

**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, 2008

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*

**8302 Dunwoody Place, #250, Atlanta, GA**

*(Address of principal executive offices)*

**(770) 587-9898**

*(Registrant's telephone  
number)*

58-1954497

*(IRS Employer Identification Number)*

**30350**

*(Zip Code)*

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

Title of each class

Name of each exchange on which registered

Common Stock, \$.001 Par Value

NASDAQ Capital Markets

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes  No

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 a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated Filer  Non-accelerated Filer  Smaller reporting company

Indicate by check mark whether the Registrant is a shell company (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 30, 2008), was approximately \$147,085,000. For the purposes of this calculation, all executive officers and directors of the Registrant (as indicated in Item 12) are deemed to be affiliates. 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 Capital Markets.

As of March 9, 2009, there were 53,985,119 shares of the registrant's Common Stock, \$.001 par value, outstanding.

Documents incorporated by reference: none

---

---

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

**INDEX**

<b><u>PART I</u></b>	<b>Page No.</b>
<a href="#"><u>Item 1. Business</u></a>	1
<a href="#"><u>Item 1A.Risk Factors</u></a>	13
<a href="#"><u>Item 1B.Unresolved Staff Comments</u></a>	21
<a href="#"><u>Item 2. Properties</u></a>	21
<a href="#"><u>Item 3. Legal Proceedings</u></a>	21
<a href="#"><u>Item 4. Submission of Matters to a Vote of Security Holders</u></a>	22
<a href="#"><u>Item 4A.Executive Officers of the Registrant</u></a>	23
<b><u>PART II</u></b>	
<a href="#"><u>Item 5. Market for Registrant’s Common Equity and Related Stockholder Matters</u></a>	25
<a href="#"><u>Item 6. Selected Financial Data</u></a>	27
<a href="#"><u>Item 7. Management’s Discussion and Analysis of Financial Condition And Results of Operations</u></a>	29
<a href="#"><u>Item 7A.Quantitative and Qualitative Disclosures About Market Risk</u></a>	55
<a href="#"><u>Special Note Regarding Forward-Looking Statements</u></a>	56
<a href="#"><u>Item 8. Financial Statements and Supplementary Data</u></a>	59
<a href="#"><u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u></a>	107
<a href="#"><u>Item 9A.Controls and Procedures</u></a>	107
<a href="#"><u>Item 9B.Other Information</u></a>	111
<b><u>PART III</u></b>	
<a href="#"><u>Item 10. Directors, Executive Officers and Corporate Governance</u></a>	111
<a href="#"><u>Item 11. Executive Compensation</u></a>	114
<a href="#"><u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u></a>	126
<a href="#"><u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u></a>	129
<a href="#"><u>Item 14. Principal Accounting Fees and Services</u></a>	131
<b><u>PART IV</u></b>	
<a href="#"><u>Item 15. Exhibits and Financial Statement Schedules</u></a>	132

---

## PART I

### ITEMBUSINESS

#### 1.

#### **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 and technology know-how company, is a Delaware corporation organized in 1990, and is engaged through its subsidiaries, in:

- Nuclear Waste Management Services (“Nuclear Segment”), which includes:
  - o Treatment, storage, processing and disposal of mixed waste (which is waste that contains both low-level radioactive and hazardous waste) including on and off-site waste remediation and processing;
  - o Nuclear, low-level radioactive, and mixed waste treatment, processing and disposal; and
  - o Research and development of innovative ways to process low-level radioactive and mixed waste.
- Consulting Engineering Services (“Engineering Segment”), which includes:
  - o Consulting services regarding broad-scope environmental issues, including air, water, and hazardous waste permitting, air, soil, and water sampling, compliance reporting, emission reduction strategies, compliance auditing, and various compliance and training activities to industrial and government customers, as well as engineering and compliance support needed by our other segments.
- Industrial Waste Management Services (“Industrial Segment”), which includes:
  - o Treatment, storage, processing, and disposal of hazardous and non-hazardous waste; and
  - o Wastewater management services, including the collection, treatment, processing and disposal of hazardous and non-hazardous wastewater.

In May 2007, our Board of Directors authorized the divestiture of our Industrial Segment. On September 26, 2008, our Board of Directors approved retaining our Industrial Segment facilities/operations at Perma-Fix of Fort Lauderdale, Inc. (“PFFL”), Perma-Fix of South Georgia (“PFSG”), and Perma-Fix of Orlando, Inc. (“PFO”). This subsequent decision to retain operations at PFFL, PFSG, and PFO within our Industrial Segment is based on our belief that these operations are self-sufficient, which should allow senior management more freedom to focus on growing our Nuclear operations, while benefiting from the cash flow and growth prospects of these three facilities and the fact that we were unable in the current economic climate to obtain the values for these companies that we believe they are worth. In 2008, we completed the sale of substantially all of the assets of three of our Industrial Segment facilities/operations as follows: on January 8, 2008, we completed the sale of substantially all of the assets of Perma-Fix Maryland, Inc. (“PFMD”) for \$3,825,000 in cash and the assumption by the buyer of certain liabilities of PFMD, with a final working capital adjustment of \$170,000 received by us from the buyer in the fourth quarter of 2008; on March 14, 2008, we completed the sale of substantially all of the assets of Perma-Fix of Dayton, Inc. (“PFD”) for approximately \$2,143,000 in cash, plus assumption by the buyer of certain of PFD’s liabilities and obligations. In June 2008, we paid the buyer \$209,000 in final working capital adjustment; and on May 30, 2008, we completed the sale of substantially all of the assets of Perma-Fix Treatment Services, Inc. (“PFTS”) for approximately \$1,503,000, and assumption by the buyer of certain liabilities of PFTS. In July 2008, we paid the buyer \$135,000 in final working capital adjustments.

As a result of our Board of Directors’ approval to retain our PFFL, PFO, and PFSG facilities/operations in September 2008, we restated the consolidated financial statements for all periods presented to reflect the reclassification of these three facilities/operations back into our continuing operations. In the third quarter of 2008, we classified one of the two properties at PFO as held for sale. In the fourth quarter of 2008, we completed the sale of this property at PFO for \$900,000 in cash. We do not expect any impact or reduction to PFO’s operating capability from the sale of the property at PFO.

Our goal is to continue focus on the efficient operation of our existing facilities within our Nuclear, Industrial, and Engineering Segments, evaluate strategic acquisitions primarily within the Nuclear Segments, and to continue the research and development of innovative technologies to treat nuclear waste, mixed waste, and industrial waste. We continue to place greater attention and resources on our nuclear

## [Table of Contents](#)

business. Our Nuclear Segment facility, Perma-Fix Northwest Richland, Inc. (“PFNWR”) facility, which was acquired in June 2007, had \$17,325,000 in revenue, which represented 22.9% of our consolidated revenue from continuing operations in 2008 as compared to \$8,439,000 or 13.1% in 2007. PFNWR is a hazardous waste, low level radioactive waste and mixed waste (containing both hazardous waste and low level radioactive waste) management company based in Richland, Washington, adjacent to the Department of Energy’s (“DOE”) Hanford Site. This acquisition provides us with a number of strategic benefits. Foremost, this acquisition secured PFNWR’s radioactive and hazardous waste permits and licenses, which further solidified our position within the mixed waste industry. Additionally, the PFNWR facility is located adjacent to the Hanford Site, which represents one of the largest environmental clean-up projects in the nation and is expected to be one of the most expensive of DOE’s nuclear weapons sites to remediate. In addition, the acquisition of PFNWR facility introduced our West Coast presence and increases our treatment capacity for radioactive only waste.

During the second quarter of 2008, our East Tennessee Materials and Energy Corporation (“M&EC”) facility within our Nuclear Segment was awarded a subcontract by CH Plateau Remediation Company (“CHPRC”) to perform a portion of facility operations and waste management activities for the DOE Hanford, Washington site. The general contract awarded by the DOE to CHPRC and our subcontract provide for a transition period from August 11, 2008 through September 30, 2008, a base period from October 1, 2008 through September 30, 2013, and an option period from October 1, 2013 through September 30, 2018. The subcontract is a cost-plus award fee contract. On October 1, 2008, operations of this subcontract commenced at the DOE Hanford Site. We believe full operations under this subcontract will result in revenues for on-site and off-site work of approximately \$200,000,000 to \$250,000,000 over the five year based period. As of December 31, 2008, revenue from this subcontractor accounted for \$8,120,000 or 10.8% of total revenue from our continuing operations. As of the date of this report, we have employed an additional 177 employees to service this subcontract. This subcontract, as are most, if not all, contracts involving work relating to federal sites provide that the government or subcontractor may terminate or renegotiate the contract with us at any time for convenience or 30 days notice.

We service research institutions, commercial companies, public utilities, and governmental agencies nationwide, including the DOE and Department of Defense (“DOD”). 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 8302 Dunwoody Place, Suite 250, Atlanta, Georgia 30350.

Demand for our services has been, and we expect that demand will continue to be, subject to significant fluctuation (including substantial reductions) due to a variety of factors beyond our control, such as the current economic recession and the large budget deficits of our federal government and many of our states (see “Risk Factors” and “Management Discussion and Analysis of Financial Condition and Results of Operations contained herein for a discussion as to these factors that could have a significant effect on our business and results). However, we believe that government funding made available for DOE remediation projects under the recently enacted government stimulus plan could have a positive impact on our government subcontracts within our Nuclear Segment. (see “Dependence Upon a Single or Few Customers in this section for certain subcontracts with the DOE within our Nuclear Segment), although we continue to remain cautious of the future due to the heightened financial market and economic turmoil and large federal/budget deficit.

### **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 (“Commission”). Additionally, we make available free of charge on our internet website:

## [Table of Contents](#)

- our Code of Ethics;
- the charter of our Corporate Governance and Nominating Committee;
- our Anti-Fraud Policy;
- the charter of our Audit Committee.

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

During 2008, we were engaged in three 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 and Chief Operating Officer to make decisions about resources to be allocated and assess its performance; and
- for which discrete financial information is available.

We therefore define our operating segments as each business line that we operate. These segments, however, exclude the Corporate and Operation Headquarters, which do not generate revenue; Perma-Fix of Michigan Inc. (“PFMI”) and Perma-Fix of Pittsburgh, Inc. (“PFP”), two non-operational facilities within our Industrial Segment which were approved as discontinued operations by our Board of Director effective November 8, 2005, and October 4, 2004, respectively; and PFMD, PFD, and PFTS, three Industrial Segment facilities which were divested in January 2008, March 2008, and May 2008, respectively, as previously discussed.

Most of our activities are conducted nationwide. We do not own any foreign operations and we had no export sales during 2008.

### **Operating Segments**

We have three operating segments, which represent each business line that we operate. The Nuclear Segment, which operates four facilities; the Industrial Segment, which operates three facilities; and the Engineering Segment as described below:

NUCLEAR WASTE MANAGEMENT SERVICES (“Nuclear Segment”), which includes nuclear, low-level radioactive, mixed (waste containing both hazardous and low-level radioactive constituents) hazardous and non-hazardous waste treatment, processing and disposal services through four uniquely licensed (Nuclear Regulatory Commission or state equivalent) and permitted (Environmental Protection Agency (“EPA”) or state equivalent) treatment and storage facilities. The presence of nuclear and low-level radioactive constituents within the waste streams processed by this segment creates different and unique operational, processing and permitting/licensing requirements, as discussed below.

Perma-Fix of Florida, Inc. (“PFF”), located in Gainesville, Florida, specializes in the storage, 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 (“mixed waste”). PFF is one of the first 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. 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. LSVs are used for the counting of certain radionuclides. 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 DOE and other government facilities as well as select mixed waste field remediation projects. PFF also continues to receive and process certain hazardous and non-hazardous waste streams as a compliment to its expanded nuclear and mixed waste processing activities.

[Table of Contents](#)

Diversified Scientific Services, Inc. (“DSSI”) located in Kingston, Tennessee, specializes in the storage, processing, and destruction of certain types of 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 DOD. On November 26, 2008, the U.S. Environmental Protection Agency (“EPA”) Region 4 issued a permit to DSSI to commercially store and dispose of radioactive Polychlorinated Biphenyls (“PCBs”). Currently, we are unaware of any other commercial facilities authorized to store and dispose of radioactive PCB wastes.

East Tennessee Materials & Energy Corporation (“M&EC”), located in Oak Ridge, Tennessee, is another mixed waste facility. M&EC also operates under both a hazardous waste permit and radioactive materials license. M&EC represents the largest of our four mixed waste facilities, covering 150,000 sq. ft., and is located in leased facilities at the DOE East Tennessee Technology Park. In 2007, M&EC completed its facility expansion (“SouthBay”) to treat DOE special process wastes from the DOE Portsmouth Gaseous Diffusion Plant located in Piketon, Ohio under the subcontract awarded by LATA/Parallax Portsmouth LLC to our Nuclear Segment in 2006. LATA/Parallax performs environmental remediation services, including groundwater cleanup and waste management activities, under contract to DOE at the Portsmouth site.

Perma-Fix Northwest Richland, Inc. (“PFNWR”), which we acquired in June 2007, is located in Richland, Washington. PFNWR is a permitted hazardous, low level radioactive and mixed waste treatment, storage and disposal facility located at the Hanford Site in the eastern part of the state of Washington. The DOE’s Hanford Site is subject to one of the largest, most complex, and costliest DOE clean up plans. The strategic addition of PFNWR facility provides the Company with immediate access to treat some of the most complex nuclear waste streams in the nation. PFNWR predominately provides waste treatment services to contractors of government agencies, in addition to commercial generators.

For 2008, the Nuclear Segment accounted for \$61,359,000 or 81.3% of total revenue from continuing operations, as compared to \$51,704,000 or 80.1% of total revenue from continuing operations for 2007. See “ – Dependence Upon a Single or Few Customers” and “Financial Statements and Supplementary Data” for further details and a discussion as to our Nuclear Segment’s contracts with the federal government or with others as a subcontractor to the federal government.

INDUSTRIAL WASTE MANAGEMENT SERVICES (“Industrial Segment”), which includes, off-site waste storage, treatment, processing and disposal services of hazardous and non-hazardous waste (solids and liquids) through three permitted treatment and/or disposal facilities, as discussed below.

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 permitted treatment and storage facility located in Orlando, Florida. PFO collects, stores and treats hazardous and non-hazardous wastes under one of our most inclusive permits. PFO is also a transporter of hazardous waste and operates a transfer facility at the site. PFO also collects oily waste waters, used oil, and other off-specification petroleum based products and performs vacuum service work in Florida.

Perma-Fix of South Georgia, Inc. (“PFSG”) is a permitted treatment and storage facility located in Valdosta, Georgia. PFSG provides storage, treatment and disposal services to hazardous and non-hazardous waste generators primarily throughout the Southeastern portion of the United States, in conjunction with the

## [Table of Contents](#)

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.

For 2008, the Industrial Segment accounted for approximately \$10,951,000 or 14.5% of our total revenue from continuing operations as compared to approximately \$10,442,000 or 16.2% for 2007. See “Financial Statements and Supplementary Data” for further details.

CONSULTING ENGINEERING SERVICES (“Engineering Segment”), which provides environmental engineering and regulatory compliance consulting services through one subsidiary, as discussed below.

Schreiber, Yonley & Associates (“SYA”) is located in Ellisville, Missouri. SYA specializes in air, water, and hazardous waste permitting, air, soil, and water sampling, compliance reporting, emission reduction strategies, compliance auditing, and various compliance and training activities to industrial and government customers, as well as, engineering and compliance support needed by our other segments.

During 2008, environmental engineering and regulatory compliance consulting services accounted for approximately \$3,194,000 or 4.2% of our total revenue from continuing operations, as compared to approximately \$2,398,000 or 3.7% in 2007. See “Financial Statements and Supplementary Data” for further details.

### **Discontinued Operations**

As stated previously above, our discontinued operations includes the following facilities within our Industrial Segment: Perma-Fix of Michigan Inc. (“PFMI”), Perma-Fix of Pittsburgh, Inc. (“PFP”), two non-operational facilities which were approved as discontinued operations by our Board of Director effective October 4, 2004, and November 8, 2005, respectively, and PFMD, PFD, and PFTS, three Industrial Segment facilities which were divested in January 2008, March 2008, and May 2008, respectively.

