances, as idle cash is able to be moved without delay to the revolving credit facility.

#### *Operating Activities*

Accounts Receivable, net of allowances for doubtful accounts, totaled \$21,820,000, an increase of \$4,629,000 over the December 31, 2001, balance of \$17,191,000. This increase principally reflects the impact of the higher fourth quarter 2002 revenues within the Nuclear Waste Management Services segment, which resulted in an increase of \$6,848,000. Offsetting this was a decrease in the accounts receivable of the Industrial Waste Management Services segment, resulting from increased collection efforts, write-off of certain unreserved uncollectible accounts and reduced revenue levels during the fourth quarter of 2002.

As of December 31, 2002, total consolidated accounts payable was \$9,759,000, an increase of \$2,592,000 from the December 31, 2001, balance of \$7,167,000. This increase in accounts payable reflects the impact of increased revenues and operating activities, and the timing of payments in the fourth quarter of 2002 as compared to 2001. This increase is also reflective of unfinanced capital expenditures. During the fourth quarter, the accounts payable balance and its aging will increase during seasonal periods and in conjunction with increases in our accounts receivable balances or delays in collection of such accounts receivable balances.

Accrued Expenses as of December 31, 2002, totaled \$10,724,000, an increase of \$2,293,000 over the December 31, 2001, balance of \$8,431,000. This increase in accrued expenses reflects the increase in waste disposal and other operating related expenses which increased by \$1,407,000 over prior year. This increase reflects the impact of larger amounts of mixed waste being received and processed in conjunction with increased revenues in the Nuclear Waste Management Services segment. Additionally, the salaries and employee benefits expense accrual increased by \$742,000 when compared to prior year. This increase correlates to the increase in the number of employees in the Nuclear Waste Management Services segment as we increase our sales and marketing efforts and mixed waste processing activities.

The working capital position at December 31, 2002, was \$731,000, as compared to a working capital position of \$134,000 at December 31, 2001. The increase in this position of \$597,000 is principally a result of increased trade receivables associated with the growth in revenue and an increase in prepaid insurance relating to policy renewals late in the third quarter offset by an increase in accounts payable and other operating accruals.

#### *Investing Activities*

Our purchases of new capital equipment for the twelve-month period ended December 31, 2002, totaled approximately \$5,822,000. 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 operations of \$1,061,000, through various other lease financing sources and through Warrant proceeds raised during the year. We have budgeted capital expenditures of approximately \$6,500,000 for 2003, which includes an estimated \$1,393,000 to complete certain current projects committed at December 31, 2002, as well as other identified capital and permit compliance purchases. We anticipate funding these capital expenditures by a combination of lease financing, internally generated funds, and/or the proceeds received from Warrant exercises.

#### *Financing Activities*

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 ("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 of \$2,083,000 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, 2002, our excess availability under our revolving credit facility was \$4,108,000 based on our eligible receivables.

Pursuant to the Agreement, the Term Loan bears interest at a floating rate equal to the prime rate plus 1½% (5.75% at December 31, 2002), and the Revolving Credit at a floating rate equal to the prime rate plus 1% (5.25% at December 31, 2002). The loans are subject to a prepayment fee of 1½% in the first year, 1% in the second and third years and ¾% after the third anniversary until termination date.

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. 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 (1.44% at December 31, 2002). The value of the interest rate swap at January 1, 2001, was de minimus. At December 31, 2002, the market value of the interest rate swap was in an unfavorable value position of \$215,000 and was recorded as a liability. During the twelve months ended December 31, 2002, the Company recorded a loss on the interest rate swap of \$57,000 which offset against other comprehensive income on the Statement of Stockholders' Equity (see Note 6 to Notes to Consolidated Financial Statements).

Effective as of June 2002, the Company and PNC entered into Amendment No. 1 to the Agreement, which, among other things, increased the letter of credit commitment from \$500,000 to \$4,500,000 and provided for a \$4.0 million standby letter of credit. The standby Letter of Credit was issued to secure certain surety bond obligations. Pursuant to the terms of Amendment No. 1, as partial collateral for the issuance of the standby letter of credit, PNC will charge a reserve of approximately \$66,000 each month against the availability under

the Revolving Credit beginning July 15, 2002, until such time as the standby letter of credit is fully reserved. As of December 31, 2002, \$400,000 has been charged against availability. As a condition precedent to this Amendment No. 1, the Company paid a \$50,000 amendment fee to PNC.

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 \$1,538,000 at December 31, 2002, of which \$1,008,000 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 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 in one lump sum at the end of the term of the Unsecured Promissory Note (August 2005).

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 Company's short term loan.

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, which were valued at \$1,622,000 and recorded as a debt discount and are being amortized over the term of the Notes. The Warrants, as issued, also contain a cashless exercise provision. The Warrant Shares are registered under an S-3 Registration Statement that was declared effective on November 27, 2002.

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 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 accounts for the changes in redemption value immediately as they occur and the Company adjusts the carrying value of the security to equal the redemption value at the end of each reporting period. On December 31, 2002, the Put Option had no value and no liability was recorded.

M&EC 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 (7% on December 31, 2002) and payable in one lump sum at the end of the loan period. On December 31, 2002, the outstanding balance was \$4,125,000 including accrued interest of approximately \$531,000. 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.

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, 2002, the rate was 7%. On December 31, 2002, the outstanding balance was \$1,020,000 including accrued interest of approximately \$127,000.

The following table summarizes the Company's contractual obligations at December 31, 2002, and the effect such obligations are expected to have on its liquidity and cash flow in future periods, (in thousands):

<u>Contractual Obligations</u>	<u>Total</u>	<u>Payments due by period</u>			
		<u>Less than 1 year</u>	<u>1-3 years</u>	<u>4-5 years</u>	<u>After 5 years</u>
Long-term debt	\$ 30,515	\$ 3,373	\$ 25,294	\$ 1,848	\$ —
Operating leases	6,128	2,008	3,450	665	5
Total contractual obligations	<u>\$ 36,643</u>	<u>\$ 5,381</u>	<u>\$ 28,744</u>	<u>\$ 2,513</u>	<u>\$ 5</u>

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 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.

During 2002, 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. Dividends for the period January 1, 2002 through June 30, 2002, of approximately \$62,000 were paid in the form of 22,106 shares of Common Stock. The accrued dividends for the period July 1, 2002, through December 31, 2002, in the amount of approximately \$63,000 were paid in January 2003, in the form of 25,165 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.

During 2001, the Company completed a private placement offering of units (the "Offering") to accredited investors. Each unit was 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. 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.

In summary, we have continued to take steps to improve our operations as discussed above. However, with the acquisition of M&EC in 2001, the completion of M&EC's initial phase of construction and the ramp-up of the mixed waste segment, we incurred and assumed certain debt obligations and long-term liabilities, which had a short-term impact on liquidity. Additionally, reduced revenue levels, the start-up of the new wastewater treatment technology within the Industrial Waste Management Services segment and the utilization of working capital funds for capital spending purposes has contributed toward the negative impact on liquidity. However, as these projects became fully operational and the mixed waste segment continues to expand, our liquidity position demonstrated improvement during the last three quarters of 2002. If we are unable to continue to improve our operations, to successfully expand our mixed waste activities, and to continue profitability in the foreseeable future, such would have a material adverse effect on our liquidity position.

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

*Seasonality.* Historically the Company has experienced reduced revenues, 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 revenues and operating profits. Management expects this trend to continue in future years as this was evident in the four quarters of 2002.

*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 2002, and believes that this trend may continue into 2003.

*Significant contracts.* The Company's revenues are principally derived from numerous and varied customers. However, Perma-Fix Government Services ("PFGS") manages six contracts with the Defense Reutilization & Marketing Service, a sub-agency of the Department of Defense which accounted for 8.0% of total consolidated revenues in 2002, and M&EC operates under the Oak Ridge Contracts which contributed 11.6% of total consolidated revenues in 2002. As the newly constructed M&EC facility continues to enhance its processing capabilities and completes certain expansion projects and with the amended pricing structure under the Oak Ridge Contracts, the Company could see higher total revenue under the Oak Ridge Contracts. In February 2003, M&EC commenced legal proceedings against the general contractor under the Oak Ridge Contracts, seeking payment from Bechtel Jacobs of approximately \$4.3 million in surcharges relating to certain wastes that were treated by M&EC in 2001 and 2002 under the Oak Ridge Contracts. Bechtel Jacobs continues to deliver waste to M&EC for treatment, and M&EC continues to accept such waste. There is no guarantee of future business under the Oak Ridge Contracts, and the Oak Ridge Contracts may be terminated by either party at any time. Termination of these contracts could have a material adverse effect on the Company. 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.

As discussed under "BUSINESS – Dependence Upon a Single or Few Customers", PFD, a subsidiary of the Company has been awarded a subcontract and limited notice to proceed with post-treatment of the neutralized VX product called hydrolysate. This award is subject to PFD and the general contractor entering into definitive agreements. It is anticipated that under the definitive agreements, when finalized, there will be approximately 900,000 gallons of hydrolysate to be biologically treated by PFD, at an approximate value of \$9.0 million. It is anticipated that, if the agreements are completed, work by PFD to treat this waste will begin in the Fall of 2003 and will take approximately nine months to complete.

*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 the downturn 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, or that the cost of such insurance will not increase materially.

#### **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 stockholders 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 stockholders 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 stockholders 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 stockholders, 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 to Notes to Consolidated Financial Statements and a portion of its working capital line of credit to fund the corrective contributions to the 401(k) Plans described above.

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

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 \$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.

#### **Potential Acquisition**

The Company is in the process of negotiating to acquire from a trustee another mixed waste permitted facility which is currently in bankruptcy. As of the date of this report, no agreements have been entered into with the seller, and the Company does not know if it will be successful in acquiring this mixed waste facility. If the Company is successful, it is anticipated that the purchase price to be paid by the Company will be approximately \$6,000,000, payable in notes or a combination of notes and cash, with the notes secured certain by the assets of the acquired facility.

#### **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; 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.

We have budgeted for 2003 \$982,000 in environmental expenditures to comply with federal, state and local regulations in connection with remediation of certain contaminants 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 2003 to be approximately \$211,000 at the EPS site, \$307,000 at the PFM location, \$126,000 at the PFSG site and \$338,000 at the PFMI site. Additional funds will be required for the next one 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, 2002, the Company had accrued environmental liabilities totaling \$2,696,000, which reflects a decrease of \$838,000 from the December 31, 2001, balance of \$3,534,000. The decrease represents payments on remediation projects. The December 31, 2002, current and long-term accrued environmental balance is recorded as follows:

	PFD	PFMI	PFSG	PFM	Total
Current accrual	\$ 211,000	\$ 307,000	\$ 126,000	\$ 338,000	\$ 982,000
Long-term accrual	—	—	1,134,000	580,000	1,714,000
Total	<u>\$ 211,000</u>	<u>\$ 307,000</u>	<u>\$ 1,260,000</u>	<u>\$ 918,000</u>	<u>\$ 2,696,000</u>

#### 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 de minimus. At December 31, 2002, the market value of the interest rate swap was in an unfavorable value position of \$215,000 and was recorded as a liability. During the twelve months ended December 31, 2002, the Company recorded a loss on the interest rate swap of \$57,000 which offset other comprehensive income on the Statement of Stockholders' Equity (see Note 6 to Notes to Consolidated Financial Statements).

#### Recently Adopted Accounting Standards

The Company adopted the Financial Accounting Standards Board FASB Statements No. 141, *Business Combinations* ("SFAS 141"), and No. 142, *Goodwill and Other Intangible Assets* ("SFAS 142"), effective January 1, 2002. 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 required the Company to complete a transitional goodwill impairment test six months from the date of adoption. The Company was also required to reassess the useful lives of other intangible assets within the first interim quarter after adoption of SFAS 142. The Company hired an independent appraisal firm to complete its transitional evaluation of intangible assets for impairment, and the appraisal report indicated that no impairment existed as of January 1, 2002. The Company also completed its annual impairment test as of October 1, 2002, which also indicated no impairment to intangible assets. The Company has discontinued amortizing its indefinite-life intangible assets (goodwill and permits). Prior to January 1, 2002, goodwill and permits were amortized on a straight-line basis over ten to forty years.

Pursuant to the Company's adoption of SFAS 141 and 142, the Company changed its method of recording acquired permits in connection with business combinations. For all acquisitions prior to June 2001, the Company allocated the excess purchase price between goodwill and permits, based upon the percentage of revenue generated through permitted activities. For all acquisitions after May 2001, the Company believes that all of the excess purchase price should be attributed to the permit. The Company will expense as incurred any ongoing costs to maintain and renew its permits. These ongoing costs are significantly less than the initial costs to obtain a permit.

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 Principles 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 adoption of this pronouncement had no impact on the Company's financial position or results operations.

#### **Recent Accounting Pronouncements**

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 also 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.

SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities," issued in July 2002, addresses financial accounting and reporting for costs associated with exit or disposal activities. It nullifies EITF Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." SFAS No. 146 requires that a liability be recognized for the cost associated with an exit or disposal activity only when the liability is incurred, that is, when it meets the definition of a liability in the FASB conceptual framework. SFAS No. 146 also establishes fair value as the objective for initial measurement of liabilities related to exit or disposal activities. The Statement is effective for exit or disposal activities that are initiated after December 31, 2002. The

Company believes the adoption of SFAS No. 146 will not have a material impact on the Company's financial statements.

## 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.

### 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 maintain profitability 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;
- our possession of all necessary approvals, licenses and permits, and our ability to attain, renew, or receive certain approvals, licenses, permits, or patents;
- potential acquisition of another permitted mixed waste facility;
- no expectation of material future inflationary changes;
- the volume of hydrolysate expected to be created under the subcontract relating to the Newport Chemical Agent Disposal Facility;
- our potential advantage over our competitors due to our Bio-Fix process; and
- ability to fund budgeted capital expenditures for 2003;

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;
- termination of the Oak Ridge contracts as a result of our lawsuit against Bechtel Jacobs or otherwise;
- inability to maintain profitability on an annualized basis;
- 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.

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**

### **Index to Consolidated Financial Statements**

<b><u>Consolidated Financial Statements:</u></b>	<b><u>Page No.</u></b>
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Consolidated Balance Sheets as of December 31, 2002 and 2001	36
Consolidated Statements of Operations for the years ended December 31, 2002, 2001 and 2000	38
Consolidated Statements of Cash Flows for the years ended December 31, 2002, 2001 and 2000	39
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2002, 2001 and 2000	40
Notes to Consolidated Financial Statements	41
 <b><u>Financial Statement Schedule:</u></b>	
II Valuation and Qualifying Accounts for the years ended December 31, 2002, 2001 and 2000	87

### **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.

## **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, 2002 and 2001, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2002. 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, 2002 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

As discussed in the Summary of Significant Accounting Policies in the consolidated financial statements, on January 1, 2002, the Company adopted the provisions of Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets."

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

BDO Seidman, LLP  
Chicago, Illinois  
February 26, 2003

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
*As of December 31*

<u>(Amounts in Thousands, Except for Share Amounts)</u>	<u>2002</u>	<u>2001</u>
<b>ASSETS</b>		
Current assets:		
Cash	\$ 212	\$ 860
Restricted cash	20	20
Accounts receivable, net of allowance for doubtful accounts of \$1,212 and \$725, respectively	21,820	17,191
Inventories	682	756
Prepaid expenses	2,722	954
Other receivables	113	142
Total current assets	<u>25,569</u>	<u>19,923</u>
Property and equipment:		
Buildings and land	16,161	15,210
Equipment	29,125	26,915
Vehicles	2,616	2,120
Leasehold improvements	10,963	10,029
Office furniture and equipment	1,954	1,657
Construction in progress	4,325	4,382
	<u>65,144</u>	<u>60,313</u>
Less accumulated depreciation/amortization	<u>(15,219)</u>	<u>(11,940)</u>
Net property and equipment	49,925	48,373
Intangibles and other assets:		
Permits, net	20,759	20,639
Goodwill, net	6,525	6,509
Other assets	3,047	3,693
Total assets	<u><u>\$ 105,825</u></u>	<u><u>\$ 99,137</u></u>

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

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**CONSOLIDATED BALANCE SHEETS, CONTINUED**  
*As of December 31*

(Amounts in Thousands, Except for Share Amounts)	2002	2001
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 9,759	\$ 7,167
Current environmental accrual	982	1,202
Accrued expenses	10,724	8,431
Current portion of long-term debt	3,373	2,989
Total current liabilities	<u>24,838</u>	<u>19,789</u>
Environmental accruals	1,714	2,332
Accrued closure costs	4,929	4,919
Other long-term liabilities	1,332	814
Long-term debt, less current portion	27,142	28,157
Total long-term liabilities	<u>35,117</u>	<u>36,222</u>
Total liabilities	<u>59,955</u>	<u>56,011</u>
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 shares issued and outstanding, liquidation value \$1.00 per share (see Note 5)	1,285	1,285
Stockholders' equity:		
Preferred Stock, \$.001 par value; 2,000,000 shares authorized, 2,500 shares issued and outstanding,	—	—
Common Stock, \$.001 par value; 50,000,000 shares authorized, 35,326,734 and 35,008,005 shares issued, including 988,000 shares held as treasury stock, respectively	35	35
Additional paid-in capital	66,799	66,042
Accumulated deficit	(20,172)	(22,216)
Interest rate swap	(215)	(158)
	<u>46,447</u>	<u>43,703</u>
Less Common Stock in treasury at cost; 988,000 shares	<u>(1,862)</u>	<u>(1,862)</u>
Total stockholders' equity	<u>44,585</u>	<u>41,841</u>
Total liabilities and stockholders' equity	<u>\$105,825</u>	<u>\$ 99,137</u>

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



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

*For the years ended December 31*

(Amounts in Thousands, Except for Share Amounts)	2002	2001	2000
Net revenues	\$ 83,404	\$ 74,492	\$ 59,139
Cost of goods sold	<u>59,055</u>	<u>52,442</u>	<u>43,349</u>
Gross profit	24,349	22,050	15,790
Selling, general and administrative expenses	<u>17,909</u>	<u>16,631</u>	<u>13,977</u>
Income from operations	6,440	5,419	1,813
Other income (expense):			
Interest income	16	29	41
Interest expense	(2,903)	(3,038)	(2,132)
Interest expense-Warrants	—	(234)	(344)
Interest expense-financing fees	(1,044)	(2,732)	(181)
Other	<u>(307)</u>	<u>(46)</u>	<u>247</u>
Net income (loss)	2,202	(602)	(556)
Preferred Stock dividends	<u>(158)</u>	<u>(145)</u>	<u>(206)</u>
Net income (loss) applicable to Common Stock	<u><u>\$ 2,044</u></u>	<u><u>\$ (747)</u></u>	<u><u>\$ (762)</u></u>
<hr/>			
Net income (loss) per common share:			
Basic	<u><u>\$ .06</u></u>	<u><u>\$ (.03)</u></u>	<u><u>\$ (.04)</u></u>
Diluted	<u><u>\$ .05</u></u>	<u><u>\$ (.03)</u></u>	<u><u>\$ (.04)</u></u>
 Number of shares and potential common shares used in computing net income (loss) per share:			
Basic	<u><u>34,217</u></u>	<u><u>27,235</u></u>	<u><u>21,558</u></u>
Diluted	<u><u>42,618</u></u>	<u><u>27,235</u></u>	<u><u>21,558</u></u>

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

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
*For the years ended December 31*

(Amounts in Thousands)	2002	2001	2000
Cash flows from operating activities:			
Net income (loss)	\$ 2,202	\$ (602)	\$ (556)
Adjustments to reconcile net income (loss) to cash provided by (used in) operations:			
Depreciation and amortization	4,244	4,616	3,651
Provision for bad debt and other reserves	1,211	334	99
Loss (gain) on sale of plant, property and equipment	19	28	(122)
Issuance of Warrants for financing and services	—	234	389
Changes in assets and liabilities, net of effects from business acquisitions:			
Accounts receivable	(5,839)	(4,143)	(980)
Prepaid expenses, inventories and other assets	(252)	512	(2,515)
Accounts payable and accrued expenses	4,028	(1,183)	(193)
Net cash provided by (used in) operations	<u>5,613</u>	<u>(204)</u>	<u>(227)</u>
Cash flows from investing activities:			
Purchases of property and equipment, net	(4,761)	(4,081)	(3,170)
Proceeds from sale of plant, property and equipment	10	167	227
Change in restricted cash, net	(6)	(18)	295
Cash used for acquisition consideration	—	(10,083)	(2,500)
Net cash used in investing activities	<u>(4,757)</u>	<u>(14,015)</u>	<u>(5,148)</u>
Cash flows from financing activities:			
Borrowings of revolving loan and term note facility	78	921	3,731
Principal repayments of long term debt	(2,094)	(3,136)	(3,940)
Proceeds from issuance of long term debt	—	6,161	3,750
Proceeds from issuance of stock	512	10,635	1,516
Net cash (used in) provided by financing activities	<u>(1,504)</u>	<u>14,581</u>	<u>5,057</u>
(Decrease) increase in cash	(648)	362	(318)
Cash at beginning of period	860	498	816
Cash at end of period	<u>\$ 212</u>	<u>\$ 860</u>	<u>\$ 498</u>
Supplemental disclosure:			
Interest paid	\$ 2,569	\$ 2,656	\$ 1,772
Non-cash investing and financing activities:			
Issuance of Common Stock for services	120	63	236
Issuance of Common Stock for payment of dividends	125	184	214
Issuance of Common Stock for acquisition	—	2,916	—
Issuance of Preferred Stock of subsidiary for acquisition	—	1,285	—
Issuance of Warrants for services and financing	—	3,550	997
Interest rate swap valuation	57	158	—
Long-term debt incurred for purchase of property and equipment	1,061	517	642
Long-term debt incurred for acquisition	—	—	6,000
Long-term debt and accrued interest exchanged for Common Stock	—	3,144	—