Our discontinued operations generated \$3,195,000 and \$19,965,000 of revenue in 2008 and 2007, respectively.

### **Importance of Patents, Trademarks and Proprietary Technology**

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 to the year 2010 and 2012 for the service marks “Perma-Fix” and “Perma-Fix Environmental Services,” respectively, by the U.S. Patent and Trademark Office.

We are active in the research and development (“R&D”) of technologies that allow us to address certain of our customers' environmental needs. To date, our R&D efforts have resulted in the granting of seven active patents and the filing of several pending patent applications. Our flagship technology, the Perma-Fix Process, is a proprietary, cost effective, treatment technology that converts hazardous waste into non-hazardous material. Subsequently, we developed the Perma-Fix II process, a multi-step treatment process that converts hazardous organic components into non-hazardous material. The Perma-Fix II process is particularly important to our mixed waste strategy. We believe that at least one third of DOE mixed waste contains organic components.

The Perma-Fix II process is designed to remove certain types of organic hazardous constituents from soils or other solids and sludges (“Solids”) through a water-based system. Until development of this Perma-Fix II 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 in the Solids to a level where the Solids meet Land Disposal Requirements, 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 Perma-Fix II process in 2000. However, changes to current environmental laws and regulations could limit the use of the Perma-Fix II process or the disposal options available to the generator. See “—Permits and Licenses” and “—Research and Development.”

### **Permits and Licenses**

Waste management companies are subject to extensive, evolving and increasingly stringent federal, state and local environmental laws and regulations. Such federal, state and local environmental laws and regulations govern our activities regarding the treatment, storage, processing, disposal and transportation of hazardous, non-hazardous and radioactive wastes, and require us to obtain and maintain permits, licenses and/or approvals in order to conduct certain of our waste activities. Failure to obtain and maintain our permits or approvals would have a material adverse effect on us, our operations, and financial condition. The permits and licenses have terms ranging from one to ten years, and provided that we maintain 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.

#### *Nuclear Segment:*

PFF operates its hazardous, mixed 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, mixed and low-level radioactive waste activities under a RCRA Part B permit and a radioactive materials license issued by the State of Tennessee. On November 26, 2008, the U.S. EPA Region 4 issued a permit to DSSI to commercially store and dispose of radioactive Polychlorinated Biphenyls (“PCBs”). DSSI began the permitting process to add Toxic Substances Control Act (“TSCA”) regulated wastes, namely PCBs, containing radioactive constituents to its authorization in 2004 in order to meet the demand for the treatment of government and commercially generated radioactive PCB wastes. Currently, we are unaware of any other commercial facility authorized to store and dispose of radioactive PCB wastes.

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.

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

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

#### *Industrial Segment:*

PFFL operates under a used oil processors license and a solid waste processing permit 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.

PFO operates a hazardous and non-hazardous waste treatment and storage facility under various permits, including a RCRA Part B permit, and a used oil processors 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.

### **Seasonality**

Historically, we have experienced reduced activities and related billable hours throughout the November and December holiday periods within our Engineering Segment. Our Industrial Segment operations experience reduced activities during the holiday periods; however, one key product line is the servicing of cruise line business where operations are typically higher during the winter months, thus offsetting the impact of the holiday season. The DOE and DOD represent major customers for the Nuclear Segment. In conjunction with the federal government's September 30 fiscal year-end, the Nuclear Segment historically experienced seasonably large shipments during the third quarter, leading up to this government fiscal year-end, as a result of incentives and other quota requirements. Correspondingly for a period of approximately three months following September 30, the Nuclear Segment is generally seasonably slow, as the government budgets are still being finalized, planning for the new year is occurring, and we enter the holiday season. Over the past years, due to our efforts to work with the various government customers to smooth these shipments more evenly throughout the year, we have seen smaller fluctuations in the quarters. Although we have seen smaller fluctuation in the quarters in recent years, as government spending is contingent upon its annual budget and allocation of funding, we cannot provide assurance that we will not have larger fluctuations in the quarters in the near future. For 2008, government agencies were operated under "Continuing Resolution" without finalized budgets due in part to the impending change in Administration, which had a negative impact on availability of funding for services offered by our Nuclear Segment.

### **Backlog**

The Nuclear Segment of our Company maintains a backlog of stored waste, which represents waste that has not been processed. The backlog is principally a result of the timing and complexity of the waste being brought into the facilities and the selling price per container. As of December 31, 2008, our Nuclear Segment had a backlog of approximately \$10,244,000, as compared to approximately \$14,600,000, as of December 31, 2007. Additionally, the time it takes to process mixed waste from the time it arrives may increase due to the types and complexities of the waste we are currently receiving. We typically process our backlog during periods of low waste receipts, which historically has been in the first or fourth quarter.

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

Our Nuclear Segment has a significant relationship with the federal government, and continues 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 or renegotiate the contracts in 30 days notice, 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.

We performed services relating to waste generated by the federal government, either directly or indirectly as a subcontractor (including LATA/Parallax, Fluor Hanford, and CHPRC as discussed below) to the federal government, representing approximately \$43,464,000 or 57.6% of our total revenue from continuing operations during 2008, as compared to \$30,000,000 or 46.5% of our total revenue from continuing operations during 2007, and \$33,226,000 or 48.7% of our total revenue from continuing operations during 2006.

Included in the amounts discussed above, are revenues from LATA/Parallax Portsmouth LLC ("LATA/Parallax"). LATA/Parallax manages DOE environmental programs. Our revenues from LATA/Parallax contributed \$4,841,000 or 6.4%, \$8,784,000 or 13.6%, and 10,341,000 or 15.2% of our revenues from continuing operations for 2008, 2007, and 2006, respectively. In 2006, our M&EC facility was awarded a subcontract by LATA/Parallax to treat DOE special process wastes from the DOE Portsmouth Gaseous Diffusion Plant located in Piketon, Ohio. This subcontract has been extended through September 30, 2009. We currently have two other subcontracts with LATA/Parallax to treat wastes which are set to expire on September 30, 2009. As with most contracts relating to the federal government,

LATA/Parallax can terminate the contract with us at any time for convenience, which could have a material adverse effect on our operations.

Since 2004, our Nuclear Segment has treated mixed low-level waste, as a subcontractor, for Fluor Hanford, who acts as a general contractor for the DOE. However, with the acquisition of our PFNWR facility in 2007, a significant amount of our revenues is derived from Fluor Hanford, a DOE general contractor since 1996. Fluor Hanford manages several major activities at the DOE's Hanford Site, including dismantling former nuclear processing facilities, monitoring and cleaning up the site's contaminated groundwater, and retrieving and processing transuranic waste for off-site shipment. The Hanford Site is one of DOE's largest nuclear weapon environmental remediation projects. Our PFNWR facility is located adjacent to the Hanford Site and treats low level radioactive and mixed wastes. We have three subcontracts with Fluor Hanford (as the general contractor at the DOE Site) at our PFNWR facility, with the initial contract dating back to 2003. Fluor Hanford's successor, CHPRC, was awarded the Plateau Remediation Contract for the Hanford Site in the second quarter of 2008 and has begun management of the waste activities previously managed by Fluor Hanford under these three subcontracts, effective October 1, 2008. CHPRC has extended these subcontracts to March 31, 2009 and we expect these subcontracts will be renegotiated by CHPRC beyond March 31, 2009. Revenue from Fluor Hanford has been transitioned to CHPRC and we expect these revenues to remain constant or possibly increase, dependent upon DOE funding, in fiscal year 2009. Revenues from Fluor Hanford totaled \$7,974,000 or 10.6% (approximately \$5,160,000 from PFNWR), \$6,985,000 (approximately \$3,100,000 from PFNWR) or 10.8%, and \$1,229,000 or 1.8% of our consolidated revenue from continuing operations for 2008, 2007, and 2006, respectively.

In connection with the CHPRC obligations under its DOE general contract as discussed above, our M&EC facility was awarded a subcontract by CHPRC to participate in the cleanup of the central portion of the Hanford Site, which once housed certain chemical separation buildings and other facilities that separated and recovered plutonium and other materials for use in nuclear weapons. This subcontract became effective on June 19, 2008, the date DOE awarded CHPRC the general contract. DOE's general contract and M&EC's subcontract provided a transition period from August 11, 2008 through September 30, 2008, a base period from October 1, 2008 through September 30, 2013, and an option period from October 1, 2013 through September 30, 2018. M&EC's subcontract is a cost plus award fee contract. On October 1, 2008, operations of this subcontract commenced at the DOE Hanford Site. We believe full operations under this subcontract will result in revenues for on-site and off-site work of approximately \$200,000,000 to \$250,000,000 over the five year base period. As of December 31, 2008, revenue from this subcontractor accounted for \$8,120,000 or 10.8% of total revenue from our continuing operations. As of the date of this report, we have employed an additional 177 employees to service this subcontract.

### **Competitive Conditions**

The Nuclear Segment's largest competitor is EnergySolutions, which provides treatment and disposal capabilities at its Oak Ridge, Tennessee and Clive, Utah facilities. EnergySolutions presents the largest competitive challenge in the market. At present, EnergySolutions' Clive, Utah facility is one of the few radioactive disposal sites for commercially generated wastes in the country in which our Nuclear Segment can dispose of its nuclear waste. If EnergySolutions should refuse to accept our waste or cease operations at its Clive, Utah facility, such would have a material adverse effect on us for commercial wastes. The Nuclear Segment treats and disposes of DOE generated wastes largely at DOE owned sites. Smaller competitors are also present in the market place; however, they do not present a significant challenge at this time. Our Nuclear Segment solicits business on a nationwide basis with both government and commercial clients.

The permitting and licensing requirements, and the cost to obtain such permits, are barriers to the entry of hazardous waste treatment, storage, and disposal ("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 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 less rigorous to obtain, such would allow companies to enter into these markets and provide greater competition.

Engineering Segment 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, emission reduction strategies, and Maximum Available Control Technology (“MACT”) compliance.

Within our Industrial Segment we solicit business primarily in the Southeastern portion of the United States. We believe that we are a significant provider in the delivery of off-site waste treatment services in the Southeast portion of the United States. We compete with facilities operated by national, regional and independent environmental services firms located within a several hundred-mile radius of our facilities.

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

### *Capital Spending*

During 2008, our purchases of capital equipment totaled approximately \$1,158,000 of which \$1,129,000 and \$29,000 was for our continuing and discontinued operations, respectively. Of the total capital spending, \$148,000 was financed for our continuing operations, resulting in total net purchases of \$1,010,000 funded out of cash flow (\$981,000 for continuing operations and \$29,000 for our discontinued operations). These expenditures were for compliance, sustenance, expansion, and improvements to the operations principally within the Nuclear Segment. These capital expenditures were funded by the cash provided by operations and from cash provided by financing activities. We have budgeted approximately \$1,300,000 for 2009 capital expenditures for our segments to 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. Certain of these budgeted projects are discretionary and may either be delayed until later in the year or deferred altogether. We have traditionally incurred actual capital spending totals for a given year less than the initial budget amount. The initiation and timing of projects are also determined by financing alternatives or funds available for such capital projects.

### *Environmental Liabilities*

We have four remediation projects, which are currently in progress at certain of our continuing and discontinued facilities. These remediation projects principally entail the removal/remediation of contaminated soil and, in some cases, the remediation of surrounding ground water.

In June 1994, we acquired PFD, which we divested in March 2008. Prior to us acquiring PFD in 1994, the former owners of PFD had merged Environmental Processing Services, Inc. (“EPS”) with PFD. The party that sold PFD to us in 1994 agreed to indemnify us for costs associated with remediating the property leased by EPS (“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 was located. The contamination of the Leased Property occurred prior to PFD being acquired by us. During 1995, in conjunction with the bankruptcy filing by the selling party, we recognized an environmental liability of approximately \$1,200,000 for remedial activities at the Leased Property. Upon the sale of PFD in March 2008 by Perma-Fix, we retained the environmental liability of PFD as it related only to the remediation of the EPS site. In 2008, we performed a field investigation to gather additional information required to close certain soil contamination issues and to support development of the final groundwater remediation approach. We have accrued approximately \$489,000, at December 31, 2008, for the estimated, remaining costs of remediating the Leased Property used by EPS, which will extend over the next seven years.

In conjunction with the acquisition of Perma-Fix of Memphis, Inc. (“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

[Table of Contents](#)

standards in accordance with federal, state and local authorities. In 2008, we completed all soil remediation with the exception of that associated with the groundwater contamination. In addition, we installed wells and equipment associated with groundwater remediation. We have accrued approximately \$275,000 at December 31, 2008, for the estimated, remaining costs of remediating the groundwater contamination, which will extend over the next five years. This environmental liability is included in our continuing operations and will remain the financial obligation of the Company.

In conjunction with the acquisition of PFSG, a subsidiary within our Industrial Segment, we initially recognized an environmental accrual of \$2,200,000 for estimated long-term costs to remove contaminated soil and to undergo ground water remediation activities at the acquired facility in Valdosta, Georgia. The remedial activities began in 2003. We have accrued approximately \$531,000, at December 31, 2008, to complete remediation of the facility, which we anticipate spending over the next seven years.

In conjunction with an oil spill at PFTS, we accrued approximately \$69,000 to remediate the contaminated soil and ground water at this location. Upon the sale of PFTS facility in May 2008, the remaining environmental reserve of approximately \$35,000 was recorded as a "gain on disposal of discontinued operations, net of taxes" in the second quarter of 2008 on our "Consolidated Statement of Operations".

In conjunction with the acquisition of PFMD in March 2004, we accrued for long-term environmental liabilities of \$391,000 as a best estimate of the cost to remediate the hazardous and/or non-hazardous contamination on certain properties owned by PFMD. In connection with the sale of PFMD facility in January 2008, the buyer assumed this liability in addition to obligations and liabilities for environmental conditions at the Maryland facility except for fines, assessments, or judgments to governmental authorities prior to the closing of the transaction or third party tort claims existing prior to the closing of the sale.

As a result of the discontinued operations at the PFMI facility in 2004, we were required to complete certain closure and remediation activities pursuant to our RCRA permit, which were completed in January 2006. In September 2006, PFMI signed a Corrective Action Consent Order with the State of Michigan, requiring performance of studies and development and execution of plans related to the potential clean-up of soils in portions of the property. The level and cost of the clean-up and remediation are determined by state mandated requirements. Upon discontinuation of operations in 2004, we engaged our engineering firm, SYA, to perform an analysis and related estimate of the cost to complete the RCRA portion of the closure/clean-up costs and the potential long-term remediation costs. Based upon this analysis, we estimated the cost of this environmental closure and remediation liability to be \$2,464,000. During 2006, based on state-mandated criteria, we re-evaluated our required activities to close and remediate the facility, and during the quarter ended June 30, 2006, we began implementing the modified methodology to remediate the facility. As a result of the reevaluation and the change in methodology, we reduced the accrual by \$1,182,000. We have spent approximately \$745,000 for closure costs since September 30, 2004, of which \$26,000 was spent during 2008 and \$81,000 was spent during 2007. In the 4<sup>th</sup> quarter of 2007, we reduced our reserve by \$9,000 as a result of our reassessment of the cost of remediation. We have \$538,000 accrued for the closure, as of December 31, 2008, and we anticipate spending \$425,000 in 2009 with the remainder over the next six years. Based on the current status of the Corrective Action, we believe that the remaining reserve is adequate to cover the liability.

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.

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. 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 (see “Legal Proceedings” in Part I, Item 3). We could also be subject to fines and civil penalties in connection with violations of regulatory requirements.

### **Research and Development**

Innovation and technical know-how 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 conduct research internally, and also through collaborations with other third parties. The majority of our research activities are performed as we receive new and unique waste to treat; as such, we recognize these expenses as a part of our processing costs. We feel that our investments in research have been rewarded by the discovery of the Perma-Fix Process and the Perma-Fix II 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 2008, 2007, and 2006, we spent approximately \$1,020,000, \$715,000, and \$422,000, 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, 2008, we employed 554 full time persons, of whom 16 were assigned to our corporate office, 20 were assigned to our Operations Headquarters, 24 were assigned to our Engineering Segment, 42 were assigned to our Industrial Segment, and 452 were assigned to our Nuclear Segment. Of the 452 employees at our Nuclear Segment, 177 employees were hired in 2008 as result of our new subcontract awarded to us by CHPRC. Of the 177 employees, 84 employees (representing 15.2% of the Company's total number of employees) are unionized and are covered by a collective bargaining agreement. The bargaining agreement has a term of three years effective April 1, 2007 and expires on March 31, 2010 and is subject to a two year extension pending wage and benefit renegotiation (see “-Company Overview and Principal Products and Services” in this section).