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

**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		Additional Paid-in Capital	Interest Rate Swap	Accumulated Deficit	Common Stock Held in Treasury	Total Stockholders Equity
	Shares	Amount	Shares	Amount					
<b>Balance at December 31, 1999</b>	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 dividends	—	—	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
<b>Balance at December 31, 2000</b>	<u>4,187</u>	<u>\$ —</u>	<u>23,429,759</u>	<u>\$ 23</u>	<u>\$ 45,328</u>	<u>\$ —</u>	<u>\$ (21,469)</u>	<u>\$ (1,862)</u>	<u>\$ 22,020</u>
Comprehensive loss									
Net loss	—	—	—	—	—	—	(602)	—	(602)
Other Comprehensive loss:									
Interest rate swap	—	—	—	—	—	(158)	—	—	(158)
Comprehensive loss									(760)
Preferred Stock dividends	—	—	—	—	—	—	(145)	—	(145)
Issuance of Common Stock for Preferred Stock dividends	—	—	117,676	—	184	—	—	—	184
Issuance of Common Stock 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 Series 17	48	—	—	—	—	—	—	—	—
Debt for equity exchange	—	—	1,999,437	2	3,142	—	—	—	3,144
Issuance of Warrants for services and financing	—	—	—	—	3,784	—	—	—	3,784
Exercise of Warrants and Options	—	—	1,841,875	2	3,649	—	—	—	3,651
<b>Balance at December 31, 2001</b>	<u>2,500</u>	<u>\$ —</u>	<u>35,008,005</u>	<u>\$ 35</u>	<u>\$ 66,042</u>	<u>\$ (158)</u>	<u>\$ (22,216)</u>	<u>\$ (1,862)</u>	<u>\$ 41,841</u>
Comprehensive income									
Net income	—	—	—	—	—	—	2,202	—	2,202
Other comprehensive income (loss):									
Interest rate swap	—	—	—	—	—	(57)	—	—	(57)
Comprehensive income									2,145
Preferred Stock dividends	—	—	—	—	—	—	(158)	—	(158)
Issuance of Common Stock for Preferred Stock dividends	—	—	46,323	—	125	—	—	—	125
Issuance of Common Stock for cash and services	—	—	121,360	—	282	—	—	—	282
Exercise of Warrants and Options	—	—	151,046	—	350	—	—	—	350
<b>Balance at December 31, 2002</b>	<u>2,500</u>	<u>\$ —</u>	<u>35,326,734</u>	<u>\$ 35</u>	<u>\$ 66,799</u>	<u>\$ (215)</u>	<u>\$ (20,172)</u>	<u>\$ (1,862)</u>	<u>\$ 44,585</u>

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

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

**Notes to Consolidated Financial Statements**

**December 31, 2002, 2001 and 2000**

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**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), an environmental technology and knowhow company, 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
  - wastewater management services, including the collection, treatment, processing and disposal of hazardous and non-hazardous wastewater.
- Nuclear Waste Management Services, which includes:
  - treatment, storage, processing and disposal of mixed waste (which is both low-level radioactive and hazardous waste) which includes on and off-site waste remediation and processing;
  - nuclear and low-level radioactive waste treatment, processing and disposal; and
  - research and development of innovative ways to process low-level radioactive and mixed waste.
- 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, evaluate strategic acquisitions within both the nuclear and industrial segments, 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 2000 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"), Perma-Fix of Ft. Lauderdale, Inc. ("PFFL"), Perma-Fix of Orlando, Inc. ("PFO"), Perma-Fix of South Georgia, Inc. ("PFSG"), Perma-Fix of Michigan, Inc. ("PFMI"), and effective August 31, 2000, 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.

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**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.

**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, 2002 and 2001. In addition to this current asset, a trust fund of \$447,000, which is classified as a long term asset, increased \$5,000 at December 31, 2002, as compared to \$442,000 as of December 31, 2001. These restricted instruments reflect secured collateral relative to the various financial assurance instruments guaranteeing the standard Resource Conservation and Recovery Act of 1976 ("RCRA") closure bonding requirements for the PFFL treatment, storage and disposal ("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.

**Accounts Receivable**

Accounts receivable are customer obligations due under normal trade terms requiring payment within 30 or 60 days from the invoice date based on the customer type (government, broker, or commercial). Account balances are stated by invoice at the amount billed to the customer. Payments of accounts receivable are made directly to a lockbox and are applied to the specific invoices stated on the customer's remittance advise. The carrying amount of accounts receivable is reduced by an allowance for doubtful accounts which is a valuation allowance that reflects management's best estimate of the amounts that will not be collected. Management regularly reviews all accounts receivable balances that exceed 60 days from the invoice date and based on an assessment of current credit worthiness, estimates the portion, if any, of the balance that will not be collected.

**Inventories**

Inventories consist of 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, 2002, \$4,325,000 in current construction in progress projects. It is estimated that the Company will incur an additional \$1,393,000 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. Prior to our adoption of SFAS 142, effective January 1, 2002, goodwill had been amortized over 20 to 40 years and permits amortized over 10 to 20 years. Effective January 1, 2002, the Company discontinued amortizing its indefinite life intangible assets (goodwill and permits). Amortization expense approximated \$1,575,000, and \$948,000, for the years ended 2001 and 2000, respectively. We continually reevaluate the propriety of the carrying amount of permits and goodwill to determine whether current events and circumstances warrant adjustments to the carrying value and estimates of useful lives. Effective January 1, 2002, we adopted SFAS 142 and obtained an initial financial valuation of our intangible assets, which indicated no impairment to our indefinite life intangible assets. Our annual financial valuation was performed as of October 1, 2002, and also indicated no impairment.

### **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. For more information see Interest Rate Swap.

### **Net Revenues**

Revenues for services and reimbursable costs are recognized at the time services are rendered. Under certain agreements whereby the Company is contracted to perform only select services (excluding, for example, final disposal responsibilities) revenue is recognized on a percentage of completion basis. For the year ended 2002, our customer Bechtel-Jacobs accounted for revenues of approximately \$9,664,000 or 11.6% of our consolidated revenues. The contracts with Bechtel-Jacobs are terminable at any time by either party. See Note 12 - Commitments and Contingencies.

### **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 2002 was approximately \$3,006,000, as compared to \$1,881,000 and \$1,533,000 for 2001 and 2000, respectively.

### Stock-Based Compensation

The Company accounts for, and plans to continue accounting for, its stock-based employee compensation plans under the accounting provisions of APB Opinion No. 25, Accounting for Stock Issued to Employees, and has furnished the pro forma disclosures required under SFAS No. 123, Accounting for Stock-Based Compensation, and SFAS No. 148, Accounting for Stock-Based Compensation - Transition and Disclosure. See Note 11 for additional disclosures on the Company's stock-based employee compensation plans.

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 2002, 2001, and 2000, respectively: no dividend yield for all years; an expected life of ten years for all years; expected volatility of 30.51%, 36.92% and 39.6%, and risk-free interest rates of 2.93%, 4.60% and 6.08%.

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):

	2002	2001	2000
Net income (loss) as reported	\$ 2,044	\$ (747)	\$ (762)
Deduct: Total Stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(407)	(276)	(256)
Pro forma net income (loss)	<u>\$ 1,637</u>	<u>\$ (1,023)</u>	<u>\$ (1,018)</u>
Earnings per share			
Basic - as reported	<u>\$ .06</u>	<u>\$ (.03)</u>	<u>\$ (.04)</u>
Basic - pro-forma	<u>\$ .05</u>	<u>\$ (.04)</u>	<u>\$ (.05)</u>
Diluted - as reported	<u>\$ .05</u>	<u>\$ (.03)</u>	<u>\$ (.04)</u>
Diluted - pro forma	<u>\$ .04</u>	<u>\$ (.04)</u>	<u>\$ (.05)</u>

### 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.

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, 2002, 2001 and 2000:



(Amounts in Thousands, Except for Share Amounts)	2002	2001	2000
Net income (loss) applicable to Common Stock - basic	\$ 2,044	\$ (747)	\$ (762)
Effect of dilutive securities:			
Preferred Stock dividends	158	—	—
Net income (loss) applicable to Common Stock - diluted	<u>\$ 2,202</u>	<u>\$ (747)</u>	<u>\$ (762)</u>
Basic net income (loss) per share	<u>\$ .06</u>	<u>\$ (.03)</u>	<u>\$ (.04)</u>
Diluted net income (loss) per share	<u>\$ .05</u>	<u>\$ (.03)</u>	<u>\$ (.04)</u>
Weighted average shares outstanding - basic	34,217	27,235	21,558
Potential shares exercisable under stock option plans	1,070	—	—
Potential shares upon exercise of Warrants	5,664	—	—
Potential share upon conversion of Preferred Stock	1,667	—	—
Weighted average shares outstanding - diluted	<u>42,618</u>	<u>27,235</u>	<u>21,558</u>

Potential shares excluded from above weighted average share calculations due to their antidilutive effect include:

Upon exercise of options	186,800	2,966,805	2,090,949
Upon exercise of Warrants	—	14,468,052	6,438,582
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.

### 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, the fair value of long-term debt was not significantly different from the stated value at December 31, 2002 and 2001.

### Recently Adopted Accounting Standards

The Company adopted the Financial Accounting Standards Board FASB Statements No. 141, *Business Combinations* ("SFAS 141"), and No. 142, *Goodwill and Other Intangible Assets* ("SFAS 142"), effective January 1, 2002. 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 (see Note 3 below), that the Company reclassify the carrying amounts of intangible assets and goodwill based on the criteria in SFAS 141.

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 Principles 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 adoption of this pronouncement had no impact on the Company's financial position or results of operations.

#### **Recent Accounting Pronouncements**

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 also 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.

SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities," issued in July 2002, addresses financial accounting and reporting for costs associated with exit or disposal activities. It nullifies EITF Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." SFAS No. 146 requires that a liability be recognized for the cost associated with an exit or disposal activity only when the liability is incurred, that is, when it meets the definition of a liability in the FASB conceptual framework. SFAS No. 146 also establishes fair value as the objective for initial measurement of liabilities related to exit or disposal activities. The Statement is effective for exit or disposal activities that are initiated after December 31, 2002. The Company believes the adoption of SFAS No. 146 will not have a material impact on the Company's financial statements.

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#### **NOTE 3**

#### **GOODWILL AND OTHER INTANGIBLE ASSETS**

The Company adopted SFAS 142 January 1, 2002. 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 required the Company to complete a transitional goodwill impairment test six months from the date of adoption. The Company was also required to reassess the useful lives of other intangible assets within the first interim quarter after adoption of SFAS 142. The Company hired an independent appraisal firm to test goodwill and permits, separately, for impairment. The report provided by the appraiser for the transitional period indicated that no impairment existed as of January 1, 2002. The Company also completed its annual impairment test as of October 1, 2002, which also indicated no impairment to intangible assets. The Company has discontinued amortizing its indefinite-life intangible assets (goodwill and permits). Prior to January 1, 2002, goodwill and permits were amortized on a straight-line basis over ten to forty years.

Pursuant to the Company's adoption of SFAS 141 and 142, the Company changed its method of recording acquired permits in connection with business combinations. For all acquisitions prior to June 2001, the Company allocated the excess purchase price between goodwill and permits, based upon the percentage of revenue generated through permitted activities. For all acquisitions after June 2001, the Company believes that all of the excess purchase price should be attributed to the permit. The Company will expense as incurred any ongoing costs to maintain and renew its permits. These ongoing costs are significantly less than the initial costs to obtain a permit.

The following table shows results assuming discontinuation of amortization beginning January 1, 2000:

(Amounts in Thousands, Except for Share Amounts)	2002	2001	2000
Net income (loss)	\$ 2,044	\$ (747)	\$ (762)
Goodwill amortization	—	315	315
Permit amortization	—	1,260	633
Adjusted net income	<u>\$ 2,044</u>	<u>\$ 828</u>	<u>\$ 186</u>
Net income (loss) per share - basic	\$ .06	\$ (.03)	\$ (.04)
Goodwill amortization	—	.01	.02
Permit amortization	—	.05	.03
Adjusted net income (loss) per share - basic	<u>\$ .06</u>	<u>\$ .03</u>	<u>\$ .01</u>
Net income (loss) per share - diluted	\$ .05	\$ (.03)	\$ (.04)
Goodwill amortization	—	.01	.02
Permit amortization	—	.04	.03
Adjusted net income (loss) per share - diluted	<u>\$ .05</u>	<u>\$ .02</u>	<u>\$ .01</u>

The following table is a summary of changes in the carrying amount of goodwill for the years ended December 31, 2001 and 2002 (amounts in thousands). The Company's Nuclear Waste segment has been excluded as it has no goodwill recorded.

	Industrial Waste Segment	Engineering Segment	Total
Balance as of January 1, 2001	\$ 5,467	\$ 1,373	\$ 6,840
Reclass of accumulated amortization	(16)	—	(16)
Amortization during the year	(271)	(44)	(315)
Balance as of December 31, 2001	5,180	1,329	6,509
Reclass of accumulated amortization	16	—	16
Amortization during the year	—	—	—
Balance as of December 31, 2002	<u>\$ 5,196</u>	<u>\$ 1,329</u>	<u>\$ 6,525</u>

The following table is a summary of changes in the carrying amount of permits for the years ended December 31, 2001 and 2002 (amounts in thousands). The Company's Engineering segment has been excluded as it has no permits recorded.

	Industrial Waste Segment	Nuclear Waste Segment	Total
Balance as of January 1, 2001	\$ 6,763	\$ 6,575	\$ 13,338
Permits acquired	—	8,443	8,443
Permits in progress	102	—	102
Reclass of accumulated amortization	16	—	16
Amortization during the year	(447)	(813)	(1,260)
Balance as of December 31, 2001	6,434	14,205	20,639
Permits acquired	—	63	63
Permits in progress	73	—	73
Reclass of accumulated amortization during the year	(16)	—	(16)
Amortization during the year	—	—	—
Balance as of December 31, 2002	<u>\$ 6,491</u>	<u>\$ 14,268</u>	<u>\$ 20,759</u>

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**NOTE 4**  
**ACQUISITIONS**

**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 stockholders 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 stockholders 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 stockholders 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 stockholders, 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.

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 performed a preliminary purchase price allocation based upon information available as of this date. Accordingly, the purchase price was 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 resulted in an excess purchase price assigned to intangible permits of \$9,149,000. The results of the acquired business has been included in the consolidated financial statements since the date of acquisition. In conjunction with the final purchase price allocation, completed in June 2002, the Company recognized additional accrued liabilities, of \$63,000, as permits.

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, 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.

(Amount in thousands, except per share amounts (unaudited))	Year Ended December 31,	
	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.

#### **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 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 performed a preliminary purchase price allocation based upon information available as of this date. Accordingly, the purchase price was preliminarily allocated to the net assets acquired and net liabilities assumed based on their estimated fair values. 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. Included in this final purchase allocation were acquired assets of approximately \$9,165,000 and assumed liabilities of approximately \$3,527,000 against total

consideration of \$8,500,000. This final purchase allocation resulted in an excess purchase price over the fair value of the net assets acquired of \$2,920,000 which was assigned to permits. The results of the acquired business have been included in the consolidated financial statements since the date of acquisition.

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**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, which were issued and outstanding as of December 31, 2002.

**Series 14 Preferred**

On January 1, 2001, 1,769 shares of the Series 14 Preferred (formerly Series 3 Preferred and Series 11 Preferred) were issued and outstanding. 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 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.

**Series 15 Preferred**

On January 1, 2001, 616 shares of the Series 15 Preferred (formerly Series 4 Preferred, Series 6 Preferred, Series 8 Preferred and Series 12 Preferred) were issued and outstanding. 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 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.

**Series 16 Preferred**

On January 1, 2001, 1,802 shares of the Series 16 Preferred (formerly Series 10 Preferred and Series 13 Preferred) were issued and outstanding. 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 exchanged. On April 6, 2001, Capital Bank exchanged the 1,797 outstanding shares of Series 16 Preferred into 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 4% per annum which dividends were payable semiannually when 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.

### **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 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, or Series 16 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 \$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 5% per annum which dividends are payable semiannually when and as declared by the Board of Directors. During 2002, accrued dividends on the Series 17 Preferred of approximately \$125,000 were paid in the form of 47,271 shares of Common Stock, of which 25,165 were issued in January 2003.

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.

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 of 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.



### 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.

### Series B Preferred Stock

As partial consideration of the M&EC Acquisition (see Note 4), M&EC issued shares of its Series B Preferred Stock to stockholders of M&EC having a stated value of approximately \$1,285,000. No other shares of M&EC's Series B Preferred Stock are outstanding. 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. During 2002, the Company accrued approximately \$33,000 in dividends for the Series B Preferred Stock.

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### NOTE 6

#### LONG-TERM DEBT

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

	<u>2002</u>	<u>2001</u>
<b>Revolving Credit</b> 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% (5.25% at December 31, 2002), balance due in December 2005.	\$ 8,742	\$ 7,663
<b>Term Loan</b> 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 1½% (5.75% at December 31, 2002).	5,083	6,083
<b>Three promissory notes</b> 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 first three years and 7% for remaining two years.	1,538	2,495
<b>Unsecured promissory note</b> dated August 31, 2000, payable in lump sum in August 2005, interest paid annually at 7%.	3,500	3,500
<b>Senior subordinated notes</b> 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 December 31, 2002 and 2001, of \$1,163 and \$1,487, respectively.	4,462	4,138
<b>Promissory note</b> dated June 25, 2001, payable in semiannual installments on June 30 and December 31 through December 31, 2008, variable interest accrues at the applicable law rate determined under the IRS Code (7.0% on December 31, 2002) and is payable in lump sum at the end of installment period.	3,594	3,634

**Installment agreement** dated June 25, 2001, payable in semiannual installments on June 30 and December 31 through December 31, 2008, variable interest accrues at the applicable law rate determined under the IRS Code (7.0% on December 31, 2002) and is payable in lump sum at the end of installment period.

	893	903
Various capital lease and promissory note obligations, payable 2003 to 2007, interest at rates ranging from 5.2% to 17.9%.	<u>2,703</u>	<u>2,730</u>
	30,515	31,146
Less current portion of long-term debt	<u>3,373</u>	<u>2,989</u>
	<u>\$ 27,142</u>	<u>\$ 28,157</u>

### **Revolving Credit and Term Loan Agreement**

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 ("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 of \$2,083,000 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, 2002, our excess availability under our revolving credit facility was \$4,108,000 based on our eligible receivables.

Pursuant to the Agreement, the Term Loan bears interest at a floating rate equal to the prime rate plus 1½%, and the Revolving Credit at a floating rate equal to the prime rate plus 1%. The loans are subject to a prepayment fee of 1½% in the first year, 1% in the second and third years and ¾% after the third anniversary until termination date.

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. 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 (1.44% at December 31, 2002). The value of the interest rate swap at January 1, 2001, was de minimis. At December 31, 2002, the market value of the interest rate swap was in an unfavorable value position of \$215,000 and was recorded as a liability. During the twelve months ended December 31, 2002, the Company recorded a loss on the interest rate swap of \$57,000 which offset against other comprehensive income on the Statement of Stockholders' Equity.

Effective as of June 2002, the Company and PNC entered into Amendment No. 1 to the Agreement, which, among other things, increased the letter of credit commitment from \$500,000 to \$4,500,000 and provided for a \$4.0 million standby letter of credit. The standby Letter of Credit was issued to secure certain surety bond obligations. Pursuant to the terms of Amendment No. 1, as partial collateral for the issuance of the standby letter of credit, PNC will charge a reserve of approximately \$66,000 each month against the availability under the Revolving Credit beginning July 15, 2002, until such time as the standby letter of credit is fully reserved. As of December 31, 2002, \$400,000 has been charged against availability. As a condition precedent to this Amendment No. 1, the Company paid a \$50,000 amendment fee to PNC.

### **Three Promissory Notes**

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 \$1,538,000 at December 31, 2002, of which \$1,008,000 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.

### **Unsecured Promissory Note**

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 in one lump sum at the end of the term of the Unsecured Promissory Note (August 2005).

### **Senior Subordinated Note**

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 Company's short term loan.

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, which were valued at \$1,622,000 and recorded as a debt discount and are being amortized over the term of the Notes. The Warrants, as issued, also contain a cashless exercise provision. The Warrant Shares are registered under an S-3 Registration Statement that was declared effective on November 27, 2002.

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 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 accounts for the changes in redemption value as they occur and the Company adjusts the carrying value of the security to equal the redemption value at the end of each reporting period. On December 31, 2002, the Put Option had no value and no liability was recorded.

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. 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 \$1.5 million.

#### **Promissory Note**

M&EC 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 (7% on December 31, 2002) and payable in one lump sum at the end of the loan period. On December 31, 2002, the outstanding balance was \$4,125,000 including accrued interest of approximately \$531,000. 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.

#### **Installment Agreement**

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, 2002, the rate was 7%. On December 31, 2002, the outstanding balance was \$1,020,000 including accrued interest of approximately \$127,000.

The aggregate approximate amount of the maturities of long-term debt maturing in future years as of December 31, 2002, is \$3,373,000 in 2003; \$2,591,000 in 2004; \$16,867,000 in 2005; \$5,836,000 in 2006; \$1,061,000 in 2007, and \$787,000, in 2008.

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#### **NOTE 7**

#### **ACCRUED EXPENSES**

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

	2002	2001
Salaries and employee benefits	\$ 3,084	\$ 2,342
Accrued sales, property and other tax	1,032	735
Waste disposal and other operating related expenses	6,247	4,840
Other	361	514
Total accrued expenses	<u>\$ 10,724</u>	<u>\$ 8,431</u>

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**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 2002, the accrued long-term closure cost increased by \$10,000 to a total of \$4,929,000 as compared to the 2001 total of \$4,919,000. This increase is principally a result of normal inflation factor increases.

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**NOTE 9****ENVIRONMENTAL LIABILITIES**

The Company has four remediation projects, which are currently in progress at four 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 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 due to the stringent operational procedures instituted at the facilities after they have been acquired by the Company.

At December 31, 2002, the Company had accrued environmental liabilities totaling \$2,696,000, which reflects a decrease of \$838,000 from the December 31, 2001, balance of \$3,534,000. The net decrease principally represents payments on remediation projects. The December 31, 2002 current and long-term accrued environmental balance is recorded as follows:

	<u>PFD</u>	<u>PFMI</u>	<u>PFSG</u>	<u>PFM</u>	<u>Total</u>
Current accrual	\$ 211,000	\$ 307,000	\$ 126,000	\$ 338,000	\$ 982,000
Long-term accrual	<u>—</u>	<u>—</u>	1,134,000	580,000	1,714,000
Total	<u>\$ 211,000</u>	<u>\$ 307,000</u>	<u>\$ 1,260,000</u>	<u>\$ 918,000</u>	<u>\$ 2,696,000</u>

**PFD**

In June 1994, the Company acquired from Quadrex Corporation and/or a subsidiary of Quadrex Corporation (collectively, "Quadrex") three treatment, storage and disposal ("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 to three years after approval by the appropriate governmental authorities of the final remedial process. For the year ended December 31, 2002, the Company incurred \$34,000 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 \$211,000, representing the remaining reserve balance, of which the Company anticipates spending during 2003.