### **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. 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 our customers and us 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 permitting and 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.

#### **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 non-hazardous 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 non-hazardous 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 liabilities for the costs of clean up and damages to natural resources.

**Health and Safety Regulations**

The operation of our 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 “USNRC”) 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. The State of Washington (with the USNRC oversight) Department of Health, regulates the radiological operations of the PFNWR facility.

**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 effect 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 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 we may incur 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 is 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 \$1,000,000 per occurrence and \$2,000,000 per year in the aggregate. To meet the requirements of customers, we have exceeded these coverage amounts.

In June 2003, we entered into a 25-year finite risk insurance policy with AIG (see “Part I, Item 1A. - Risk Factors” for certain potential risk related to AIG), which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. Prior to obtaining or renewing operating permits, we are required to provide financial assurance that guarantees to the states that in the event of closure, our permitted facilities will be closed in accordance with the regulations. The policy provides a maximum \$35,000,000 of financial assurance coverage, and thus far has provided \$32,515,000 in financial assurance as of December 31, 2008. In March 2009, we increased our maximum policy coverage to \$39,000,000 in order to secure additional financial assurance coverage requirement for our DSSI subsidiary to commercially store and dispose of PCB wastes under a permit issued by theEPA on November 26, 2008. As a result of this additional financial assurance requirement for our DSSI permit, our coverage under this policy totals approximately \$37,936,000.

In August 2007, we entered into a second finite risk insurance policy for our PFNWR facility, which we acquired in June 2007, with AIG (see “Part I, Item 1A. - Risk Factors” for certain potential risk related to AIG). The policy provides an initial \$7,800,000 of financial assurance coverage with annual growth rate of 1.5%, which at the end of the four year term policy, will provide maximum coverage of \$8,200,000. The policy will renew automatically on an annual basis at the end of the four year term and will not be subject to any renewal fees.

## **ITEM RISK FACTORS**

### **1A.**

*The following are certain risk factors that could affect our business, financial performance, and results of operations. These risk factors should be considered in connection with evaluating the forward-looking statements contained in this Form 10-K, as the forward-looking statements are based on current expectations, and actual results and conditions could differ materially from the current expectations. Investing in our securities involves a high degree of risk, and before making an investment decision, you should carefully consider these risk factors as well as other information we include or incorporate by reference in the other reports we file with the Securities and Exchange Commission (“SEC”).*

#### **Risks Relating to our Operations**

##### **Our insurer that provides our financial assurance that we are required to have in order to operate our permitted treatment, storage and disposal facility has experienced financial difficulties.**

It has been publicly reported that American International Group, Inc. (“AIG”), has experienced significant financial difficulties and is continuing to experience significant financial difficulties. A subsidiary of AIG provides our finite risk insurance policies which provide financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. We are required to provide and to maintain financial assurance that guarantees to the state that in the event of closure of our permitted facilities will be closed in accordance with the regulations. The policies provide a maximum of \$35,000,000 of financial assurance coverage of which the coverage amount totals \$32,515,000 at December 31, 2008. In March 2009, the policies were increased to provide a maximum of \$39,000,000 of financial assurance coverage of which the coverage amounts totals \$37,936,000. This additional increase was the result of additional financial assurance coverage requirement for our DSSI subsidiary to commercially store and dispose of PCB wastes under a permit issued by theEPA on November 26, 2008. The AIG subsidiary also provides other operating insurance policies for the Company and our subsidiaries. In the event of a failure of AIG, this could materially impact our operations and our permits which we are required to have in order to operate our treatment, storage, and disposal facilities.

##### **If we cannot maintain adequate insurance coverage, we will be unable to continue certain operations.**

Our business exposes us to various risks, including claims for causing damage to property and injuries to persons that may involve allegations of negligence or professional errors or omissions in the performance of our services. Such claims could be substantial. We believe that our insurance coverage is presently adequate and similar to, or greater than, the coverage maintained by other companies in the industry of our size. If we are unable to obtain adequate or required insurance coverage in the future, or if our insurance is not available at affordable rates, we would violate our permit conditions and other requirements of the

environmental laws, rules, and regulations under which we operate. Such violations would render us unable to continue certain of our operations. These events would have a material adverse effect on our financial condition.

**The inability to maintain existing government contracts or win new government contracts over an extended period could have a material adverse effect on our operations and adversely affect our future revenues.**

A material amount of our Nuclear Segment's revenues are generated through various U.S. government contracts or subcontracts involving the U.S. government. Our revenues from governmental contracts and subcontracts relating to governmental facilities within our Nuclear Segment were approximately \$43,464,000 and \$30,000,000, representing 57.6% and 46.5%, respectively, of our consolidated operating revenues from continuing operations for 2008 and 2007. Most of our government contracts or our subcontracts granted under government contracts are awarded through a regulated competitive bidding process. Some government contracts are awarded to multiple competitors, which increase overall competition and pricing pressure and may require us to make sustained post-award efforts to realize revenues under these government contracts. All contracts with, or subcontracts involving, the federal government are terminable, or subject to renegotiation, by the applicable governmental agency on 30 days notice, at the option of the governmental agency. If we fail to maintain or replace these relationships, or if a material contract is terminated or renegotiated in a manner that is materially adverse to us, our revenues and future operations could be materially adversely affected.

**Failure of our Nuclear Segment to be profitable could have a material adverse effect.**

Our Nuclear Segment has historically been profitable. With the divestitures of certain facilities within our Industrial Segment and the acquisition of our Perma-Fix Northwest Richland, Inc. ("PFNWR") within our Nuclear Segment in June 2007, the Nuclear Segment represents the Company's largest revenue segment. The Company's main objectives are to increase focus on the efficient operation of our existing facilities within our Nuclear Segment and to further evaluate strategic acquisitions within the Nuclear Segment. If our Nuclear Segment fails to continue to be profitable in the future, this could have a material adverse effect on the Company's results of operations, liquidity and our potential growth.

**Our existing and future customers may reduce or halt their spending on nuclear services with outside vendors, including us.**

A variety of factors may cause our existing or future customers (including the federal government) to reduce or halt their spending on nuclear services from outside vendors, including us. These factors include, but are not limited to:

- accidents, terrorism, natural disasters or other incidents occurring at nuclear facilities or involving shipments of nuclear materials;
- failure of the federal government to approve necessary budgets, or to reduce the amount of the budget necessary, to fund remediation of DOE and DOD sites;
- civic opposition to or changes in government policies regarding nuclear operations; or
- a reduction in demand for nuclear generating capacity.

These events could result in or cause the federal government to terminate or cancel its existing contracts involving us to treat, store or dispose of contaminated waste at one or more of the federal sites since all contracts with, or subcontracts involving, the federal government are terminable upon or subject to renegotiation at the option of the government on 30 days notice. These events also could adversely affect us to the extent that they result in the reduction or elimination of contractual requirements, lower demand for nuclear services, burdensome regulation, disruptions of shipments or production, increased operational costs or difficulties or increased liability for actual or threatened property damage or personal injury.

**Economic downturns (ie: the current economic recession) and/or reductions in government funding could have a material negative impact on our businesses.**

Demand for our services has been, and we expect that demand will continue to be, subject to significant fluctuations due to a variety of factors beyond our control, including the current economic recession and conditions, inability of the federal government to adopt its budget or reductions in the budget for spending to remediate federal sites due to numerous reasons, including, without limitation, the substantial deficits that the federal government has and is continuing to incur. During economic downturns, such as the current economic recession, and large budget deficits that the federal government and many states are experiencing, the ability of private and government entities to spend on nuclear services may decline significantly. Although the recently adopted economic stimulus package provides for substantial funds to remediate federal nuclear sites, we cannot be certain that economic or political conditions will be generally favorable or that there will not be significant fluctuations adversely affecting our industry as a whole. In addition, our operations depend, in large part, upon governmental funding, particularly funding levels at the DOE. Significant reductions in the level of governmental funding (for example, the annual budget of the DOE) or specifically mandated levels for different programs that are important to our business could have a material adverse impact on our business, financial position, results of operations and cash flows.

**The loss of one or a few customers could have an adverse effect on us.**

One or a few governmental customers or governmental related customers have in the past, and may in the future, account for a significant portion of our revenue in any one year or over a period of several consecutive years. Because customers generally contract with us for specific projects, we may lose these significant customers from year to year as their projects with us are completed. Our inability to replace the business with other projects could have an adverse effect on our business and results of operations.

**As a government contractor, we are subject to extensive government regulation, and our failure to comply with applicable regulations could subject us to penalties that may restrict our ability to conduct our business.**

Our governmental contracts, which are primarily with the DOE or subcontracts relating to DOE sites, are a significant part of our business. Allowable costs under U.S. government contracts are subject to audit by the U.S. government. If these audits result in determinations that costs claimed as reimbursable are not allowed costs or were not allocated in accordance with applicable regulations, we could be required to reimburse the U.S. government for amounts previously received.

Governmental contracts or subcontracts involving governmental facilities are often subject to specific procurement regulations, contract provisions and a variety of other requirements relating to the formation, administration, performance and accounting of these contracts. Many of these contracts include express or implied certifications of compliance with applicable regulations and contractual provisions. If we fail to comply with any regulations, requirements or statutes, our existing governmental contracts or subcontracts involving governmental facilities could be terminated or we could be suspended from government contracting or subcontracting. If one or more of our governmental contracts or subcontracts are terminated for any reason, or if we are suspended or debarred from government work, we could suffer a significant reduction in expected revenues and profits. Furthermore, as a result of our governmental contracts or subcontracts involving governmental facilities, claims for civil or criminal fraud may be brought by the government or violations of these regulations, requirements or statutes.

**Loss of certain key personnel could have a material adverse effect on us.**

Our success depends on the contributions of our key management, environmental and engineering personnel, especially Dr. Louis F. Centofanti, Chairman, President, and Chief Executive Officer. The loss of Dr. Centofanti could have a material adverse effect on our operations, revenues, prospects, and our ability to raise additional funds. Our future success depends on our ability to retain and expand our staff of qualified personnel, including environmental specialists and technicians, sales personnel, and engineers. Without qualified personnel, we may incur delays in rendering our services or be unable to render certain services. We cannot be certain that we will be successful in our efforts to attract and retain qualified personnel as their availability is limited due to the demand for hazardous waste management services and

the highly competitive nature of the hazardous waste management industry. We do not maintain key person insurance on any of our employees, officers, or directors.

**Changes in environmental regulations and enforcement policies could subject us to additional liability and adversely affect our ability to continue certain operations.**

We cannot predict the extent to which our operations may be affected by future governmental enforcement policies as applied to existing laws, by changes to current environmental laws and regulations, or by the enactment of new environmental laws and regulations. Any predictions regarding possible liability under such laws are complicated further by current environmental laws which provide that we could be liable, jointly and severally, for certain activities of third parties over whom we have limited or no control.

**The refusal to accept our waste for disposal by, or a closure of, the end disposal site that our Nuclear Segment utilizes to dispose of its waste could subject us to significant risk and limit our operations.**

Our Nuclear Segment has limited options available for disposal of its waste. If this disposal site ceases to accept waste or closes for any reason or refuses to accept the waste of our Nuclear Segment, for any reason, we could have nowhere to dispose of our nuclear waste or have significantly increased costs from disposal alternatives. With nowhere to dispose of our nuclear waste, we would be subject to significant risk from the implications of storing the waste on our site, and we would have to limit our operations to accept only waste that we can dispose of.

**Our businesses subject us to substantial potential environmental liability.**

Our business of rendering services in connection with management of waste, including certain types of hazardous waste, low-level radioactive waste, and mixed waste (waste containing both hazardous and low-level radioactive waste), subjects us to risks of liability for damages. Such liability could involve, without limitation:

- claims for clean-up costs, personal injury or damage to the environment in cases in which we are held responsible for the release of hazardous or radioactive materials; and
- 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.

Our operations are subject to numerous environmental laws and regulations. We have in the past, and could in the future, be subject to substantial fines, penalties, and sanctions for violations of environmental laws and substantial expenditures as a responsible party for the cost of remediating any property which may be contaminated by hazardous substances generated by us and disposed at such property, or transported by us to a site selected by us, including properties we own or lease.

**As our operations expand, we may be subject to increased litigation, which could have a negative impact on our future financial results.**

Our operations are highly regulated and we are subject to numerous laws and regulations regarding procedures for waste treatment, storage, recycling, transportation, and disposal activities, all of which may provide the basis for litigation against us. In recent years, the waste treatment industry has experienced a significant increase in so-called “toxic-tort” litigation as those injured by contamination seek to recover for personal injuries or property damage. We believe that, as our operations and activities expand, there will be a similar increase in the potential for litigation alleging that we have violated environmental laws or regulations or are responsible for contamination or pollution caused by our normal operations, negligence or other misconduct, or for accidents, which occur in the course of our business activities. Such litigation, if significant and not adequately insured against, could adversely affect our financial condition and our ability to fund our operations. Protracted litigation would likely cause us to spend significant amounts of our time, effort, and money. This could prevent our management from focusing on our operations and expansion.

**Our operations are subject to seasonal factors, which cause our revenues to fluctuate.**

We have historically experienced reduced revenues and losses during the first and fourth quarters of our fiscal years due to a seasonal slowdown in operations from poor weather conditions, overall reduced activities during these periods resulting from holiday periods, and finalization of government budgets during the fourth quarter of each year. During our second and third fiscal quarters there has historically been an increase in revenues and operating profits. If we do not continue to have increased revenues and profitability during the second and third fiscal quarters, this will have a material adverse effect on our results of operations and liquidity.

**If environmental regulation or enforcement is relaxed, the demand for our services will decrease.**

The demand for our services is substantially dependent upon the public's concern with, and the continuation and proliferation of, the laws and regulations governing the treatment, storage, recycling, and disposal of hazardous, non-hazardous, and low-level radioactive waste. A decrease in the level of public concern, the repeal or modification of these laws, or any significant relaxation of regulations relating to the treatment, storage, recycling, and disposal of hazardous waste and low-level radioactive waste would significantly reduce the demand for our services and could have a material adverse effect on our operations and financial condition. We are not aware of any current federal or state government or agency efforts in which a moratorium or limitation has been, or will be, placed upon the creation of new hazardous or radioactive waste regulations that would have a material adverse effect on us; however, no assurance can be made that such a moratorium or limitation will not be implemented in the future.

**We and our customers operate in a politically sensitive environment, and the public perception of nuclear power and radioactive materials can affect our customers and us.**

We and our customers operate in a politically sensitive environment. Opposition by third parties to particular projects can limit the handling and disposal of radioactive materials. Adverse public reaction to developments in the disposal of radioactive materials, including any high profile incident involving the discharge of radioactive materials, could directly affect our customers and indirectly affect our business. Adverse public reaction also could lead to increased regulation or outright prohibition, limitations on the activities of our customers, more onerous operating requirements or other conditions that could have a material adverse impact on our customers' and our business.

**We may not be successful in winning new business mandates from our government and commercial customers.**

We must be successful in winning mandates from our government and commercial customers to replace revenues from projects that are nearing completion and to increase our revenues. Our business and operating results can be adversely affected by the size and timing of a single material contract.

**The elimination or any modification of the Price-Anderson Acts indemnification authority could have adverse consequences for our business.**

The Atomic Energy Act of 1954, as amended, or the AEA, comprehensively regulates the manufacture, use, and storage of radioactive materials. The Price-Anderson Act supports the nuclear services industry by offering broad indemnification to DOE contractors for liabilities arising out of nuclear incidents at DOE nuclear facilities. That indemnification protects DOE prime contractor, but also similar companies that work under contract or subcontract for a DOE prime contract or transporting radioactive material to or from a site. The indemnification authority of the DOE under the Price-Anderson Act was extended through 2025 by the Energy Policy Act of 2005.