PFD has filed a lawsuit for contribution in connection with the remediation of the EPS site against the owners of the Leased Property and the parties that owned EPS prior to its acquisition by Quadrex. Recently, PFD and the defendants entered into an agreement in principal to settle this lawsuit, and under the terms of this settlement the defendants would pay PFD \$400,000. This settlement is subject to the parties entering into definitive settlement documents.

**PFMI**

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 years, and anticipates completion of such activities during 2003. For the year ended December 31, 2002, the Company incurred \$856,000 in remedial costs which reduced the reserve. The Company's estimate of the potential liability at December 31, 2002, for the PFMI remediation is \$307,000, of which the Company anticipates spending in 2003.

**PFSG**

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, 2002, the Company incurred \$103,000 in environmental costs which reduced the reserve. The Company's estimate of the potential liability at December 31, 2002, for the PFSG remediation is \$1,260,000, of which the Company anticipates spending \$126,000 during 2003, with the remaining \$1,134,000 to be spent over the next five (5) to seven (7) years.

**PFM**

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, 2002, the Company incurred \$56,000 in remedial costs which reduced the reserve. The Company's estimate of the potential liability at December 31, 2002, for completion of this project is \$918,000, of which the Company anticipates spending \$338,000 in 2003 and the remaining \$580,000 over the next three to five 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 from 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**

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):

	<u>2002</u>	<u>2001</u>
Deferred tax assets:		
Net operating losses	\$ 7,887	\$ 8,381
Environmental reserves	1,240	967
Impairment of assets	7,611	7,611
Other	471	175
Valuation allowance	<u>(10,195)</u>	<u>(10,825)</u>
Deferred tax assets	7,014	6,309
Deferred tax liabilities:		
Depreciation and amortization	(7,014)	(6,124)
Other	<u>—</u>	<u>(185)</u>
Deferred tax liabilities	(7,014)	(6,309)
Net deferred tax asset (liability)	<u>\$ —</u>	<u>\$ —</u>

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):

	<u>2002</u>	<u>2001</u>	<u>2000</u>
Tax expense (benefit) at statutory rate	\$ 749	\$ (205)	\$ (189)
Goodwill amortization	—	440	241
Other	(119)	(651)	100
Deferred tax assets acquired	—	(1,910)	(3,534)
Increase (decrease) in valuation allowance	<u>(630)</u>	<u>2,326</u>	<u>3,382</u>
Provision for income taxes	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

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 (decreased) by approximately \$(630,000), \$2,326,000, and \$3,382,000 for the years ended December 31, 2002, 2001, and 2000, 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, 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 \$23,200,000 at December 31, 2002. These net operating losses can be carried forward and applied against future taxable income, if any, and expire in the years 2007 through 2022. 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. 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 times per year and that the exercise price per share shall be 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.

<u>Purchase Period</u>	<u>Proceeds</u>	<u>Shares Purchased</u>
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
January 1 - June 30, 2002	94,000	42,917
July 1 - December 31, 2002	92,000	43,243

The shares for the purchase period ending December 31, 2002, were purchased in January 2003.



### **Employment Options**

During October 1997, Dr. Centofanti entered into a three 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 \$2.50 per share, and (iii) after three 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 equal to 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 to purchase up to 5,000 shares of Common Stock for each outside director of the Company upon initial election and each re-election. The plan also provides for the grant of additional options to purchase up to 10,000 shares of Common Stock on the foregoing terms to each outside director upon initial election to the Board. 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. 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 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 65% or 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 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.

A summary of the status of options under the plans as of December 31, 2002, 2001 and 2000 and changes during the years ending on those dates is presented below:

	2002		2001		2000	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
<b><u>Performance Equity Plan:</u></b>						
Balance at beginning of year	174,005	\$ 2.14	251,149	\$ 2.33	260,149	\$ 2.28
Exercised	(78,837)	2.84	(10,000)	1.00	—	—
Forfeited	(8,068)	3.02	(67,144)	2.99	(9,000)	1.25
Balance at end of year	<u>87,100</u>	1.43	<u>174,005</u>	2.14	<u>251,149</u>	2.33
Options exercisable at year end	78,500	1.45	156,805	2.24	213,748	2.53
<b><u>Non-qualified Stock Option Plan:</u></b>						
Balance at beginning of year	2,237,800	\$ 1.50	1,319,800	\$ 1.33	837,800	\$ 1.37
Granted	—	—	918,000	1.75	510,000	1.27
Exercised	(21,400)	1.31	—	—	—	—
Forfeited	(147,500)	1.48	—	—	(28,000)	1.26
Balance at end of year	<u>2,068,900</u>	1.51	<u>2,237,800</u>	1.50	<u>1,319,800</u>	1.33
Options exercisable at year end	1,085,500	1.42	788,900	1.37	542,000	1.44
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	0.79
<b><u>Outside Directors Stock Option Plan:</u></b>						
Balance at beginning of year	255,000	\$ 2.34	225,000	\$ 2.31	210,000	\$ 2.36
Granted	40,000	2.73	30,000	2.59	15,000	1.69
Forfeited	(45,000)	3.02	—	—	—	—
Balance at end of year	<u>250,000</u>	2.28	<u>255,000</u>	2.34	<u>225,000</u>	2.31
Options exercisable at year end	225,000	2.25	240,000	2.32	225,000	2.31
Weighted average fair value of options granted during the year at exercise prices which equal market price of stock at date of grant	40,000	1.27	30,000	1.47	15,000	1.06

The following table summarizes information about options under the plan outstanding at December 31, 2002:

Description and Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding at Dec. 31, 2002	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Outstanding at Dec. 31, 2002	Weighted Average Exercise Price
<b><u>Performance Equity Plan:</u></b>					
1993 Awards (\$5.25)	6,500	0.8 years	\$ 5.25	6,500	\$ 5.25
1996 Awards (\$1.00)	40,000	3.4 years	1.00	40,000	1.00
1998 Awards (\$1.25)	40,600	5.8 years	1.25	32,000	1.25
	<u>87,100</u>	4.3 years	1.43	<u>78,500</u>	1.45
<b><u>Non-qualified Stock Option Plan:</u></b>					
1994 Awards (\$4.75)	300	1.2 years	\$ 4.75	300	\$ 4.75
1995 Awards (\$2.88)	85,000	2.0 years	2.88	85,000	2.88
1996 Awards (\$1.00)	270,000	3.4 years	1.00	270,000	1.00
1997 Awards (\$1.375)	229,000	4.3 years	1.38	229,000	1.38
1998 Awards (\$1.25)	195,000	5.8 years	1.25	156,000	1.25
2000 Awards (\$1.25-\$1.50)	438,000	7.3 years	1.26	175,200	1.26
2001 Awards (\$1.75)	851,600	8.3 years	1.75	170,000	1.75
	<u>2,068,900</u>	6.5 years	1.51	<u>1,085,500</u>	1.42
<b><u>Outside Directors Stock Option Plan:</u></b>					
1994 Awards (\$3.00 - \$3.22)	45,000	1.8 years	3.04	45,000	3.04
1995 Awards (\$3.25)	20,000	2.0 years	3.25	20,000	3.25
1996 Awards (\$1.75)	35,000	3.9 years	1.75	35,000	1.75
1997 Awards (\$2.125)	15,000	4.9 years	2.13	15,000	2.13
1998 Awards (\$1.375)	15,000	5.4 years	1.38	15,000	1.38
1999 Awards (\$1.2188 - \$1.25)	35,000	6.7 years	1.24	35,000	1.24
2000 Awards (\$1.688)	15,000	8.0 years	1.69	15,000	1.69
2001 Awards (\$2.43 - \$2.75)	30,000	8.6 years	2.59	30,000	2.59
2002 Awards (\$2.58 - \$2.98)	40,000	9.6 years	2.73	15,000	2.98
	<u>250,000</u>	5.6 years	2.28	<u>225,000</u>	2.25

## 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 751,250 shares are currently outstanding exercise prices from \$1.81 to \$2.50 per share.
- During 1999, the Company entered into a consulting agreement for certain investor relations services whereby we agreed to pay a consulting fee and issued two Common Stock purchase Warrants for an aggregate of up to 480,000 shares of Common Stock exercisable at exercise prices from \$1.20 to \$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 issued 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 for an aggregate of 610,000 shares of Common Stock at exercise prices from \$1.50 to \$1.75 per share.
- 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 at an exercise 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 Warrants for an aggregate amount of up to 1,020,000 shares of Common Stock to Capital Bank, exercisable at exercise prices from \$1.42 to \$1.97 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 exercisable at exercise prices from \$1.44 to \$1.46 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 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 at an exercise price of \$1.75 per share.
- 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 exercisable at exercise prices from \$1.44 to \$1.50.

The Company issued no warrants in 2002. The Black-Scholes valuation of all warrants issued during 2001 was approximately \$3,784,000, using the following weighted average assumptions: no dividend yield, an expected life ranging from three to seven years, expected volatility ranging from 25.0% to 53.5% and a risk-free interest rate of 4.25% to 4.99%. During 2002, a total of 55,000 Warrants were exercised for proceeds in the amount of \$110,000 and 1,500 Warrants expired. 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.

The following details the Warrants currently outstanding as of December 31, 2002:

<u>Warrant Series</u>	<u>Number of Underlying Shares</u>	<u>Exercise Price</u>	<u>Expiration Date</u>
Class D Preferred Stock Warrants	751,250	\$1.81 - \$2.50	6/03 - 7/03
Consulting Warrants	1,260,000	\$1.20 - \$2.35	4/03 - 1/05
PNC Financing Warrants	1,283,332	\$1.44	12/05
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	<u>1,609,858</u>	\$1.44 - \$1.50	7/06 - 7/08
	<u>14,061,552</u>		

#### **Shares Reserved**

At December 31, 2002, we have reserved approximately 18.8 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.)

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**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 \$197,000 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. PFD filed a lawsuit against those parties that own the Leased Property and that operated the Leased Property prior to being sold to Quadrex for contributions relating to the remediation of the Leased Property. PFD and the defendants have agreed in principal to settle the lawsuit, subject to finalization and execution of definitive settlement agreements. Under the proposed settlement, the defendants would pay PFD \$400,000 towards remediation of the Leased Property.

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. During the second quarter of 2002 PFMI, and other PRPs entered into an agreement to settle the suit. PFMI will pay approximately \$153,000 of the total settlement of which the total amount was accrued in September 2002. The settlement agreement was finalized in October 2002, and provides that the Company will pay its portion of the settlement over a twelve month period beginning in March 2003.

Patrick Sullivan ("P. Sullivan"), the son of a former member of our Board of Directors, Thomas P. Sullivan ("Mr. Sullivan"), was employed by a subsidiary of the Company, Perma-Fix of Orlando, Inc. ("PFO"), as an executive and/or general manager from the date of the Company's acquisition of PFO in June 1999 to June 2002, when he terminated his employment to go to work for a competitor of PFO in Orlando, Florida. P. Sullivan is subject to an agreement with the Company that provides, in part, that P. Sullivan would not solicit customers, suppliers or employees of the Company or PFO for a period of two years after termination of his employment. The Company has been advised that P. Sullivan violated the agreement and his duties to the Company and PFO prior to and after he terminated his employment with PFO. P. Sullivan reimbursed the Company for certain personal expenses charged to, and paid by, the Company after the Company notified P. Sullivan of the claims. In December 2002, the Company filed a lawsuit against P. Sullivan in the circuit court of the Ninth Judicial Circuit in Orange County, Florida, for injunction relief and damages related to the above. P. Sullivan has denied the allegations. Mr. Sullivan has denied committing any breach of his fiduciary duties to the Company in connection with these alleged actions by his son.

In October 2002, the Company's subsidiary Perma-Fix of Memphis, Inc. ("PFM"), a discontinued operation, entered into a settlement agreement with Mid-South Industrial, Inc. and CNA Insurance Company to settle a lawsuit PFM filed seeking damages resulting from an explosion and fire which occurred in January 1997. Under the settlement agreement PFM received approximately \$233,000 in October 2002, which was recorded as other income in the fourth quarter of 2002.

On February 24, 2003, East Tennessee Materials and Energy Corporation ("M&EC"), a subsidiary of Perma-Fix Environmental Services, Inc., commenced legal proceedings against Bechtel Jacobs Company, LLC, in the chancery court for Knox County, Tennessee, seeking payment from Bechtel Jacobs of approximately \$4.3 million in surcharges relating to certain wastes that were treated by M&EC during 2001 and 2002. M&EC is operating primarily under three subcontracts with Bechtel Jacobs, which were awarded under contracts between Bechtel Jacobs and the U.S. Department of Energy. M&EC and Bechtel Jacobs have been discussing these surcharges under the subcontracts for many months. In 2002, the revenues generated by M&EC under the subcontracts with Bechtel Jacobs represented approximately 11.6% of Perma-Fix's 2002 total revenues. As of the date of this release, Bechtel Jacobs continues to deliver waste to M&EC for treatment and M&EC continues to accept such waste. Although Perma-Fix does not believe that this lawsuit will have a material adverse effect on its operations, Bechtel Jacobs could terminate the subcontracts with M&EC, as the subcontracts may be terminated at any time by either party.

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.

#### **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, 2002, required under these leases are \$2,008,000 in 2003, \$1,410,000 in 2004, \$1,118,000 in 2005, \$922,000 in 2006, \$537,000 in 2007 and \$133,000 thereafter.

Net rent expense relating to our operating leases was \$3,109,000, \$2,922,000 and \$2,245,000 for 2002, 2001 and 2000, 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 currently match up to 25% of our employees contributions, not to exceed 3% of a participant's compensation. We contributed \$253,000 and \$241,000 in matching funds during 2002 and 2001, respectively.

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### **NOTE 14**

#### **OPERATING SEGMENTS**

During 2002, 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. 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 a 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.

Our reportable segments are 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 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.



The table below shows certain financial information by business segment for 2002, 2001 and 2000 and excludes the results of operations of the discontinued operations.

**Segment Reporting December 31, 2002**

	Industrial Waste Services	Nuclear Waste Services	Engineering	Segments Total	Corporate Other <sup>(2)</sup>	Consolidated Total
Revenue from external customers	\$ 37,641 <sup>(3)</sup>	\$ 42,260 <sup>(4)</sup>	\$ 3,503	\$ 83,404	\$ —	\$ 83,404
Intercompany revenues	5,447	4,053	164	9,664	—	9,664
Interest income	15	—	—	15	1	16
Interest expense	683	2,188	1	2,872	31	2,903
Interest expense-financing fees	—	8	—	8	1,036	1,044
Depreciation and amortization	1,973	2,148	40	4,161	83	4,244
Segment profit (loss)	(3,919)	5,625	338	2,044	—	2,044
Segment assets <sup>(1)</sup>	40,171	59,035	2,189	101,395	4,430	105,825
Expenditures for segment assets	2,757	2,843	12	5,612	210	5,822

**Segment Reporting December 31, 2001**

	Industrial Waste Services	Nuclear Waste Services	Engineering	Segments Total	Corporate Other <sup>(2)</sup>	Consolidated Total
Revenue from external customers	\$ 42,355 <sup>(3)</sup>	\$ 28,932 <sup>(4)</sup>	\$ 3,205	\$ 74,492	\$ —	\$ 74,492
Intercompany revenues	3,799	5,093	245	9,137	—	9,137
Interest income	21	—	—	21	8	29
Interest expense	932	1,909	36	2,877	161	3,038
Interest expense-Warrants	—	—	—	—	234	234
Interest expense-financing fees	6	605	—	611	2,121	2,732
Depreciation and amortization	2,659	1,787	90	4,536	80	4,616
Segment profit (loss)	(150)	884	200	934	(1,681)	(747)
Segment assets <sup>(1)</sup>	41,838	51,079	2,100	95,017	4,120	99,137
Expenditures for segment assets	1,757	2,817	14	4,588	10	4,598

**Segment Reporting December 31, 2000**

	Industrial Waste Services	Nuclear Waste Services	Engineering	Segments Total	Corporate Other <sup>(2)</sup>	Consolidated Total
Revenue from external customers	\$ 44,191 <sup>(3)</sup>	\$ 11,737	\$ 3,211	\$ 59,139	\$ —	\$ 59,139
Intercompany revenues	4,130	1,315	149	5,594	—	5,594
Interest income	27	—	—	27	14	41
Interest expense	1,183	445	59	1,687	445	2,132
Interest expense-Warrants	—	—	—	—	344	344
Interest expense-financing fees	8	—	—	8	173	181
Depreciation and amortization	2,793	703	83	3,579	72	3,651
Segment profit (loss)	(1,296)	914	131	(251)	(511)	(762)
Segment assets <sup>(1)</sup>	46,546	19,816	2,483	68,845	3,926	72,771
Expenditures for segment assets	2,152	587	51	2,790	46	2,836

<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.

<sup>(3)</sup> The consolidated revenues within the Industrial Waste Management Services segment include DRMS contracts for 2002 which total \$6,642,000 (or 8.0%) of total revenue, \$5,996,000 (or 8.0%) for the year ended December 31, 2001, and \$7,606,000 (or 12.9%) for the year ended December 31, 2000.

<sup>(4)</sup> The consolidated revenues within the Nuclear Waste management Services segment include the Oak Ridge contracts for 2002 which total \$9,664,000 (or 11.6%) of total revenue and \$6,300,000 (or 8.5%) for the year ended 2001.

**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	September 30	December 31
<u>2002</u>				
Revenues	\$ 16,451	\$ 22,485	\$ 24,232	\$ 20,236
Gross Profit	3,139	7,950	7,244	6,016
Net income (loss) applicable to Common Stock	(2,030)	2,765	1,508	(199)
Basic net income (loss) per common share	(.06)	.08	.04	(.01)
Diluted net income (loss) per common share	(.06)	.06	.04	(.01)
Stockholders' equity	40,209	43,071	44,685	44,585
Total assets	99,829	100,764	104,916	105,825
<u>2001</u>				
Revenues	\$ 18,712	\$ 17,840	\$ 17,386	\$ 20,554
Gross Profit	4,547	4,463	5,963	7,077
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
Stockholders' equity	23,258	30,289	40,408	41,841
Total assets	80,876	97,169	99,180	99,137

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

None.

### 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:

<u>NAME</u>	<u>AGE</u>	<u>POSITION</u>
Dr. Louis F. Centofanti	59	Chairman of the Board, President and Chief Executive Officer
Mr. Jon Colin	47	Director
Mr. Mark A. Zwecker	52	Director
Mr. Jack Lahav	54	Director
Mr. Alfred C. Warrington, IV	67	Director
Mr. Richard T. Kelecy	47	Chief Financial Officer, Vice President and Secretary
Mr. Roger Randall	59	Vice President - Contract Management
Mr. Larry McNamara	53	President, Nuclear Services
Mr. William Carder	53	Vice President Sales & Marketing

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 14 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 Executive Officer of Lifestar Response Corporation, a position he has held since April 2002. Previously Mr. Colin served as Chief Operating Officer of Lifestar Response Corporation from October 2000 to April 2002, and 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 has a B.S. in Accounting from the University of Maryland.

##### **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.

##### **MR. JACK LAHAV**

Jack Lahav has served as a Director of the Company since September 2001. 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 15 is incorporated by reference.

**MR. ROGER RANDALL**

The information set forth under the caption "Executive Officers of the Company" on page 15 is incorporated by reference.

**MR. LARRY MCNAMARA**

The information set forth under the caption "Executive Officers of the Company" on page 15 is incorporated by reference.

**MR. WILLIAM CARDER**

The information set forth under the caption "Executive Officers of the Company" on page 15 is incorporated by reference.

**Certain Relationships**

There are no family relationships between any of our existing Directors or executive officers. 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 2002 none of the executive officers and directors of the Company failed to timely file reports under Section 16(a), except that a Form 5 for Thomas Sullivan was not timely filed for December 2002.

Capital Bank-Grawe Gruppe AG ("Capital Bank") has advised us that it is a banking institution regulated by the banking regulations of Austria which holds shares of our common stock on behalf of numerous investors. Capital Bank has represented that all of its investors are accredited investors under Rule 501 of Regulation D promulgated under the Act. In addition, Capital Bank has advised us that none of its investors beneficially own more than 4.9% of our common stock. Capital Bank has further informed us that its clients (and not Capital Bank) maintain full voting and dispositive power over such shares. Consequently, Capital Bank has advised us that it believes it is not the beneficial owner, as such term is defined in Rule 13d-3 of the Exchange Act, of the shares of our common 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. Capital Bank has informed us that it does not believe that it is required to file, and has not filed, reports under Section 16(a) or to file either Schedule 13D or Schedule 13G in connection with the shares of our common stock registered in the name of Capital Bank.

If the representations, or information provided, by Capital Bank are incorrect or Capital Bank was historically acting on behalf of its investors as a group, rather than on behalf of each investor independent of other investors, then Capital Bank and/or the investor group would have become a beneficial owner of more than 10% of our common stock on February 9, 1996, as a result of the acquisition of 1,100 shares of Series 1

Preferred Stock 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. If either Capital Bank or a group of Capital Bank's investors became a beneficial owner of more than 10% of the Company's Common Stock on February 9, 1996, and thereby required to file reports under Section 16(a) of the Exchange Act, then Capital Bank also failed to file a Form 3 or any Forms 4 or 5 for period from February 9, 1996, until the present.

## 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, Vice President - Contract Management, and President of Nuclear Services.

Name and Principal Position	Year	Annual Compensation			Long-Term Compensation		All Other Compensation (\$) <sup>(2)</sup>
		Salary (\$)	Bonus (\$)	Other Annual Compensation (\$)	Restricted Stock Award(s) (\$)	Securities Underlying Options/SARs (#)	
Dr. Louis F. Centofanti <sup>(1)</sup>							
Chairman of the Board,	2002	149,500	—	—	—	—	11,214
President and Chief	2001	138,667	40,000	—	—	100,000	11,310
Executive Officer	2000	130,000	—	—	—	75,000	11,310
Richard T. Kelecý	2002	138,958	—	—	—	—	10,725
Vice President and Chief	2001	128,333	30,000	—	—	70,000	10,800
Financial Officer	2000	120,000	—	—	—	50,000	10,725
Roger Randall	2002	134,167	—	—	—	—	9,000
Vice President - Contract	2001	123,333	25,000	—	—	70,000	9,000
Management	2000	115,000	—	—	—	50,000	9,000
Larry McNamara	2002	137,042	—	—	—	—	10,826
President of Nuclear Services	2001	127,667	30,000	—	—	120,000	10,708
	2000	116,448	—	—	—	50,000	4,404

<sup>(1)</sup> 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.