The Price-Anderson Act's indemnification provisions generally do not apply to our processing of radioactive waste at governmental facilities, and do not apply to liabilities that we might incur while performing services as a contractor for the DOE and the nuclear energy industry. If an incident or evacuation is not covered under Price-Anderson Act indemnification, we could be held liable for damages, regardless of fault, which could have an adverse effect on our results of operations and financial condition. If such indemnification authority is not applicable in the future, our business could be adversely affected if the owners and operators of new facilities fail to retain our services in the absence of commercial adequate insurance and indemnification.

**We are engaged in highly competitive businesses and typically must bid against other competitors to obtain major contracts.**

We are engaged in highly competitive business in which most of our government contracts and some of our commercial contracts are awarded through competitive bidding processes. We compete with national and regional firms with nuclear services practices, as well as small or local contractors. Some of our competitors have greater financial and other resources than we do, which can give them a competitive advantage. In addition, even if we are qualified to work on a new government contract, we might not be awarded the contract because of existing government policies designed to protect certain types of businesses and underrepresented minority contractors. Competition also places downward pressure on our contract prices and profit margins. Intense competition is expected to continue for nuclear service contracts. If we are unable to meet these competitive challenges, we could lose market share and experience an overall reduction in our profits.

**Our failure to maintain our safety record could have an adverse effect on our business.**

Our safety record is critical to our reputation. In addition, many of our government and commercial customers require that we maintain certain specified safety record guidelines to be eligible to bid for contracts with these customers. Furthermore, contract terms may provide for automatic termination in the event that our safety record fails to adhere to agreed-upon guidelines during performance of the contract. As a result, our failure to maintain our safety record could have a material adverse effect on our business, financial condition and results of operations.

**We continue to have material weaknesses in our Internal Control over Financial Reporting (“ICFR”).**

During our evaluation of our ICFR, we noted that the monitoring of invoicing process controls and the corresponding transportation and disposal process controls at our Industrial Segment subsidiaries were ineffective and were not being applied consistently. In addition, we noted that the monitoring of quote to invoicing control was ineffective at certain of our Nuclear Segment subsidiaries. These deficiencies resulted in material weaknesses to our ICFR, and could result in sales being priced and invoiced at amounts which were not approved by the customer, or the appropriate level of management, and recognition of revenue in incorrect financial reporting period. These deficiencies have resulted in our disclosure that our ICFR was ineffective as of the end of 2008 and 2007. Although these material weaknesses did not result in a material adjustment to our quarterly or annual financial statements, if we are unable to remediate these material weaknesses, there is a reasonable possibility that a misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

**We may be unable to utilize loss carryforwards in the future.**

We have approximately \$26,589,000 in net operating loss carryforwards which will expire from 2009 to 2028 if not used against future federal income tax liabilities. Our net loss carryforwards are subject to various limitations. Our ability to use the net loss carryforwards depends on whether we are able to generate sufficient income in the future years. Further, our net loss carryforwards have not been audited or approved by the Internal Revenue Service.

**Risks Relating to our Intellectual Property**

**If we cannot maintain our governmental permits or cannot obtain required permits, we may not be able to continue or expand our operations.**

We are a waste management company. Our business is 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, recycling, disposal, and transportation of hazardous and non-hazardous waste and low-level radioactive waste. We must obtain and maintain permits or licenses to conduct these activities in compliance with such laws and regulations. Failure to obtain and maintain the required permits or licenses would have a material adverse effect on our operations and financial condition. If any of our facilities are unable to maintain currently held permits or licenses or obtain any additional permits or licenses which may be required to conduct its operations, we may not be able to continue those operations at these facilities, which could have a material adverse effect on us.

**We believe our proprietary technology is important to us.**

We believe that it is important that we maintain our proprietary technologies. There can be no assurance that the steps taken by us to protect our proprietary technologies will be adequate to prevent misappropriation of these technologies by third parties. Misappropriation of our proprietary technology could have an adverse effect on our operations and financial condition. Changes to current environmental laws and regulations also could limit the use of our proprietary technology.

**Risks Relating to our Financial Position and Need for Financing**

**Breach of financial covenants in existing credit facility could result in a default, triggering repayment of outstanding debt under the credit facility.**

Our credit facility with our bank contains financial covenants. A breach of any of these covenants could result in a default under our credit facility triggering our lender to immediately require the repayment of all outstanding debt under our credit facility and terminate all commitments to extend further credit. In the past, none of our covenants have been restrictive to our operations. If we fail to meet our loan covenants in the future and our lender does not waive the non-compliance or revise our covenant so that we are in compliance, our lender could accelerate the repayment of borrowings under our credit facility. In the event that our lender accelerates the payment of our borrowing, we may not have sufficient liquidity to repay our debt under our credit facility and other indebtedness.

**Our amount of debt and floating rates of interest could adversely affect our operations.**

At December 31, 2008, our aggregate consolidated debt was approximately \$16,203,000. If our floating rates of interest experienced an upward increase of 1%, our debt service would increase by approximately \$162,000 annually. Our secured revolving credit facility (the "Credit Facility") provides for an aggregate commitment of \$25,000,000, consisting of an \$18,000,000 revolving line of credit and a term loan of \$7,000,000. The maximum we can borrow under the revolving part of the Credit Facility is based on a percentage of the amount of our eligible receivables outstanding at any one time. As of December 31, 2008, we had borrowings under the revolving part of our Credit Facility of \$6,500,000 and borrowing availability of up to an additional \$5,400,000 based on our outstanding eligible receivables. A lack of operating results could have material adverse consequences on our ability to operate our business. Our ability to make principal and interest payments, or to refinance indebtedness, will depend on both our and our subsidiaries' future operating performance and cash flow. Prevailing economic conditions, interest rate levels, and financial, competitive, business, and other factors affect us. Many of these factors are beyond our control.

**Risks Relating to our Common Stock**

**Issuance of substantial amounts of our Common Stock could depress our stock price.**

Any sales of substantial amounts of our Common Stock in the public market could cause an adverse effect on the market price of our Common Stock and could impair our ability to raise capital through the sale of additional equity securities. The issuance of our Common Stock will result in the dilution in the percentage membership interest of our stockholders and the dilution in ownership value. As of December 31, 2008, we had 53,934,560 shares of Common Stock outstanding.

In addition, as of December 31, 2008, we had outstanding options to purchase 3,417,347 shares of Common Stock at exercise prices from \$1.22 to \$2.98 per share. Further, we have adopted a preferred share rights plan, and if such is triggered, could result in the issuance of a substantial amount of our Common Stock. The existence of this quantity of rights to purchase our Common Stock could result in a significant dilution in the percentage ownership interest of our stockholders and the dilution in ownership value. Future sales of the shares issuable could also depress the market price of our Common Stock.

**We do not intend to pay dividends on our Common Stock in the foreseeable future.**

Since our inception, we have not paid cash dividends on our Common Stock, and we do not anticipate paying any cash dividends in the foreseeable future. Our Credit Facility prohibits us from paying cash dividends on our Common Stock.

**The price of our Common Stock may fluctuate significantly, which may make it difficult for our stockholders to resell our Common Stock when a stockholder wants or at prices a stockholder finds attractive.**

The price of our Common Stock on the Nasdaq Capital Markets constantly changes. We expect that the market price of our Common Stock will continue to fluctuate. This may make it difficult for our stockholders to resell the Common Stock when a stockholder wants or at prices a stockholder finds attractive.

Future issuance or potential issuance of our Common Stock could adversely affect the price of our Common Stock, our ability to raise funds in new stock offerings, and dilute our shareholders percentage interest in our Common Stock.

Future sales of substantial amounts of our Common Stock in the public market, or the perception that such sales could occur, could adversely affect prevailing trading prices of our Common Stock, and impair our ability to raise capital through future offerings of equity. No prediction can be made as to the effect, if any, that future issuances or sales of shares of Common Stock or the availability of shares of Common Stock for future issuance, will have on the trading price of our Common Stock. Such future issuances could also significantly reduce the percentage ownership and dilute the ownership value of our existing common stockholders.

**Delaware law, certain of our charter provisions, our stock option plans, outstanding warrants and our Preferred Stock may inhibit a change of control under circumstances that could give you an opportunity to realize a premium over prevailing market prices.**

We are a Delaware corporation governed, in part, by the provisions of Section 203 of the General Corporation Law of Delaware, an anti-takeover law. In general, Section 203 prohibits a Delaware public corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. As a result of Section 203, potential acquirers may be discouraged from attempting to effect acquisition transactions with us, thereby possibly depriving our security holders of certain opportunities to sell, or otherwise dispose of, such securities at above-market prices pursuant to such transactions. Further, certain of our option plans provide for the immediate acceleration of, and removal of restrictions from, options and other awards under such plans upon a “change of control” (as defined in the respective plans). Such provisions may also have the result of discouraging acquisition of us.

We have authorized and unissued 17,648,093 (which include outstanding options to purchase 3,417,347 shares of our Common Stock) shares of Common Stock and 2,000,000 shares of Preferred Stock as of December 31, 2008 (which includes 600,000 shares of our Preferred Stock reserved for issuance under our preferred share rights plan). These unissued shares could be used by our management to make it more difficult, and thereby discourage an attempt to acquire control of us.

**Our Preferred Share Rights Plan may adversely affect our stockholders.**

In May 2008, we adopted a preferred share rights plan (the “Rights Plan”), designed to ensure that all of our stockholders receive fair and equal treatment in the event of a proposed takeover or abusive tender offer. However, the Rights Plan may also have the effect of deterring, delaying, or preventing a change in control that might otherwise be in the best interests of our stockholders.

## Table of Contents

In general, under the terms of the Rights Plan, subject to certain limited exceptions, if a person or group acquires 20% or more of our Common Stock or a tender offer or exchange offer for 20% or more of our Common Stock is announced or commenced, our other stockholders may receive upon exercise of the rights (the "Rights") issued under the Rights Plan the number of shares our Common Stock or of one-one hundredths of a share of our Series A Junior Participating Preferred Stock, par value \$.001 per share, having a value equal to two times the purchase price of the Right. In addition, if we are acquired in a merger or other business combination transaction in which we are not the survivor or more than 50% of our assets or earning power is sold or transferred, then each holder of a Right (other than the acquirer) will thereafter have the right to receive, upon exercise, common stock of the acquiring company having a value equal to two times the purchase price of the Right. The purchase price of each Right is \$13, subject to adjustment.

The Rights will cause substantial dilution to a person or group that attempts to acquire us on terms not approved by our board of directors. The Rights may be redeemed by us at \$0.001 per Right at any time before any person or group acquires 20% or more of our outstanding common stock. The rights should not interfere with any merger or other business combination approved by our board of directors. The Rights expire on May 2, 2018.

### **ITEM UNRESOLVED STAFF COMMENTS**

#### **1B.**

None

### **ITEM PROPERTIES**

#### **2.**

Our principal executive office is in Atlanta, Georgia. Our Operations Headquarters is located in Oak Ridge, Tennessee. Our Nuclear Segment facilities are located in Gainesville, Florida; Kingston, Tennessee; Oak Ridge, Tennessee, and in Richland, Washington. Our Consulting Engineering Services is located in Ellisville, Missouri. Our Industrial Segment facilities are located in Orlando and Ft. Lauderdale, Florida; and Valdosta, Georgia. Our Industrial Segment also has two non-operational facilities: Brownstown, Michigan, where we still maintain the property; and Pittsburgh, Pennsylvania, for which the leased property was released back to the owner in 2006 upon final remediation of the leased property.

We operate eight facilities. All of the facilities are in the United States. Five of our facilities are subject to mortgages as granted to our senior lender (Kingston, Tennessee; Gainesville, Florida; Richland, Washington; Fort Lauderdale, Florida; and Orlando, Florida).

We also lease 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 DOE East Tennessee Technology Park located in Oak Ridge, Tennessee.

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, which could support and supplement our existing facilities.

### **ITEM LEGAL PROCEEDINGS**

#### **3.**

*Perma-Fix of Dayton ("PFD"), Perma-Fix of Florida ("PFF"), Perma-Fix of Orlando ("PFO"), Perma-Fix of South Georgia ("PFSG"), and Perma-Fix of Memphis ("PFM")*

In May 2007, the above facilities were named Partially Responsible Parties ("PRPs") at the Marine Shale Superfund site in St. Mary Parish, Louisiana ("Site"). Information provided by the EPA indicates that from 1985 through 1996, the Perma-Fix facilities above were responsible for shipping 2.8% of the total waste volume received by Marine Shale. Subject to finalization of this estimate by the PRP group, PFF, PFO and PFD could be considered de-minimus at .06%, .07% and .28% respectively. PFSG and PFM would be major at 1.12% and 1.27% respectively. However, at this time the contributions of all facilities are consolidated.

## Table of Contents

As of the date of this report, Louisiana DEQ (“LDEQ”) has collected approximately \$8,400,000 for the remediation of the site and has completed removal of above ground waste from the site. The EPA’s unofficial estimate to complete remediation of the site is between \$9,000,000 and \$12,000,000; however, based on preliminary outside consulting work hired by the PRP group, which we are a party to, the remediation costs can be below EPA’s estimation. The PRP Group has established a cooperative relationship with LDEQ and EPA, and is working closely with these agencies to assure that the funds held by LDEQ are used cost-effective. As a result of recent negotiations with LDEQ and EPA, further remediation work by LDEQ has been put on hold pending completion of a site assessment by the PRP Group. This site assessment could result in remediation activities to be completed within the funds held by LDEQ. As part of the PRP Group, we have paid an initial assessment of \$10,000 in the fourth quarter of 2007, which was allocated among the facilities. In addition, we accrued approximately \$27,000 in the third quarter of 2008 for our estimated portion of the cost of the site assessment, which was allocated among the facilities. Approximately \$9,000 of the accrued amount was paid to the PRP Group in the fourth quarter of 2008. As of the date of this report, we cannot accurately access our total liability. The Company records its environmental liabilities when they are probable of payment and can be estimated within a reasonable range. Since this contingency currently does not meet this criteria, a liability has not been established.

### *Notice of Violation - Perma-Fix Treatment Services, Inc. (“PFTS”)*

In July 2008, PFTS received a notice of violation (“NOV”) from the Oklahoma Department of Environmental Quality (“ODEQ”) alleging that eight loads of waste materials received by PFTS between January 2007 and July 2007 were improperly analyzed to assure that the treatment process rendered the waste non-hazardous before disposition in PFTS’ non-hazardous injection well. The ODEQ alleges the handling of these waste materials violated regulations regarding hazardous waste. The ODEQ did not assert any penalties against PFTS in the NOV and requested PFTS to respond within 30 days from receipt of the letter. PFTS responded on August 22, 2008 and is currently in settlement discussions with the ODEQ. PFTS sold most all of its assets to a non-affiliated third party on May 30, 2008.

### *Industrial Segment Divested Facilities/Operations*

We sold substantially all of the assets of PFTS pursuant to an Asset Purchase Agreement on May 30, 2008. Under this Agreement the buyer assumed certain debts and obligations of PFTS, including, but not limited to, certain debts and obligations of PFTS to regulatory authorities under certain consent agreements entered into by PFTS with the appropriate regulatory authority to remediate portions of the facility sold to the buyer. If any of these liabilities/obligations are not paid or preformed by the buyer, the buyer would be in breach of the Asset Purchase Agreement and we may assert claims against the buyer for such breach. We currently are discussing with the buyer of the PFTS’ assets regarding certain liabilities which the buyer assumed and agreed to pay but which the buyer has refused to satisfy as of the date of this report. In addition, the buyer of the PFTS assets is required to replace our financial assurance bond with its own financial assurance mechanism for facility closures. Our financial assurance bond of \$685,000 for PFTS was required to remain in place until the buyer has provided replacement coverage. The respective regulatory authority will not release us from our financial assurance obligations until the buyer complies with the appropriate financial assurance regulations. On March 24, 2009, the respective regulatory authority authorized the release of our financial assurance bond of \$685,000 for PFTS. The buyer of PFTS’ assets has provided its own financial assurance bond which was approved by the respective regulatory authority.

## **ITEMSUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

4.