<sup>(2)</sup> Each noted executive is provided a monthly automobile allowance in the amount of \$750. Also included, where applicable, is the Company's 401(k) matching contribution.

### Option Grants in 2002

During 2002, there were no individual grants of stock options made to any of the executive officers named in the Summary Compensation Table.

### Aggregated Option Exercised in 2002 and Fiscal Year-end Option Values

The following table sets forth information concerning each exercise of stock options during 2002, by each of the executive officers named in the Summary Compensation Table and the fiscal year-end value of unexercised options:

Name	Shares Acquired on Exercise (#) <sup>(1)</sup>	Value Realized (\$) <sup>(1)</sup>	Number of Unexercised Options at Fiscal year-end (#)		Value of Unexercised in-the-Money Options at Fiscal Year End (\$) <sup>(2)</sup>	
			Exercisable	Unexercisable	Exercisable	Unexercisable
Dr. Louis F. Centofanti	-	-	370,000	125,000	77,500	116,250
Richard Kelecy	-	-	188,000	92,000	200,500	87,000
Roger Randall	-	-	168,000	92,000	200,500	87,000
Larry McNamara	-	-	44,000	126,000	43,000	109,500

<sup>(1)</sup> No options were exercised during 2002.

<sup>(2)</sup> Represents the difference between \$2.50 (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, 2002), 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.

#### 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. The Company currently matches up to 25% of our employee's contributions, not to exceed 3% of a participant's compensation. The Company contributed \$253,000 in matching funds during 2002.

#### 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 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 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 1% nor more than 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) 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 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 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 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 43,243 shares for the purchase period July 1 through December 31, 2002, which were issued in January 2003.

<u>Purchase Period</u>	<u>Proceeds</u>	<u>Shares Purchased</u>
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
January 1 - June 30, 2002	92,000	42,917
July 1 - December 31, 2002	92,000	43,243

### **Compensation of Directors**

In 2002, we paid our outside directors fees of \$1,500 for each month of service, resulting in the five outside directors earning annual director's fees in the total amount of \$85,000. Each Director elects to receive either 65% or 100% of the director's fee in shares of our Common Stock based on 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 2002 to the five outside directors (Messrs. Colin, Lahav, Sullivan, Warrington and Zwecker) was \$81,000, paid by the issuance of 40,232 shares of Common Stock. The aggregate amount of accrued director fees at December 31, 2002, to be paid in 2003, totals \$22,000. 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 years from the date the option is granted. As of December 31, 2002, options to purchase 250,000 shares of Common Stock had been granted under the Outside Directors Plan.

As of the date of this report, we have issued 224,563 shares of the Company's Common Stock in payment of director fees, covering the period January 1, 1995 through December 31, 2002. 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 "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 to December 2002, the Compensation and Stock Option Committee for the Company's Board of Directors was composed of Mark Zwecker and Jack Lahav. Thomas P. Sullivan also served on the Compensation and Stock Option Committee from January until his resignation in December 2002. Mr. Zwecker was neither an officer nor an employee during 2002, however, Mr. Zwecker did serve as our Secretary from June 1995 until June 30, 1996.

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

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

The table below sets forth information as to the shares of voting securities beneficially owned as of March 13, 2003, by each person known by us to be the beneficial owners of more than 5% of any class of the Company's voting securities.

<u>Name of Beneficial Owner</u>	<u>Title of Class</u>	<u>Amount and Nature of Ownership</u>	<u>Percent of Class<sup>(1)</sup></u>
Kern Capital Management, LLC <sup>(2)</sup>	Common	2,753,400	7.9%

<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 34,697,267 shares of Common Stock issued and outstanding on March 13, 2003 (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.

<sup>(2)</sup> This beneficial ownership amount is according to the Schedule 13G, filed with the Securities and Exchange Commission, dated February 14, 2003. Kern Capital Management, LLC had sole voting and dispositive power over all of these shares.

Capital Bank represented to us that:

- Capital Bank owns shares of the Company's Common Stock and rights to acquire shares of the Company's Common Stock only as agent for certain of Capital Bank's investors;
- None of Capital Bank's investors beneficially own more than 4.9% of the Company's Common Stock;
- Capital Bank's investors maintain full voting and dispositive power over the Common Stock beneficially owned by such investors; and
- Capital Bank has neither voting nor investment power over the shares of Common Stock owned by Capital Bank, as agent for its investors.

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 securities of which that person has the right to acquire beneficial ownership of such securities within 60 days from March 13, 2003.

Notwithstanding the previous paragraph, if Capital Bank's representations to us described above are incorrect or if Capital Bank's investors are acting as a group, then Capital Bank or a group of Capital Bank's investors could be a beneficial owner of more than 10% of the Company's voting securities. The following table sets



forth information as to the shares of voting securities owned of record by Capital Bank on the March 13, 2003, as if Capital Bank were the beneficial owner of such securities.

<u>Name of Beneficial Owner</u>	<u>Title of Class</u>	<u>Amount and Nature of Ownership</u>	<u>Percent of Class<sup>(1)</sup></u>
Capital Bank Grawe Gruppe <sup>(2)</sup>	Common	15,030,117 <sup>(2)</sup>	36.9%

<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 34,697,267 shares of Common Stock issued and outstanding on March 13, 2003 (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.

<sup>(2)</sup> This amount includes 9,044,175 shares that Capital Bank owns of record, as agent for certain accredited investors and 4,319,275 shares that Capital Bank has the right to acquire, as agent for certain investors, 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 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. Capital Bank has also advised the Company that it is holding these Warrants 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 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.

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

The following table sets forth information as to the shares of voting securities beneficially owned as of March 13, 2003, by each Director and executive officer of the Company named in the Summary Compensation Table and by 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 60 days.

<u>Name of Beneficial Owner</u>	<u>Number of Shares of Common Stock Beneficially Owned</u>	<u>Percentage of Common Stock<sup>(1)</sup></u>
Dr. Louis F. Centofanti <sup>(2)(3)</sup>	1,250,434 <sup>(3)</sup>	3.56 %
Mark A. Zwecker <sup>(2)(4)</sup>	258,853 <sup>(4)</sup>	*
Jon Colin <sup>(2)(5)</sup>	67,339 <sup>(5)</sup>	*
Jack Lahav <sup>(2)(6)</sup>	1,171,876 <sup>(6)</sup>	3.32 %
Alfred C. Warrington, IV <sup>(2)(7)</sup>	160,725 <sup>(7)</sup>	*
Richard T. Kelecyc <sup>(2)(8)</sup>	228,572 <sup>(8)</sup>	*
Roger Randall <sup>(2)(9)</sup>	192,000 <sup>(9)</sup>	*
Larry McNamara <sup>(2)(10)</sup>	78,000 <sup>(10)</sup>	*
Bill Carder <sup>(2)(11)</sup>	— <sup>(11)</sup>	*
Directors and Executive Officers as a Group (9 persons)	3,407,799	9.39 %

\*Indicates beneficial ownership of less than one percent (1%).

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

<sup>(2)</sup> 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.

<sup>(3)</sup> These shares include (i) 541,434 shares held of record by Dr. Centofanti; (ii) options to purchase 105,000 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 Dr. Centofanti's wife. This amount does not include options to purchase 190,000 shares granted pursuant to the 1993 Non-qualified Stock Option Plan, which are not exercisable within sixty 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.

<sup>(4)</sup> Mr. Zwecker has sole voting and investment power over these shares which include: (i) 208,853 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 45,000 shares granted pursuant to the 1992 Outside Directors Stock Option and Incentive Plan which are immediately exercisable.

<sup>(5)</sup> Mr. Colin has sole voting and investment power over these shares which include: (i) 22,339 shares held of record by Mr. Colin, and (ii) options to purchase 45,000 shares granted pursuant to the 1992 Outside Directors Stock Option and Incentive Plan which are immediately exercisable.

<sup>(6)</sup> Mr. Lahav has sole voting and investment power over these shares which include: (i) 580,447 shares of Common Stock held of record by Mr. Lahav; (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) 571,429 Warrants to purchase Common Stock purchased pursuant to our Private Offering held in 2001 which are exercisable immediately.

<sup>(7)</sup> Mr. Warrington has sole voting and investment power over these shares which include: (i) 125,725 shares of Common Stock held of record by Mr. Warrington; (ii) 25,000 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.

<sup>(8)</sup> Mr. Kelecyc has sole voting and investment power over 16,572 shares of Common Stock held of record by Mr. Kelecyc and 212,000 options to purchase Common Stock granted pursuant to the 1993 Non-qualified Stock Option Plan. This amount does not include options to purchase 143,000 shares of Common Stock granted pursuant to the 1993 Non-qualified Stock Option Plan which are not exercisable within sixty days.

<sup>(9)</sup> Mr. Randall has sole voting and investment power over these shares which include: (i) 192,000 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 93,000 shares of Common Stock granted pursuant to the 1993 Non-qualified Stock Option Plan which are not exercisable within sixty days.

<sup>(10)</sup> Mr. McNamara has sole voting and investment power over these shares which include: (i) 78,000 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 192,000 shares pursuant to the 1993 Non-qualified Stock Option Plan which are not exercisable within sixty days.

<sup>(11)</sup> Not included are options to purchase 50,000 shares of Common Stock granted pursuant to the 1993 Non-qualified stock Option Plan, which are not exercisable within sixty days.

### Equity Compensation Plans

The following table sets forth information as of December 31, 2002, with respect to the Company's equity compensation plans.

Plan Category	Equity Compensation Plan		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by stockholders	2,406,000	\$1.59	1,612,391
Equity compensation plans not approved by stockholders	300,000	2.58	—
Total	2,706,000	\$1.70	1,612,391

### Potential Change in Control

As of March 13, 2003, Capital Bank owned of record, as agent for certain accredited investors, 9,044,175 shares of common stock representing 26.1% of our issued and outstanding common stock. As of that date, Capital Bank also had the right to acquire an additional 5,985,942 shares of common stock, comprised of (a) 4,319,275 shares of common stock issuable under various warrants held by Capital Bank, as agent for certain investors; and (b) 1,666,667 shares of common stock issuable to Capital Bank upon the conversion of 2,500 shares of Series 17 Preferred held by Capital Bank.

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 would own of record 15,030,117 shares of common stock, representing 36.9% of the issued and outstanding common stock. The foregoing estimates assume that we do not issue any other shares of common stock; no other warrants or options are exercised; we do not acquire additional shares of common stock as treasury stock; and Capital Bank does not dispose of any shares of common stock.

Capital Bank has advised us that it is a banking institution regulated by the banking regulations of Austria which holds shares of our common stock on behalf of numerous investors. Capital Bank asserts that it is precluded by Austrian law from disclosing the identities of its investors, unless so approved by each such investor. Certain of its investors recently gave Capital Bank permission to disclose their identities in order to be included as Selling Stockholders in our S-3 Registration Statement. Capital Bank has represented that all of its investors are accredited investors under Rule 501 of Regulation D promulgated under the Act. In addition, Capital Bank has advised us that none of its investors beneficially own more than 4.9% of our common stock. Capital Bank has further informed us that its clients (and not Capital Bank) maintain full voting and dispositive power over such shares. Consequently, Capital Bank has advised us that it believes it is not the beneficial owner, as such term is defined in Rule 13d-3, of the shares of our common 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. Capital Bank has informed us that it does not believe that it is required to file, and has not filed, reports under Section 16(a) or to file either Schedule 13D or Schedule 13G in connection with the shares of our common stock registered in the name of Capital Bank.