None

## ITEMEXECUTIVE OFFICERS OF THE REGISTRANT

### 4A.

The following table sets forth, as of the date hereof, information concerning our executive officers:

<u>NAME</u>	<u>AGE</u>	<u>POSITION</u>
Dr. Louis F. Centofanti	65	Chairman of the Board, President and Chief Executive Officer
Mr. Larry McNamara	59	Chief Operating Officer
Mr. Robert Schreiber, Jr.	58	President of SYA, Schreiber, Yonley & Associates, a subsidiary of the Company, and Principal Engineer
Mr. Ben Naccarato	46	Chief Financial Officer, Vice President, and Secretary

#### **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. Larry McNamara**

Mr. McNamara has served as Chief Operating Officer since October 2005. From October 2000 to October 2005, he served as President of the Nuclear Waste Management Services Segment. From December 1998 to October 2000, he served as Vice President of the Company's Nuclear Waste Management Services Segment. 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. Robert Schreiber, Jr.**

Mr. Schreiber has served as President of SYA since the Company acquired the environmental engineering firm in 1992. Mr. Schreiber co-founded the predecessor of SYA, Lafser & Schreiber in 1985, and served in several executive roles in the firm until our acquisition of SYA. From 1978 to 1985, Mr. Schreiber served as Director of Air programs and all environmental programs for the Missouri Department of Natural Resources. Mr. Schreiber provides technical expertise in wide range of areas including the cement industry, environmental regulations and air pollution control. Mr. Schreiber has a B.S. in Chemical Engineering from the University of Missouri – Columbia.

#### **Mr. Ben Naccarato**

Mr. Naccarato was named Chief Financial Officer by the Company's Board of Directors on February 26, 2009. Mr. Naccarato was appointed on October 24, 2008 by the Company's Board of Directors as the Interim Chief Financial Officer, effective November 1, 2008. Mr. Naccarato has been with the Company since September 2004 and has served as Vice President, Corporate Contoller/Treasurer since May 2006. Previous to serving as the Vice President, Corporate Contoller/Treasurer, Mr. Naccarato served as Vice President, Finance of the Company's Industrial Segment. Prior to joining the Company in September 2004, Mr. Naccarato served as the CFO of Culp Petroleum Company, Inc., a privately held company in the fuel distribution and used waste oil industry from December 2002 to September 2004. Mr. Naccarato is a

[Table of Contents](#)

graduate of University of Toronto having received a Bachelor of Commerce and Finance Degree and is a Certified Management Accountant.

**Resignation of Chief Financial Officer**

On October 22, 2008, Mr. Steven Baughman, tendered his resignation as Chief Financial Officer, Vice President, and Secretary of the Board of Directors of the Company. Mr. Baughman's resignation from his positions and as an executive officer became effective October 31, 2008.

**Certain Relationships**

There are no family relationships between any of our Directors or executive officers. Dr. Centofanti is the only Director who is our employee.

**PART II****ITEM MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS****5.**

Our Common Stock, is traded on the NASDAQ Capital Markets ("NASDAQ") under the symbol "PESI". 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.

		2008		2007	
		Low	High	Low	High
Common					
Stock	1 <sup>st</sup> Quarter	\$ 1.49	\$ 2.48	\$ 2.07	\$ 2.57
	2 <sup>nd</sup> Quarter	1.50	3.18	2.13	3.25
	3 <sup>rd</sup> Quarter	1.75	2.99	1.74	3.40
	4 <sup>th</sup> Quarter	.63	2.09	2.25	3.05

As of March 9, 2009, there were approximately 265 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 9, 2009, was approximately 3,249.

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 from the lender. We do not anticipate paying cash dividends on our outstanding Common Stock in the foreseeable future.

No sales of unregistered securities, other than the securities sold by us during 2008, as reported in our Forms 10-Q for the quarters ended March 31, 2008, June 30, 2008, and September 30, 2008, which were not registered under the Securities Act of 1933, as amended, were issued during 2007. There were no purchases made by us or on behalf of us or any of our affiliated members of shares of our Common Stock during the last quarter of 2008.

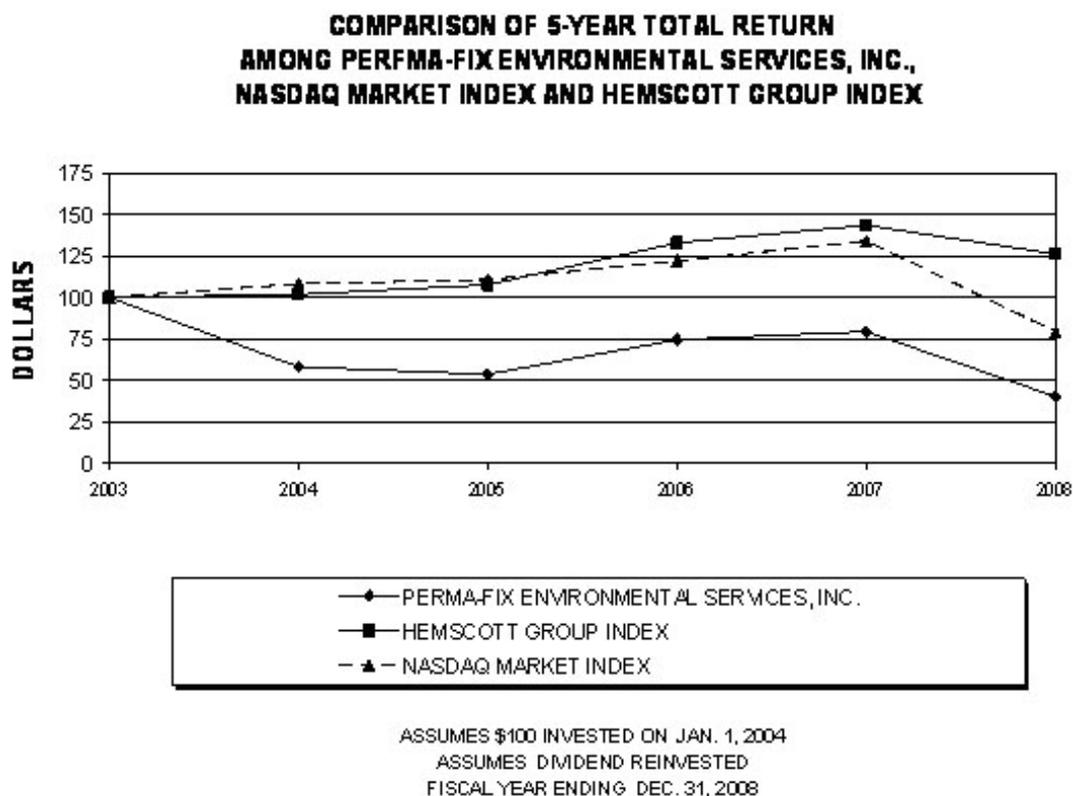
**Preferred Share Rights Plan**

In May 2008, we adopted a shareholder rights plan which will impact a potential acquirer unless the acquirer negotiates with our Board of Directors and the Board of Directors approves the transaction. The rights plan has a 10 year term. Pursuant to this plan, one preferred share purchase right (a "Right") is attached to each currently outstanding or subsequently issued share of our Common Stock. Prior to becoming exercisable, the Rights trade together with our Common Stock. In general, the Rights will become exercisable if a person or group (other than the acquirer) acquires or announces a tender or exchange offer for 20% or more of our Common Stock. Each Right entitles the holder to purchase from us one one-hundredth of a share of Series A Junior Participating Preferred Stock, par value \$0.001 per share (the "Preferred Stock"), at an exercise price of \$13 per one one-hundredth of a share, subject to adjustment. If a person or group acquires 20% or more of our Common Stock, each Right will entitle the holder (other than the acquirer) to purchase shares of our Common Stock (or, in certain circumstances, cash or other securities) having a market value of twice the exercise price of a Right at such time. Under certain circumstances, each Right will entitle the holder (other than the acquirer) to purchase the common stock of the acquirer having a market value of twice the exercise price of a Right at such time. In addition, under certain circumstances, our Board of Directors may exchange each Right (other than those held by the acquirer) for one share of our Common Stock, subject to adjustment. If the Rights become exercisable, holders of our Common Stock (other than the acquirer), will receive the number of Rights they would have received if their units had been redeemed and the purchase price paid in our Common Stock. Our Board of Directors may redeem the Rights at a price of \$0.001 per Right generally at any time before 10 days after the Rights become exercisable.

### Common Stock Price Performance Graph

The following Common Stock price performance graph compares the yearly change in the Company's cumulative total stockholders' returns on the Common Stock during the years 2004 through 2008, with the cumulative total return of the NASDAQ Market Index and the published industry index prepared by Hemscoff and known as Hemscoff Industry Group 637-Waste Management Index ("Industry Index") assuming the investment of \$100 on January 1, 2004.

The stockholder returns shown on the graph below are not necessarily indicative of future performance, and we will not make or endorse any predications as to future stockholder returns.



Assumes \$100 invested in the Company on January 1, 2004, the Industry Index and the NASDAQ Market Index, and the reinvestment of dividends. The above five-year Cumulative Total Return Graph shall not be deemed to be "soliciting material" or to be filed with the Securities and Exchange Commission, nor shall such information be incorporated by reference by any general statement incorporating by reference this Form 10-K into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934 (collectively, the "Acts") or be subject to the liabilities under Section 18 of the Securities Exchange Act of 1934, except to the extent that the Company specifically incorporates this information by reference, and shall not be deemed to be soliciting material or to be filed under such Acts.

**ITEMSELECTED FINANCIAL DATA**

**6.**

The financial data included in this table has been derived from our audited consolidated financial statements, which have been audited by BDO Seidman, LLP. In 2007, as a result of the Company's decision to divest the facilities within our Industrial Segment, our Industrial Segment facilities were reclassified (with the exception of PFMI and PFP which were already reclassified as discontinued operations in 2004 and 2005, respectively) in our discontinued operations, in accordance with Statement of Financial Accounting Standard ("SFAS") No. 144. As a result of the Company's decision to retain PFFL, PFSG, and PFO within the Industrial Segment in September 2008, the Company's previously reported Consolidated Statement of Operations data for the years noted below have been restated to reflect the reclassification of these three facilities/operations back into our continuing operations from discontinued operations, in accordance with SFAS No. 144. Certain prior year amounts have been reclassified to conform with current year presentations. Amounts are in thousands, except for per share amounts. The information set forth below should be read in conjunction with "Management's Discussion Analysis of Financial Condition and Results of Operations" and the consolidated financial statements of the Company and the notes thereto included elsewhere herein.

**Statement of Operations Data:**

	2008 <sup>(1)</sup>	2007 <sup>(1)(2)</sup>	2006 <sup>(1)</sup>	2005	2004 <sup>(3)</sup>
Revenues	\$ 75,504	\$ 64,544	\$ 68,205	\$ 68,833	\$ 61,912
Income (loss) from continuing operations	920	(2,380)	5,422	4,067	(3,170)
Loss from discontinued operations, net of taxes	(1,332)	(6,830)	(711)	(328)	(16,191)
Gain on disposal of discontinued operations, net of taxes	2,323	—	—	—	—
Net income (loss)	1,911	(9,210)	4,711	3,739	(19,361)
Preferred stock dividends	—	—	—	(156)	(190)
Net income (loss) applicable to Common Stockholders	1,911	(9,210)	4,711	3,583	(19,551)
Income (loss) per common share - Basic					
Continuing operations	.02	(.05)	.11	.09	(.08)
Discontinued operations	(.02)	(.13)	(.01)	(.01)	(.40)
Disposal of discontinued operations	.04	—	—	—	—
Net income (loss) per share	.04	(.18)	.10	.08	(.48)
Income (loss) per common share - Diluted					
Continuing operations	.02	(.05)	.11	.09	(.08)
Discontinued operations	(.02)	(.13)	(.01)	(.01)	(.40)
Disposal of discontinued operations	.04	—	—	—	—
Net income (loss) per share	.04	(.18)	.10	.08	(.48)
Basic number of shares used in computing net income (loss) per share	53,803	52,549	48,157	42,605	40,478
Diluted number of shares and potential common shares used in computing net income (loss) per share	54,003	52,549	48,768	44,804	40,478

**Balance Sheet Data:**

	December 31,				
	2008	2007	2006	2005	2004
Working capital (deficit)	\$ (3,886)	\$ (17,154)	\$ 12,810	\$ 5,916	\$ (497)
Total assets	123,712	126,048	106,355	98,457	100,304
Current and long-term debt	16,203	18,836	8,329	13,375	18,956
Total liabilities	60,791	66,035	40,617	50,019	56,771
Preferred Stock of subsidiary	1,285	1,285	1,285	1,285	1,285
Stockholders' equity	61,636	58,728	64,453	47,153	42,248

- (1) Includes recognized stock based compensation expense of \$531,000, \$457,000 and \$338,000 for 2008, 2007 and 2006, respectively, pursuant to the adoption of SFAS 123R which became effective January 1, 2006.
- (2) Includes financial data of PFNWR acquired during 2007 and accounted for using the purchase method of accounting in which the results of operations are reported from the date of acquisition, June 13, 2007.
- (3) Includes financial data of PFMD and PFP acquired during 2004 and accounted for using the purchase method of accounting in which the results of operations are reported from the date of acquisition, March 23, 2004.

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

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 our accounts and the accounts of 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.

### **Review**

2008 was a turbulent year throughout the U.S economy, with the domestic recessionary environment which became evident during the latter part of 2008. This turbulence impacted our results in 2008. Demand for our services has been, and we expect that demand will continue to be, subject to significant fluctuations due to a variety of factors beyond our control, including the current economic recession and conditions, inability of the federal government to adopt its budget or reductions in the budget for spending to remediate federal sites due to numerous reasons, including, without limitation, the substantial deficits that the federal government has and is continuing to incur. During economic downturns, such as the current economic recession, and large budget deficits that the federal government and many states are experiencing, the ability of private and government entities to spend on nuclear services may decline significantly. Although the recently adopted economic stimulus package provides for substantial funds to remediate federal nuclear sites, we cannot be certain that economic or political conditions will be generally favorable or that there will not be significant fluctuations adversely affecting our industry as a whole. In addition, our operations depend, in large part, upon governmental funding, particularly funding levels at the Department of Energy ("DOE"). Our governmental contracts and subcontracts relating to activities at governmental sites are subject to termination or renegotiation on 30 days notice at the government's option. Significant reductions in the level of governmental funding (for example, the annual budget of the DOE) or specifically mandated levels for different programs that are important to our business could have a material adverse impact on our business, financial position, results of operations and cash flows.

Within our Nuclear Segment, we generated revenue of \$61,359,000, which included revenue of approximately \$17,325,000 at our Perma-Fix Northwest Richland, Inc. ("PFNWR") facility acquired in June of 2007 and \$7,095,000 of revenue generated from a subcontract awarded to us by the DOE's general contractor CH Plateau Remediation Company ("CHPRC") to treat wastes at the Hanford Site. This CHPRC subcontract became effective October 1, 2008. In 2007, revenue from PFNWR accounted for \$8,439,000 of our revenue within our Nuclear Segment. Excluding revenue of PFNWR and CHPRC, our Nuclear Segment's revenue decreased \$6,326,000 or 14.6% due primarily to reduced receipts offset in part by higher priced wastes. Our Industrial Segment generated \$10,951,000 in revenue in 2008 as compared to \$10,442,000 in 2007 or 4.9% increase. This increase was primarily the result of oil sales which paralleled the high price of oil globally in 2008. Revenue in our Industrial Segment includes revenue of Perma-Fix of Fort Lauderdale, Inc. ("PFFL"), Perma-Fix of South Georgia, Inc. ("PFSG"), and Perma-Fix of Orlando, Inc. ("PFO"). In May 2007, our Board of Directors authorized the divestiture of our Industrial Segment. In September 2008, our Board of Directors approved retaining the three facilities/operations at PFFL, PFSG, and PFO, which resulted in the reclassification of these three facilities/operations back into our continuing operations. The subsequent decision to retain these operations within our Industrial Segment is based on our belief that these operations are self sufficient, which should allow senior management the freedom to focus on growing our nuclear operations, while benefiting from the cash flow and growth prospects of these three facilities and the fact that we were unable in the current economic climate to obtain the values for

[Table of Contents](#)

these companies that we believe they are worth. In the fourth quarter of 2008, we sold one of the two properties at our PFO facility for \$900,000 in cash, which was used for our working capital. We do not expect any impact or reduction to PFO's operating capability from the sale of the property at PFO. Revenue in our Engineering Segment was up 33.2% in 2008 from 2007 due primarily to increase in billable hours. The backlog of stored waste within the Nuclear Segment was reduced to \$10,244,000, at December 31, 2008, down from \$14,646,000 in 2007, reflecting the reduced waste receipts in the year.