If Capital Bank's investors agree to, or reach an understanding to, act as a group or otherwise to act in concert for the purposes of voting on matters subject to stockholder vote, our operations and management could be greatly impacted. For example, if Capital Bank acquires the shares of common stock described in the previous paragraph, the Capital Bank investor group may be able to cause a change in at least 50% of the members of our Board of Directors. This change in Board membership could be an event of default under our \$22 million credit facility (the "Credit Facility") and our \$5.6 million outstanding Subordinated Notes. If the Capital Bank investor group were to cause Dr. Louis Centofanti to be removed from our Board of Directors or as our president and chief executive officer, the removal could be an event of default under the Credit Facility and the Subordinated Notes. The Company is not aware of any agreement or understanding among Capital Bank's investors to act as a group.

If the representations or information provided, by Capital Bank are incorrect or if Capital Bank was historically acting on behalf of its investors as a group, rather than on behalf of each investor independent of other investors, Capital Bank and/or the investor group could have become a beneficial owner (as that term is defined under Rule 13d-3 as promulgated under the Exchange Act of 1934, as amended (the "Exchange Act")) of more than 10% of our Common Stock. Capital Bank and/or its investor group has not filed with the Securities and Exchange Commission and the Company, among other reports, any Forms 3, 4 or 5, and has not filed any applicable Schedules 13D or 13G as a result of acquiring shares of our voting equity securities.

Because Capital Bank (a) has advised us that it holds the common stock as a nominee only and that it does not exercise voting or investment power over our common stock held in its name and that no one investor of Capital Bank for which it holds our common stock holds more than 4.9% of our issued and outstanding common stock; (b) has no right to, and is not believed to possess the power to, exercise control over our management or our policies; (c) has not nominated, and has not sought to nominate, a director to our board; and (d) has no representative serving as an executive officer of the Company, we do not believe that Capital Bank is an affiliate of the Company.

## **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, or Series 16 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.

#### *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 consisted of one share of Common Stock and a Warrant to purchase one share of Common Stock at \$1.75 per share. Stockholder approval was required prior to any of the Warrants being exercised. The stockholders of the Company approved the exercise of the Warrants in a special meeting of stockholders held in June 2002.

#### **ITEM 14. CONTROLS AND PROCEDURES**

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in the periodic reports filed by the Company with the Securities and Exchange Commission (the "SEC") is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC and that such information is accumulated and communicated to the Company's management. Based on their most recent evaluation, which was completed within 90 days of the filing of this Annual Report on Form 10-K, the Company's Chief Executive Officer and Chief Financial Officer believe that the Company's disclosure controls and procedures (as defined in Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934, as amended) are effective. There were no significant changes in the Company's internal controls or in other factors that could significantly affect these internal controls subsequent to the date of the most recent evaluation.

## PART IV

### ITEM 15. 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

Current report on Form 8-K (Item 5-Other Events and Regulation FD Disclosure), was filed by the Company on November 26, 2002, reporting the completion of discussions with the Securities and Exchange Commission relating to SFAS 141 and 142.

Current report on Form 8-K (Item 5-Other Events and Regulation FD Disclosure), was filed by the Company on December 17, 2002, reporting the resignation of Thomas P. Sullivan from the Board of Directors of Perma-Fix Environmental Services, Inc.

## 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 March 27, 2003  
Dr. Louis F. Centofanti  
Chairman of the Board  
Chief Executive Officer

By /s/Richard T. Kelecy Date March 27, 2003  
Richard T. Kelecy  
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.

By /s/Jon Colin Date March 27, 2003  
Jon Colin, Director

By /s/Jack Lahav Date March 27, 2003  
Jack Lahav, Director

By /s/Alfred C. Warrington, IV Date March 27, 2003  
Alfred C. Warrington, IV, Director

By /s/Mark A. Zwecker Date March 27, 2003  
Mark A. Zwecker, Director

By /s/Dr. Louis F. Centofanti Date March 27, 2003  
Dr. Louis F. Centofanti, Director



## CERTIFICATIONS

I, Dr. Louis F. Centofanti, certify that:

1. I have reviewed this annual report on Form 10-K of Perma-Fix Environmental Services, Inc.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 27, 2003

/s/Dr. Louis F. Centofanti

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

## CERTIFICATIONS

I, Richard T. Kelecyc, certify that:

1. I have reviewed this annual report on Form 10-K of Perma-Fix Environmental Services, Inc.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 27, 2003

/s/Richard T. Kelecyc

Richard T. Kelecyc  
Chief Financial Officer

# SCHEDULE II

## PERMA-FIX ENVIRONMENTAL SERVICES, INC.

### VALUATION AND QUALIFYING ACCOUNTS For the years ended December 31, 2002, 2001, and 2000 (Dollars in thousands)

<u>Description</u>	<u>Balance at Beginning of Year</u>	<u>Additions Charged to Costs, Expenses and Other</u>	<u>Deductions</u>	<u>Balance at End of Year</u>
Year ended December 31, 2002:				
Allowance for doubtful accounts	\$ 725	\$ 1,200	\$ 713	\$ 1,212
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

## EXHIBIT INDEX

### Exhibit

<u>No.</u>	<u>Description</u>
2.1	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.
2.2	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.
2.3	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.
3(i)	Restated Certificate of Incorporation, as amended, and all Certificates of Designations are incorporated by reference from 3.1(i) to the Company's Form 10-Q for the quarter ended September 30, 2002.
3(ii)	Bylaws are incorporated by reference from the Company's Registration Statement, No. 33-51874.
4.1	Specimen Common Stock Certificate as incorporated by reference from Exhibit 4.3 to the Company's Registration Statement, No. 33-51874.
4.2	Loan and Security Agreement by and between the Company, subsidiaries of the Company as signatories 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	First Amendment to Loan Agreement and Consent, dated January 30, 2001, between the Company and PNC Bank, National Association as incorporated by reference from Exhibit 99.7 to the Company's Form 8-K dated January 31, 2001.
4.4	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.
4.5	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.
4.6	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.
4.7	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.
4.8	Conversion and Exchange Agreement, dated May 25, 2001, but effective as of April 6, 2001, between the Company and RBB Bank Aktiengesellschaft (k/n/a Capital Bank Grawe-Gruppe) is incorporated by reference from Exhibit 4.5 to the Company's Form 8-K, dated June 15, 2001.
4.9	Form of Subscription Agreement incorporated by reference from Exhibit 4.2 to Company's Form 8-K dated June 15, 2001.
4.10	Amendment No. 1 to Revolving Credit, Term Loan and Security Agreement, dated as of June 10, 2002, between the Company and PNC Bank is incorporated by reference from Exhibit 4.3 to the Company's Form 10-Q for the quarter ended September 30, 2002.

**Exhibit**

<u>No.</u>	<u>Description</u>
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.
10.3	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.
10.4	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.
10.5	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.
10.6	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.
10.9	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.
10.10	Stand-Still Agreement, dated January 31, 2001, among the Company, Chem-Met Services, Inc., PNC Bank, 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.
10.11	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.
10.12	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 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.
10.13	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.

**Exhibit**

<u>No.</u>	<u>Description</u>
10.14	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.
10.15	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.
10.16	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.
10.17	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.
10.18	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.
10.19	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.
10.20	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.
10.21	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.
10.22	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.
10.23	Subcontract Change Notice between East Tennessee Materials and Energy Corporation and Bechtel Jacobs Company, LLC, No. BA-99446/7 and 8F, dated July 2, 2002, are incorporated by reference from Exhibit 10.24 to the Company's Registration Statement No. 333-70676.
10.24	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.
10.25	Promissory Note for \$1,970,000 issued to the Ann L. Sullivan Living Trust dated September 6, 1978, as incorporated by reference from Exhibit 10.2 to the Company's Form 8-K dated June 1, 1999.
10.26	Promissory Note for \$1,500,000 issued to the Thomas P. Sullivan Living Trust dated September 6, 1978, as incorporated by reference from Exhibit 10.3 to the Company's Form 8-K dated June 1, 1999.
10.27	Non-recourse Guaranty dated May 28, 1999, by and among Perma-Fix of Michigan, Inc., the Thomas P. 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.
10.28	Mortgage dated May 28, 1999, by Perma-Fix of Michigan, Inc. to the Thomas P. Sullivan Living Trust dated September 6, 1978 and the Ann L. Sullivan Living Trust dated September 6, 1978, as incorporated by reference from Exhibit 10.5 to the Company's Form 8-K dated June 1, 1999.

**Exhibit**

<u>No.</u>	<u>Description</u>
10.29	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 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.
10.30	Registration Rights Agreement, dated July 31, 2001, among the Company, AMI, and BEC is incorporated by reference from Exhibit 99.5 to the Company's Form 8-K, dated July 30, 2001.
10.31	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 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.
10.32	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, dated July 30, 2001.
10.33	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.
10.34	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.
10.35	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.
10.36	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.
10.37	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.
10.38	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.
10.39	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.

**Exhibit**

<u>No.</u>	<u>Description</u>
10.40	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. 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.
10.41	Common Stock Purchase Warrant, dated July 30, 2001, granted by the Registrant to Ryan, Beck & Co. for the purchase of 20,000 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 74,000 shares of the Registrant's Common Stock at an exercise price of \$1.75 per share were issued to Ryan, Beck & Co., LLC (14,000 shares), Larkspur Capital Corporation (34,000 shares), and National Securities Corporation (40,000 shares). Copies will be provided to the Commission upon request.
10.42	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 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.
10.43	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
23.1	Consent of BDO Seidman, LLP
99.1	Certification by Dr. Louis F. Centofanti, Chief Executive Officer of the Company. A signed original if this written statement required by Section 906 has been provided to Perma-Fix Environmental Services, Inc. and will be retained by Perma-Fix Environmental Services, Inc. and forwarded to the Securities and Exchange Commission or its staff upon request.
99.2	Certification by Richard T. Kelecyc, Chief Financial Officer of the Company. A signed original if this written statement required by Section 906 has been provided to Perma-Fix Environmental Services, Inc. and will be retained by Perma-Fix Environmental Services, Inc. and forwarded to the Securities and Exchange Commission or its staff upon request.



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.



## 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  
New York, New York 10004

## INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

BDO Seidman, LLP  
233 N. Michigan Avenue  
Suite 2500  
Chicago, Illinois 60601

## ANNUAL MEETING

The Company has scheduled its Annual Meeting for Tuesday, July 29, 2003. The meeting will be held at the offices of Perma-Fix Environmental Services, Inc., 1940 N.W. 67th Place, Gainesville, Florida 32653, at 1:00 p.m. (EDST).

## STOCK LISTING

The common stock of Perma-Fix Environmental Services, Inc. is listed on Nasdaq® 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.

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, growth opportunities from the Bio-Fix process, anticipation of future government contract opportunities, improved scheduling of DOE shipments throughout the fiscal year, expectation of continued growth and accelerated growth and profitability in all segments. See "Special Note Regarding Forward-Looking Statements" contained in the Form 10-K that is part of the Annual Report for discussion of factors which could cause future outcomes to differ materially from those described in the President's letter.

*Perma-Fix strives to be  
the leading provider of  
safe, innovative waste  
management solutions  
for unique, complex  
nuclear mixed waste,  
industrial waste and  
wastewaters.*



Perma-Fix Environmental Services, Inc.

1940 N.W. 67th Place

Gainesville, Florida 32653