In 2008, we completed the sale of substantially all of the assets of three of our Industrial Segment facilities/operations which was reclassified into our discontinued operations in May 2007 as follows: on January 8, 2008, we completed the sale of substantially all of the assets of Perma-Fix Maryland, Inc. ("PFMD") for \$3,825,000 in cash and the assumption by the buyer of certain liabilities of PFMD, with a final working capital adjustment of \$170,000 received by Perma-Fix from the buyer in the fourth quarter of 2008; on March 14, 2008, we completed the sale of substantially all of the assets of Perma-Fix of Dayton, Inc. ("PFD") for approximately \$2,143,000 in cash, plus assumption by the buyer of certain of PFD's liabilities and obligations. In June 2008, we paid the buyer \$209,000 in final working capital adjustment; and on May 30, 2008, we completed the sale of substantially all of the assets of Perma-Fix Treatment Services, Inc. ("PFTS") for approximately \$1,503,000, and assumption by the buyer of certain liabilities of PFTS. In July 2008, we paid the buyer \$135,000 in final working capital adjustments. Proceeds received from the sale of these three facilities were used to pay off our term note and pay down our revolver. In August 2008, we reloaded our term note back to \$7,000,000 with the revolving line of credit remaining at \$18,000,000. The due date of the \$25,000,000 credit facility was extended through July 31, 2012.

We have taken steps to improve our working capital in 2008. Our working capital position at December 31, 2008 is a negative \$3,886,000, which includes working capital of our discontinued operations, as compared to a negative working capital of \$17,154,000 as of December 31, 2007. The improvement in our working capital is the result of the reclassification of our indebtedness to certain of our lenders from current (less current maturities) to long term in the first quarter of 2008 due to the Company meeting its fixed charge coverage ratio, pursuant to our loan agreement, as amended, in the first quarter of 2008. In 2007, the Company failed to meet its fixed charge coverage ratio as of December 31, 2007 and as a result we were required under generally accepted accounting principles to reclassify approximately \$11,403,000 in debt under our credit facility with PNC and debt payable to KeyBank National Association, due to a cross default provision from long term to current as of December 31, 2007. We met our fixed charge coverage ratio in each quarter in 2008 and we anticipate meeting this ratio in 2009. Our working capital in 2008 was also impacted by the annual cash payment to the finite risk sinking fund of \$1,004,000, our payments of approximately \$4,274,000 in financial assurance coverage for our PFNWR facility, capital spending of approximately \$1,158,000, the reclassification of approximately \$833,000 in principal balance on the shareholder note resulting from the acquisition of PFNWR in June from long term to current, payment of approximately \$3,039,000 on the KeyBank debt from the PFNWR acquisition, and the payments against the long term portion of our term note of approximately \$4,100,000 in proceeds received from sale of PFMD, PFD, and PFTS.

**Outlook**

We believe that government funding that will be available for DOE projects under the recently enacted government stimulus plan as it relates to our existing government contracts within our Nuclear Segment should positively impact our Nuclear Segment since the stimulus plan provides for a substantial amount for remediation of DOE sites. However, declining consumer confidence continues to impact the U.S. economy. Turmoil in the financial markets continues to strain the availability of credit which could limit our customers' ability to obtain adequate financing which could decrease the demand for our services, thereby negatively impacting our results of operations into 2009. A significant amount of our revenues within our Nuclear Segment stem from U.S. government contracts or subcontracts involving the U.S. government. Our government contracts and subcontracts relating to activities at governmental sites are subject to termination or renegotiation on 30 days notice at the government's option. With government deficits at an all time high, in light of the uncertainty in the current economy, funding for certain governmental remediation projects at DOE and DOD sites could be cut off or curtailed thereby negatively impacting our results of operations and liquidity. The Company continues to remain cautious of the future due to the heightened financial market turmoil and the large government deficit.

**Results of Operations**

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

Below are the results of continuing operations for our years ended December 31, 2008, 2007, and 2006 (amounts in thousands):

(Consolidated)	2008	%	2007	%	2006	%
Net Revenues	\$ 75,504	100.0	\$ 64,544	100.0	\$ 68,205	100.0
Cost of goods sold	55,310	73.3	45,544	70.6	43,160	63.3
Gross Profit	20,194	26.7	19,000	29.4	25,045	36.7
Selling, general and administrative	18,832	24.9	18,082	28.0	17,803	26.1
Asset impairment (recovery) loss	(507)	(.7)	1,836	2.8	—	—
(Gain) loss on disposal of property and equipment	(295)	(.4)	172	.3	27	—
Income (loss) from operations	2,164	2.9	(1,090)	(1.7)	7,215	10.6
Interest income	226	.3	312	.4	280	.4
Interest expense	(1,317)	(1.7)	(1,321)	(2.0)	(1,255)	(1.8)
Interest expense – financing fees	(137)	(.2)	(196)	(.3)	(192)	(.3)
Other	(6)	—	(85)	(.1)	(119)	(.2)
Income (loss) from continuing operations before taxes	930	1.3	(2,380)	(3.7)	5,929	8.7
Income tax expense	10	—	—	—	507	.8
Income (loss) from continuing operations	920	1.3	(2,380)	(3.7)	5,422	7.9
Preferred Stock dividends	—	—	—	—	—	—

**Summary - Years Ended December 31, 2008 and 2007***Net Revenue*

Consolidated revenues from continuing operations increased \$10,960,000 for the year ended December 31, 2008, compared to the year ended December 31, 2007, as follows:

(In thousands)	2008	% Revenue	2007	% Revenue	Change	% Change
<b>Nuclear</b>						
Government waste	\$ 14,209	18.9	\$ 11,763	18.2	\$ 2,446	20.8
LATA/Parallax	4,841	6.4	8,784	13.6	(3,943)	(44.9)
Fluor Hanford	2,814(1)	3.7	3,885(2)	6.0	(1,071)	(27.6)
CHPRC	7,095(1)	9.4	—	—	7,095	100.0
Hazardous/non-hazardous	3,973	5.3	5,068	7.9	(1,095)	(21.6)
Other nuclear waste	11,102	14.7	13,765	21.3	(2,663)	(19.3)
Acquisition 6/07 (PFNWR)	17,325(1)	22.9	8,439(2)	13.1	8,886	105.3
Total	61,359	81.3	51,704	80.1	9,655	18.7
<b>Industrial</b>						
Commercial waste	5,495	7.3	5,699	8.8	(204)	(3.6)
Government services	814	1.1	1,653	2.6	(839)	(50.8)
Oil sales	4,642	6.1	3,090	4.8	1,552	50.2
Total	10,951	14.5	10,442	16.2	509	4.9
<b>Engineering</b>						
	3,194	4.2	2,398	3.7	796	33.2
Total	\$ 75,504	100.0	\$ 64,544	100.0	\$ 10,960	17.0

(1) Revenue of \$17,325,000 from PFNWR for 2008 includes approximately \$14,505,000 relating to wastes generated by the federal government, either directly or indirectly as a subcontractor to the federal government. Of the \$14,505,000 in revenue, approximately \$5,160,000 was from Fluor Hanford, a contractor to the federal government and approximately \$1,025,000 was from CHPRC, a contractor to the federal government. Revenue in 2008 from Fluor Hanford totaled approximately \$7,974,000 or 10.6% of total consolidated revenue. Revenue in 2008 from CHPRC totaled approximately \$8,120,000 or 10.8% of total consolidated revenue.

(2) Revenue of \$8,439,000 from PFNWR for 2007 includes approximately \$5,568,000 relating to wastes generated by the federal government, either directly or indirectly as a subcontractor to the federal government. Of the \$5,568,000 in revenue, approximately \$3,100,000 was from Fluor Hanford, a contractor to the federal government. Revenue in 2007 from Fluor Hanford totaled approximately \$6,985,000 or 10.8 % of total consolidated revenue.

The Nuclear Segment experienced a \$9,655,000 increase in revenue for the year ended December 31, 2008 over the same period in 2007. Total revenue within the Nuclear Segment included \$17,325,000 of revenue at our PFNWR facility for the full year of 2008 as compared to \$8,439,000 after the facility was acquired on June 13, 2007. In addition, our revenue for the Nuclear Segment included revenue of \$7,095,000 for our new subcontract awarded to us from CHPRC. In the second quarter of 2008, we were awarded a subcontract by CHPRC to perform a portion of facility operations and waste management activities for the DOE Hanford, Washington Site. The general contract awarded by the DOE to CHPRC and our subcontract provide for a transition period from August 11, 2008 through September 30, 2008, a base period from October 1, 2008 through September 30, 2013 and an option period from October 1, 2013 through September 30, 2018. On October 1, 2008, operations of this subcontract commenced at the DOE Hanford Site. Excluding our revenue from PFNWR and CHPRC, revenue within our Nuclear Segment decreased approximately \$6,326,000 or 14.6% as compared to the same period of 2007. Excluding revenue from PFNWR and CHPRC, revenue from government generators (which includes our subcontracts with LATA/Parallax and Fluor Hanford) decreased \$2,568,000 or 10.5% due primarily to overall lower government receipts. For 2008, government agencies were operated under “Continuing Resolution” without finalized budgets due in part to the impending change in Administration, which had a negative impact on availability of funding for services offered by our Nuclear Segment. We saw a decrease of \$3,943,000 or 44.9% under our subcontracts with LATA/Parallax due to significant progress made by LATA/Parallax in completing legacy waste removal actions as part of their clean-up project at Portsmouth for the DOE. We saw a decrease of approximately \$1,071,000 or 27.6% in revenue from Fluor Hanford due to lower overall

[Table of Contents](#)

receipts and transition of revenue from Fluor Hanford to CHPRC effective October 1, 2008 (see “known Trends and Uncertainties – significant customers” in this section). Revenue from remaining government wastes increased approximately \$2,446,000 or 20.8% due to higher priced waste with reduced volume. Revenue from hazardous and non-hazardous waste was down \$1,095,000 or 21.6% due to lower volume of waste received offset by higher average prices per drum which increase approximately 38.5%. The price change is primarily due to waste mix. We also had three large event projects in 2007, while none occurred in 2008. Other nuclear waste revenue decreased \$2,663,000 or 19.3% as packaging and field service related revenue from LATA/Parallax Portsmouth contract from 2007 did not occur in 2008. Revenue in our Industrial Segment increased \$509,000 or 4.9% due primarily to higher oil sale revenue. We saw an increase of approximately 52.6% in average price per gallon while volume only decreased 2.1%. The increase in average price per gallon was attributed to the high global oil costs throughout most of 2008. This increase in oil sale revenue was partially offset by lower government revenue resulting from termination of a government contract in July 2007. Revenue in our Engineering Segment increased approximately \$796,000 or 33.2% due primarily to the increase of billable hours of 29.0% caused by increase in external business, with the billability rate remaining fairly constant, a slight decrease of .3% from 2007 to 2008.

*Cost of Goods Sold*

Cost of goods sold increased \$9,766,000 for the year ended December 31, 2008, as compared to the year ended December 31, 2007, as follows:

(In thousands)	2008	% Revenue	2007	% Revenue	Change
Nuclear	\$ 35,143	79.8	\$ 30,261	69.9	\$ 4,882
Acquisition 6/07 (PFNWR)	10,606	61.2	4,938	58.5	\$ 5,668
Industrial	7,439	67.9	8,707	83.4	(1,268)
Engineering	2,122	66.4	1,638	68.3	484
Total	<u>\$ 55,310</u>	<u>73.3</u>	<u>\$ 45,544</u>	<u>70.6</u>	<u>\$ 9,766</u>

Excluding the cost of goods sold of approximately \$10,606,000 for the PFNWR facility, the Nuclear Segment’s cost of goods sold for the year ending December 31, 2008 were up approximately \$4,882,000. The \$35,143,000 in cost of good sold in the Nuclear Segment (excluding PFNWR) includes cost of good sold of approximately \$5,584,000 related to the CHPRC subcontract. Excluding this \$5,584,000 in cost of good sold, our remaining Nuclear Segment cost of goods sold decreased \$702,000 or 2.3%. Although receipts were down 41.6% as compared to prior year, cost as a percentage of revenue (excluding the CHPRC subcontract and PFNWR) increased to 80.0% from 69.9%. This reflects the mix of wastes received which was costlier to dispose. In the Industrial Segment, cost of goods sold decreased \$1,268,000 or 14.6% due primarily to reduced revenue from a government contract which terminated in July 2007. This decrease was offset by higher cost of good sold related to material and supply purchases, especially raw oil purchases, the result of the increase in the global cost of oil throughout 2008. Cost as a percentage of revenue decreased from 83.4% in 2007 to 67.9% due primarily to reduction in government receipts processed. Total cost of good sold for the Industrial Segment decreased despite depreciation expenses of approximately \$244,000 incurred as result of the reclassification of PFFL, PFO, and PFSG facilities as continuing operations. The Engineering Segment costs increased \$484,000 or 29.5% due primarily to increased revenue of 33.2%. Included within cost of goods sold is depreciation and amortization expense of \$4,612,000 and \$3,918,000 for the year ended December 31, 2008 and 2007, respectively.

*Gross Profit*

Gross profit for the year ended December 31, 2008, was \$1,194,000 higher than 2007, as follows:

(In thousands)	2008	% Revenue	2007	% Revenue	Change
Nuclear	\$ 8,891	20.2	\$ 13,004	30.1	\$ (4,113)
Acquisition 6/07 (PFNWR)	6,719	38.8	3,501	41.5	3,218
Industrial	3,512	32.1	1,735	16.6	1,777
Engineering	1,072	33.6	760	31.7	312
Total	<u>\$ 20,194</u>	<u>26.7</u>	<u>\$ 19,000</u>	<u>29.4</u>	<u>\$ 1,194</u>

The Nuclear Segment gross profit, excluding gross profit of our PFNWR facility, decreased \$4,113,000 from 2007 to 2008. Gross profit of the Nuclear Segment (excluding PFNWR) includes the gross profit of our CHPRC subcontract of approximately \$1,511,000. Excluding this gross profit, our Nuclear Segment gross profit decreased \$5,624,000 or 43.2% from 2007 to 2008 due primarily to lower volume of waste received. Gross margin decreased from 30.1% to 20.0% which reflects the receipt of lower margin waste streams in 2008. The Industrial Segment gross profit increased \$1,777,000 or 102.4% due primarily to the improved revenue mix resulting from higher margin oil revenue which displaced lower margin hazardous waste disposal revenue. Gross margin increased to 32.1% in 2008 from 16.6% in 2007 which reflects the favorable increase in oil price throughout much of 2008. The Engineering Segment gross profit increased \$312,000 or 41.1% due to increased revenue resulting from a 29.0% increase in billable hours in 2008 as compared to 2007. Gross margin remained fairly constant, with an increase of 1.9% in 2008 as compared to 2007.

*Selling, General and Administrative*

Selling, general and administrative (“SG&A”) expenses increased \$750,000 for the year ended December 31, 2008, as compared to the corresponding period for 2007, as follows:

(In thousands)	2008	% Revenue	2007	% Revenue	Change
Administrative	\$ 5,679	—	\$ 5,457	—	\$ 222
Nuclear	6,924	15.7	7,520	17.4	(596)
Acquisition 06/07 (PFNWR)	2,878	16.6	1,678	19.9	1,200
Industrial	2,686	24.5	2,910	27.9	(224)
Engineering	665	20.8	517	21.6	148
Total	<u>\$ 18,832</u>	<u>24.9</u>	<u>\$ 18,082</u>	<u>28.0</u>	<u>\$ 750</u>

Excluding the SG&A of our PFNWR facility, our Nuclear SG&A expenses decreased \$596,000 or 7.9% in 2008 as compared to 2007. The decrease within the Nuclear Segment (excluding PFNWR) was due to lower payroll, commission, travel related expenses, and general expenses due to headcount reduction resulting from decreased revenue. The increase in administrative SG&A was primarily the result of higher stock option expenses as we granted 1,083,000 options to certain company officers and employees. Such options were not granted in 2007. In addition, legal fees were higher in 2008 due to the Company’s daily legal corporate matters and public corporate filings. These increases were offset by lower director fees in 2008 as we had a one time fee payment of \$160,000 to a member of our Board of Directors in 2007 as compensation for his service in negotiating the agreement in principal to resolve a certain legal matter with the EPA against our former PFD facility. The decrease in SG&A in our Industrial Segment is due to lower payroll related expenses as we continue to streamline costs within the segment. This decrease was offset by incremental depreciation expense incurred in 2008 of approximately \$128,000 as a result of the reclassification of PFO, PFFL, and PFSG into continuing operations and higher bonus/commission expenses at PFFL due to higher revenue in 2008 as compared to 2007. The Engineering Segment increase was the result of an increase in payroll related expenses but this increase was offset by a significant decrease in bad

[Table of Contents](#)

debt expense. Included in SG&A expense is depreciation and amortization expense of \$254,000 and \$174,000 for the years ended December 31, 2008 and 2007, respectively.

*Loss (Gain) on Disposal of Property and Equipment*

The gain on disposal of property and equipment in 2008 is primarily due to the sale of one of the properties at our PFO for \$900,000 which resulted in gain of approximately \$483,000. The proceeds were used for our working capital. This gain was offset by disposal of idle equipment at our DSSI and M&EC facilities. The loss on disposal of property and equipment for 2007 was attributed mainly to the disposal of idle equipment at our M&EC, DSSI, and PFFL facilities.

*Asset Impairment Recovery*

In May 2007, our PFSG, PFO, and PFFL facilities met the held for sale criteria under SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets as a result of our Board of Directors approving the divestiture of these facilities, which resulted in impairment losses of \$1,329,000 and \$507,000 for PFSG and PFO, respectively. In September 2008, these facilities were reclassified back into continuing operations as a result of our Board of Directors approving the retention of these facilities. In the third quarter of 2008, we reclassified one of the two properties at PFO as "net property and equipment held for sale" within our continuing operations in accordance with SFAS No. 144. We evaluated the fair value of PFO's assets and as a result, recorded the \$507,000 previously impairment loss as an asset impairment recovery.

*Interest Income*

Interest income decreased \$86,000 for the year ended December 31, 2008, as compared to 2007. The decrease is primarily due to interest earned from excess cash in a sweep account which the Company had in the first six months of 2007 but did not have in the same period of 2008. The excess cash the Company had in 2007 was the result of warrants and option exercises from the latter part of 2006.

*Interest Expense*

Interest expense decreased \$4,000 for the year ended December 31, 2008, as compared to the corresponding period of 2007.

(In thousands)	2008	2007	Change	%
PNC interest	\$ 508	\$ 702	\$ (194)	(27.6)
Other	809	619	190	30.7
Total	<u>\$ 1,317</u>	<u>\$ 1,321</u>	<u>\$ (4)</u>	<u>(0.3)</u>

The decrease in 2008 is due primarily to the reduction in term loan balance and the payoff of our term note from proceeds received from the sale of our three Industrial Segment facilities, PFTS, PFD, and PFMD, in addition to lower interest rate in 2008. This decrease was offset by higher interest due to capitalized interest of approximately \$144,000 in 2007 resulting from the completion of the "SouthBay" project in 2007 at our M&EC facility. Additionally, this decrease was offset by external debt incurred resulting from the acquisition of our PFNWR facility in June 2007.

*Interest Expense - Financing Fees*

Interest expense-financing fees decreased approximately \$59,000 from 2007 to 2008 due primarily to monthly amortized financing fees associated with PNC revolving credit and term note for our original debt and subsequent amendments which became fully amortized in May 2008. This decrease was offset by financing fees paid to PNC for Amendment No. 12 which is amortized over the term of the amendment, starting from August 2008 and ending July 2012.

*Income Tax*

We have provided a valuation allowance on substantially all of our deferred tax assets. We will continue to monitor the realizability of these net deferred tax assets and will reverse some or all of the valuation allowance as appropriate. In making this determination, we consider a number of factors including whether

[Table of Contents](#)

there is a historical pattern of consistent and significant profitability in combination with our assessment of forecasted profitability in the future periods. Such patterns and forecasts allow us to determine whether our most significant deferred tax assets such as net operating losses will be realizable in future years, in whole or in part. These deferred tax assets in particular will require us to generate taxable income in the applicable jurisdictions in future years in order to recognize their economic benefits. We do not believe that we have sufficient evidence to conclude that some or all of the valuation allowance on deferred tax assets should be reversed. However, facts and circumstances could change in future years and at such point we may reverse the allowance as appropriate. For the years ended December 31, 2008 and 2007, we had \$0 and \$0, respectively, in federal income tax expense, as a result of a 100% valuation allowance against the deferred tax asset and our alternative minimum tax liability at December 31, 2008, and \$10 and \$0, respectively, in state income taxes. Our net operating loss carryforwards have not been audited or approved by the Internal Revenue Service.

**Summary - Years Ended December 31, 2007 and 2006**

*Net Revenue*

Consolidated revenues from continuing operations decreased \$3,661,000 for the year ended December 31, 2007, compared to the year ended December 31, 2006, as follows:

(In thousands)	2007	% Revenue	2006	% Revenue	Change	% Change
<b><u>Nuclear</u></b>						
Government waste	\$ 11,763	18.2	\$ 21,656	31.8	\$ (9,893)	(45.7)
LATA/Parallax	8,784	13.6	10,341	15.2	(1,557)	(15.1)
Fluor Hanford	3,885(1)	6.0	1,229	1.8	2,656	216.1
CHPRC	—	—	—	—	—	—
Hazardous/non-hazardous	5,068	7.9	3,343	4.9	1,725	51.6
Other nuclear waste	13,765	21.3	12,854	18.8	911	7.1
Recent acquisition 6/07 (PFNWR)	8,439(1)	13.1	—	—	8,439	100.0
<b>Total</b>	<b>51,704</b>	<b>80.1</b>	<b>49,423</b>	<b>72.5</b>	<b>2,281</b>	<b>4.6</b>
<b><u>Industrial</u></b>						
Commercial waste	5,699	8.8	8,679	12.7	(2,980)	(34.3)
Government services	1,653	2.6	3,594	5.3	(1,941)	(54.0)
Oil sales	3,090	4.8	3,151	4.6	(61)	(1.9)
<b>Total</b>	<b>10,442</b>	<b>16.2</b>	<b>15,424</b>	<b>22.6</b>	<b>(4,982)</b>	<b>(32.3)</b>
<b><u>Engineering</u></b>	<b>2,398</b>	<b>3.7</b>	<b>3,358</b>	<b>4.9</b>	<b>(960)</b>	<b>(28.6)</b>
<b>Total</b>	<b>\$ 64,544</b>	<b>100.0</b>	<b>\$ 68,205</b>	<b>100.0</b>	<b>\$ (3,661)</b>	<b>(5.4)</b>

<sup>(1)</sup> Revenue of \$8,439,000 from PFNWR for 2007 includes approximately \$5,568,000 relating to wastes generated by the federal government, either directly or indirectly as a subcontractor to the federal government. Of the \$5,568,000 in revenue, approximately \$3,100,000 was from Fluor Hanford, a contractor to the federal government. Revenue in 2007 from Fluor Hanford totaled approximately \$6,985,000 or 10.8 % of total consolidated revenue.

The Nuclear Segment experienced a \$2,281,000 increase in revenue for the year ended December 31, 2007 over the same period in 2006. Total revenue within the Nuclear Segment included \$8,439,000 of revenue from our PFNWR facility, which was acquired on June 13, 2007. Excluding the revenue of our PFNWR facility, revenue from our Nuclear Segment decreased approximately \$6,158,000 or 12.5% as compared to the same period of 2006. Revenue from government generators (which includes LATA/Parallax and Fluor Hanford) decreased \$8,794,000 (excluding government revenue of \$5,568,000 from our PFNWR facility) or 26.5% due to overall lower government receipts. The decrease in government waste revenue included a significant decrease in revenue of approximately \$4,893,000 or 73.0% from 2006 for Bechtel Jacobs. The Bechtel Jacobs contract in Oak Ridge is continuing at reduced waste volumes due to the large legacy waste

[Table of Contents](#)

clean-up project completion in 2005. 2006 revenues of our Nuclear Segment include approximately \$1.1 million recognized from Bechtel Jacobs as a result of a settlement of a lawsuit in connection with a dispute over surcharges from waste treated in 2003. Due to varying waste constituencies, waste received and its related pricing can vary. 2007 saw a decline in average pricing of 21.6% while volume increased 7.9%. Although our receipts were down, the increase in volume was the result of the Company's continued effort to process and dispose more of its backlog. The backlog of stored waste within the Nuclear Segment was reduced to \$9,964,000, excluding the backlog of our PFNWR facility of \$4,683,000 at December 31, 2007, down from \$12,492,000 in 2006, which reflects increases in processing and disposal for the year. The decrease for LATA/Parallax is due to significant progress made by LATA/Parallax in completing legacy waste removal actions as part of their clean-up project at Portsmouth for the Department of Energy. Fluor Hanford revenue increased approximately \$2,656,000 (excluding approximately \$3,100,000 from PFNWR) or 216.1% due mainly to increased receipts at our DSSI facility. Hazardous and non-hazardous revenue increased approximately \$1,725,000 or 51.6% as compared to the same period of 2006 due to a combination of increased volume of 19.6% and price increases of 26.7% in per drum equivalent of waste processed. Revenue from the Industrial Segment decreased \$4,982,000 or 32.3% from 2006. Revenue from government decreased 54.0% due to termination of a government contract in November 2006. Commercial waste revenue was down primarily due to our efforts to eliminate non-profitable revenue streams and pursue more profitable ones. Revenue from the Engineering Segment decreased \$960,000 or 28.6% due to less billable hours and related reimbursable costs in part to a large event project in 2006 which did not repeat in 2007 and more hours spent supporting the divestiture of the Industrial Segment facilities that are for sale.

*Cost of Goods Sold*

Cost of goods sold increased \$2,384,000 for the year ended December 31, 2007, as compared to the year ended December 31, 2006, as follows:

(In thousands)	2007	%	2006	%	Change
		Revenue		Revenue	
Nuclear	\$ 30,261	69.9	\$ 28,493	57.7	\$ 1,768
Acquisition 6/07 (PFNWR)	4,938	58.5	—	—	4,938
Industrial	8,707	83.4	12,106	78.5	(3,399)
Engineering	1,638	68.3	2,561	76.3	(923)
Total	<u>\$ 45,544</u>	<u>70.6</u>	<u>\$ 43,160</u>	<u>63.3</u>	<u>\$ 2,384</u>

Excluding the cost of goods sold of approximately \$4,938,000 for the PFNWR facility, the Nuclear Segment's cost of goods sold for the year ending December 31, 2007 were up approximately \$1,768,000. Processing and disposal costs increased due to increased volume as well as different mix of waste. In addition, costs related to the new "SouthBay" area at M&EC increased due to labor and analytical expenses. In 2007, M&EC completed its facility expansion ("SouthBay") to treat DOE special process wastes from the DOE Portsmouth Gaseous Diffusion Plant located in Piketon, Ohio under the subcontract awarded by LATA/Parallax Portsmouth LLC to our Nuclear Segment in 2006. The Industrial Segment costs decreased \$3,399,000 or 28.1% due primarily to lower revenue as efforts were made during the year to streamline and reorganize operations to focus on more profitable revenue streams and to operate more efficiently. In addition, depreciation in 2007 was reduced by approximately seven months due to classification of PFFL, PFO, and PFSG to discontinued operations in May 2007. The Engineering Segment costs fell due to lower reimbursable expenses related to a large event project in 2006. Included within cost of goods sold is depreciation and amortization expense of \$3,918,000 and \$3,341,000 for the year ended December 31, 2007 and 2006, respectively, reflecting an increase of \$577,000 over 2006 resulting primarily from the completion of the "SouthBay" area and the acquisition of PFNWR offset by the decrease in depreciation resulting from the classification of PFFL, PFO, and PFSG to discontinued operations in 2007.

[Table of Contents](#)*Gross Profit*

Gross profit for the year ended December 31, 2007, decreased \$6,045,000 over 2006, as follows:

(In thousands)	2007	% Revenue	2006	% Revenue	Change
Nuclear	\$ 13,004	30.1	\$ 20,930	42.3	\$ (7,926)
Acquisition (PFNWR)	3,501	41.5	—	—	3,501
Industrial	1,735	16.6	3,318	21.5	(1,583)
Engineering	760	31.7	797	23.7	(37)
Total	<u>\$ 19,000</u>	<u>29.4</u>	<u>\$ 25,045</u>	<u>36.7</u>	<u>\$ (6,045)</u>

The Nuclear Segment gross profit, excluding approximately \$3,501,000 from PFNWR facility, saw a decrease of 37.9% from 2006 primarily due to lower volume of waste received. In addition, revenue mix shifted to processing and disposal of higher volumes of lower price waste resulting in higher costs of sales. In addition, surcharges were significantly lower in 2007 which impacted gross profit and gross margin. The Bechtel Jacobs surcharge of \$1.1 million in 2006 had no associated costs which increased prior year's gross profit. The Industrial Segment gross profit decreased due primarily to lower revenue. The Engineering Segment gross profit decreased though its gross profit percentage increased. The sizable portion of the large event project in 2006 included low margin pass through expenses, resulting in higher gross profit and lower margins in 2006.

*Selling, General and Administrative*

Selling, general and administrative ("SG&A") expenses increased \$279,000 for the year ended December 31, 2007, as compared to the corresponding period for 2006, as follows:

(In thousands)	2007	% Revenue	2006	% Revenue	Change
Administrative	\$ 5,457	—	\$ 5,627	—	\$ (170)
Nuclear	7,520	17.4	7,467	15.1	53
Acquisition 06/07 (PFNWR)	1,678	19.9	—	—	1,678
Industrial	2,910	27.9	4,163	27.0	(1,253)
Engineering	517	21.6	546	16.3	(29)
Total	<u>\$ 18,082</u>	<u>28.0</u>	<u>\$ 17,803</u>	<u>26.1</u>	<u>\$ 279</u>

Excluding the SG&A of our PFNWR facility, our 2007 SG&A expenses decreased \$1,399,000 or 7.9% over 2006. The decrease in administrative SG&A was the result of lower payroll related expense totaling approximately \$688,000 related to a reduction in general labor and bonus expenses. This decrease was offset by higher public company expense totaling approximately \$250,000 due to an increase in director fees for our Board of Director services and payment of a one time fee to a member of our Board of Directors as compensation for his service in negotiating the agreement in principal to resolve a certain legal matter with the EPA against our PFD facility. In addition, we had higher outside service fees of approximately \$268,000 related to consulting and the adoption of FASB Interpretation 48, "Accounting for Uncertainty in Income Taxes – An Interpretation of FASB No.109" ("FIN 48") and other tax related issues. The Nuclear Segment's SG&A small decrease is due to lower payroll related expenses as commissions were down consistent with reduced revenues and severance expense was down from 2006. The decrease in SG&A in the Industrial Segment is due to the reduction of headcount, specifically the restructuring of the sales force to streamline costs. The Engineering Segment decrease was the result of a decrease in payroll related expenses as commissions and headcount were down but were offset by an increase in bad debt expense. Included in SG&A expenses is depreciation and amortization expense of \$174,000 and \$288,000 for the years ended December 31, 2007 and 2006, respectively, reflecting the decrease in depreciation resulting from the classification of PFFL, PFO, and PFSG to discontinued operations in May of 2007.

[Table of Contents](#)

*Asset Impairment loss*

In May 2007, our PFSG, PFO, and PFFL facilities met the held for sale criteria under SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets as a result of our Board of Directors approving the divestiture of these facilities. We therefore compared the offered sale price less cost to sell to the carrying value of the investment for each of these facilities which resulted in impairment loss of \$1,329,000 and \$507,000 for PFSG and PFO, respectively.

*Loss (Gain) on Disposal of Property and Equipment*

The loss on fixed asset disposal for the year ended December 31, 2007, was \$172,000, as compared to a loss of \$27,000 for the same period in 2006. The loss for 2007 was attributed mainly to the disposal of idle equipment at our M&EC, DSSI, and PFFL facilities and the loss for 2006 was attributed mainly to the disposal of idle equipment at our DSSI and PFSG facilities, offset by gain from the sale of equipment at our PFO facility.

*Interest Income*

Interest income increased \$32,000 for the year ended December 31, 2007, as compared to 2006. The increase is attributable to interest on the finite risk sinking fund which was increased by \$1,000,000 in February of 2007, as well as an additional increase of \$258,000 for our PFNWR facility closure policy. In addition, the increase in 2007 is also attributed to interest earned from additional cash in the Company's sweep account during the first six months of 2007.

*Interest Expense*

Interest expense increased \$66,000 for the year ended December 31, 2007, as compared to the corresponding period of 2006.

(In thousands)	2007	2006	Change	%
PNC interest	\$ 702	\$ 728	\$ (26)	(3.6)
Other	619	527	92	17.5
Total	\$ 1,321	\$ 1,255	\$ 66	5.3

The increase in 2007 is due primarily to increased external debt related to the Nuvotec acquisition of approximately \$272,000. In addition, revolver debt at PNC increased due to increased borrowings made necessary for the acquisition, resulting in approximately \$59,000 in additional interest expense. Offsetting these increases were reduced interest expense of approximately \$85,000 on term note, capitalized interest of approximately \$144,000 related to the "SouthBay" construction completed in 2007, and reduced interest expense from diminishing principal on other equipment related loans.

*Interest Expense - Financing Fees*

Interest expense-financing fees remained fairly constant for the year ended December 31, 2007, as compared to the corresponding period of 2006.

*Income Tax*

For the years ended December 31, 2007 and 2006, we had \$0 and approximately \$83,000, respectively, in federal income tax expense, as a result of a 100% valuation allowance against the deferred tax asset and our alternative minimum tax liability at December 31, 2007, and \$0 and \$424,000, respectively, in state income taxes primarily for our subsidiary, M&EC, in Oak Ridge, Tennessee.

**Discontinued Operations and Divestitures**

Our discontinued operations encompass our PFMD, PFD, and PFTS facilities within our Industrial Segment, as well as two previously shut down locations, Perma-Fix of Pittsburgh, Inc. ("PFP"), and Perma-Fix of Michigan, Inc. ("PFMI"), two facilities which were approved as discontinued operations by our Board of Directors effective November 8, 2005, and October 4, 2004, respectively.

## Table of Contents

In 2008, we completed the sale of substantially all of the assets of PFMD, PFD, and PFTS as follows: on January 8, 2008, we completed the sale of substantially all of the assets of PFMD for \$3,825,000 in cash (cash received was \$3,811,000, which was net of closing costs) and the assumption by the buyer of certain liabilities of PFMD, with a final working capital adjustment of \$170,000 received by Perma-Fix from the buyer in the fourth quarter of 2008; on March 14, 2008, we completed the sale of substantially all of the assets of PFD for approximately \$2,143,000 in cash (cash received was \$2,139,000, which was net of certain closing costs), plus assumption by the buyer of certain of PFD's liabilities and obligations. In June 2008, we paid the buyer \$209,000 in final working capital adjustment; and on May 30, 2008, we completed the sale of substantially all of the assets of PFTS for approximately \$1,503,000 (cash received was \$1,468,000, which was net of certain closing/settlement costs), and assumption by the buyer of certain liabilities of PFTS. In July 2008, we paid the buyer \$135,000 in final working capital adjustments. Proceeds received from the sale of these three facilities were used to pay off our term note and pay down our revolver.

Our discontinued Industrial Segment facilities generated revenues of \$3,195,000, \$19,965,000, and \$19,724,000 for the years ended December 31, 2008, 2007, and 2006, respectively, and had net operating losses of \$1,332,000, \$6,830,000 and \$711,000 for the same periods, respectively. Our operating loss in 2007 included impairment loss of \$2,727,000 and \$1,804,000 for PFD and PFTS, respectively.

Assets related to discontinued operations total \$761,000 and \$8,626,000 as of December 31, 2008, and 2007, respectively, and liabilities related to discontinued operations total \$2,994,000 and \$9,037,000 as of December 31, 2008 and 2007, respectively.

### *Non Operational Facilities*

The Industrial Segment includes two previously shut-down facilities which were presented as discontinued operations in prior years. These facilities include Perma-Fix of Pittsburgh (PFP) and Perma-Fix of Michigan (PFMI). Our decision to discontinue operations at PFP was due to our reevaluation of the facility and our inability to achieve profitability at the facility. During February 2006, we completed the remediation of the leased property and the equipment at PFP, and released the property back to the owner. Our decision to discontinue operations at PFMI was principally a result of two fires that significantly disrupted operations at the facility in 2003, and the facility's continued drain on the financial resources of our Industrial Segment. As a result of the discontinued operations at the PFMI facility, we were required to complete certain closure and remediation activities pursuant to our RCRA permit, which were completed in January 2006. In September 2006, PFMI signed a Corrective Action Consent Order with the State of Michigan, requiring performance of studies and development and execution of plans related to the potential clean-up of soils in portions of the property. The level and cost of the clean-up and remediation are determined by state mandated requirements. Upon discontinuation of operations in 2004, we engaged our engineering firm, SYA, to perform an analysis and related estimate of the cost to complete the RCRA portion of the closure/clean-up costs and the potential long-term remediation costs. Based upon this analysis, we estimated the cost of this environmental closure and remediation liability to be \$2,464,000. During 2006, based on state-mandated criteria, we re-evaluated our required activities to close and remediate the facility, and during the quarter ended June 30, 2006, we began implementing the modified methodology to remediate the facility. As a result of the reevaluation and the change in methodology, we reduced the accrual by \$1,182,000. We have spent approximately \$745,000 for closure costs since September 30, 2004, of which \$26,000 was spent during 2008 and \$81,000 was spent during 2007. In the 4<sup>th</sup> quarter of 2007, we reduced our reserve by \$9,000 as a result of our reassessment of the cost of remediation. We have \$538,000 accrued for the closure, as of December 31, 2008, and we anticipate spending \$425,000 in 2009 with the remainder over the next six years. Based on the current status of the Corrective Action, we believe that the remaining reserve is adequate to cover the liability.

As of December 31, 2008, PFMI has a pension payable of \$1,129,000. The pension plan withdrawal liability is a result of the termination of the union employees of PFMI. The PFMI union employees participate in the Central States Teamsters Pension Fund ("CST"), which provides that a partial or full termination of union employees may result in a withdrawal liability, due from PFMI to CST. The recorded liability is based upon a demand letter received from CST in August 2005 that provided for the payment of \$22,000 per month over an eight year period. This obligation is recorded as a long-term liability, with a current portion of \$181,000 that we expect to pay over the next year.

## Liquidity and Capital Resources

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, 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, collection activities, and the profitability of the segments.

At December 31, 2008, we had cash of \$129,000. The following table reflects the cash flow activities during 2008.

(In thousands)	2008
Cash provided by continuing operations	\$ 4,210
Gain on disposal of discontinued operations	(2,323)
Cash used in discontinued operations	(1,422)
Cash used in investing activities of continuing operations	(5,057)
Proceeds from sale of discontinued operations	6,734
Cash provided by investing activities of discontinued operations	75
Cash used in financing activities of continuing operations	(1,968)
Principal repayment of long-term debt for discontinued operations	(238)
increase in cash	<u>\$ 11</u>

We are in a net borrowing position and therefore attempt to move all excess cash balances immediately to the revolving credit facility, so as to reduce debt and interest expense. We utilize a centralized cash management system, which includes remittance lock boxes and is structured to accelerate collection activities and reduce cash balances, as idle cash is moved without delay to the revolving credit facility or the Money Market account, if applicable. The cash balance at December 31, 2008, primarily represents minor petty cash and local account balances used for miscellaneous services and supplies.

### *Operating Activities*

Accounts receivable, net of allowances for doubtful accounts, totaled \$13,416,000, a decrease of \$1,545,000 over the December 31, 2007, balance of \$14,961,000. Our account receivable balance as of December 31, 2008 included approximately \$1,503,000 in receivables resulting from the subcontract awarded to us by CHPRC in the second quarter of 2008. Excluding this account receivable from CHPRC, our Nuclear Segment experienced a decrease of approximately \$3,515,000 as a result of improved collection efforts. The Engineering Segment experienced a decrease of approximately \$50,000 due also mainly to improved collection efforts. The Industrial Segment experienced an increase of approximately \$517,000 due mainly to combination of increase in revenue and reduced collection.

Unbilled receivables are generated by differences between invoicing timing and the percentage of completion methodology used for revenue recognition purposes. As major processing phases are completed and the costs incurred, we recognize the corresponding percentage of revenue. We experience delays in processing invoices due to the complexity of the documentation that is required for invoicing, as well as, the difference between completion of revenue recognition milestones and agreed upon invoicing terms, which results in unbilled receivables. The timing differences occur for several reasons: partially from delays in the final processing of all wastes associated with certain work orders and partially from delays for analytical testing that is required after we have processed waste but prior to our release of waste for disposal. The difference also occurs due to our end disposal sites requirement of pre-approval prior to our shipping waste for disposal and our contract terms with the customer that we dispose of the waste prior to invoicing. These delays usually take several months to complete. As of December 31, 2008, unbilled receivables totaled

## Table of Contents

\$16,962,000, an increase of \$2,757,000 from the December 31, 2007, balance of \$14,205,000. The delays in processing invoices, as mentioned above, usually take several months to complete but are normally considered collectible within twelve months. However, as we now have historical data to review the timing of these delays, we realize that certain issues, including but not limited to delays at our third party disposal site, can exacerbate collection of some of these receivables greater than twelve months. Therefore, we have segregated the unbilled receivables between current and long term. The current portion of the unbilled receivables as of December 31, 2008 is \$13,104,000, an increase of \$2,671,000 from the balance of \$10,433,000 as of December 31, 2007. The long term portion as of December 31, 2008 is \$3,858,000, an increase of \$86,000 from the balance of \$3,772,000 as of December 31, 2007.

As of December 31, 2008, total consolidated accounts payable was \$11,076,000, an increase of \$5,169,000 from the December 31, 2007, balance of \$5,907,000. The increase is the result of higher cost of sales related to receipt of lower margin waste streams within our Nuclear Segment, higher costs related to the disposal of our legacy wastes as well as our continued efforts to manage payment terms with our vendors to maximize our cash position throughout all segments. Accounts payable can increase in conjunction with decreases in accrued expenses depending on the timing of vendor invoices.

Accrued expenses as of December 31, 2008, totaled \$8,896,000, a decrease of \$1,086,000 over the December 31, 2007, balance of \$9,982,000. Accrued expenses are made up of accrued compensation, interest payable, insurance payable, certain tax accruals, and other miscellaneous accruals. The decrease is primarily due to reduction in insurance payable due to the divestiture of our three Industrial facilities, PFMD, PFD, and PFTS, which resulted in lower insurance premium. This decrease was offset by higher bonus accrual at our Engineering Segment due to increased revenue for the year.

Disposal/transportation accrual as of December 31, 2008, totaled \$5,847,000, a decrease of \$1,003,000 over the December 31, 2007 balance of \$6,850,000. The decrease is mainly attributed to the reduction of the legacy waste accrual at PFNWR facility. In addition, revenue reduction at our PFF, DSSI, and M&EC facilities attributed to this reduction in disposal/transportation accrual.

Our working capital position at December 31, 2008 was a negative \$3,886,000, which includes working capital of our discontinued operations, as compared to a negative working capital of \$17,154,000 as of December 31, 2007. The improvement in our working capital is primarily the result of the reclassification of our indebtedness to certain of our lenders from current (less current maturities) to long term in the first quarter of 2008 due to the Company meeting its fixed charge coverage ratio, pursuant to our loan agreement, as amended, in the first quarter of 2008. We have met our fixed charge coverage ratio in each of the quarters in 2008 and we anticipate meeting this ratio in 2009. In 2007, the Company failed to meet its fixed charge coverage ratio as of December 31, 2007 and as a result we were required under generally accepted accounting principles to reclassify debt under our credit facility with PNC and debt payable to KeyBank National Association, due to a cross default provision from long term to current as of December 31, 2007. Our working capital in 2008 was also impacted by the annual cash payment to the finite risk sinking fund of \$1,004,000, our payments of approximately \$4,274,000 in financial assurance coverage for our PFNWR facility, capital spending of approximately \$1,158,000, the reclassification of approximately \$833,000 in principal balance on the shareholder note resulting from the acquisition of PFNWR in June from long term to current, payment of approximately \$3,039,000 on the KeyBank debt from the PFNWR acquisition and the payments against the long term portion of our term note of approximately \$4,100,000 in proceeds received from sale of PFMD, PFD, and PFTS.

### *Investing Activities*

During 2008, our purchases of capital equipment totaled approximately \$1,158,000 of which \$1,129,000 and \$29,000 was for our continuing and discontinued operations, respectively. Of the total capital spending, \$148,000 was financed for our continuing operations, resulting in total net purchases of \$1,010,000 funded out of cash flow (\$981,000 for continuing operations and \$29,000 for our discontinued operations). These expenditures were for compliance, sustenance, expansion, and improvements to the operations principally within the Nuclear Segment. These capital expenditures were funded by the cash provided by operations

and cash provided by financing activities. We have budgeted approximately \$1,300,000 for 2009 capital expenditures for our segments to 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. Certain of these budgeted projects are discretionary and may either be delayed until later in the year or deferred altogether. We have traditionally incurred actual capital spending totals for a given year less than the initial budget amount. The initiation and timing of projects are also determined by financing alternatives or funds available for such capital projects. We anticipate funding these capital expenditures by a combination of lease financing and internally generated funds.

In June 2003, we entered into a 25-year finite risk insurance policy with American International Group, Inc. ("AIG") (see "Part I, Item 1A. - Risk Factors" for certain potential risk related to AIG), which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. Prior to obtaining or renewing operating permits, we are required to provide financial assurance that guarantees to the states that in the event of closure, our permitted facilities will be closed in accordance with the regulations. The policy provides a maximum \$35,000,000 of financial assurance coverage of which the coverage amount totals \$32,515,000 at December 31, 2008, and has available capacity to allow for annual inflation and other performance and surety bond requirements. In 2008, we increased our assurance coverage by \$1,697,000 due to a revision to our DSSI facility closure estimate. Our finite risk insurance policy required an upfront payment of \$4,000,000, of which \$2,766,000 represented the full premium for the 25-year term of the policy, and the remaining \$1,234,000, was deposited in a sinking fund account representing a restricted cash account. In February 2008, we paid our fifth of nine required annual installments of \$1,004,000, of which \$991,000 was deposited in the sinking fund account, the remaining \$13,000 represents a terrorism premium. As of December 31, 2008, we have recorded \$6,918,000 in our sinking fund related to this policy on the balance sheet, which includes interest earned of \$730,000 on the sinking fund as of December 31, 2008. We recorded \$155,000 of interest income on the sinking fund for 2008. On the fourth and subsequent anniversaries of the contract inception, we may elect to terminate this contract. If we so elect, the Insurer will pay us an amount equal to 100% of the sinking fund account balance in return for complete releases of liability from both us and any applicable regulatory agency using this policy as an instrument to comply with financial assurance requirements.

In August 2007, we entered into a second finite risk insurance policy for our PFNWR facility, which we acquired in June 2007, with AIG (see "Part I, Item 1A. - Risk Factors" for certain potential risk related to AIG). The policy provides an initial \$7,800,000 of financial assurance coverage with annual growth rate of 1.5%, which at the end of the four year term policy, will provide maximum coverage of \$8,200,000. The policy will renew automatically on an annual basis at the end of the four year term and will not be subject to any renewal fees. The policy requires total payment of \$7,158,000, consisting of an annual payment of \$1,363,000, two annual payments of \$1,520,000, starting July 31, 2007 and an additional \$2,755,000 to be paid in five quarterly payments of \$551,000 beginning September 2007. In July 2007, we paid the \$1,363,000, of which \$1,106,000 represented premium on the policy and the remaining was deposited into a sinking fund account. In July 2008, we paid the first of the two \$1,520,000 payments, with \$1,344,000 deposited into a sinking fund account and the remaining representing premium. As of December 31, 2008, we have made all of the five quarterly payments which were deposited into a sinking fund. As of December 31, 2008, we have recorded \$4,427,000 in our sinking fund related to this policy on the balance sheet, which includes interest earned of \$71,000 on the sinking fund as of December 31, 2008. Interest income for 2008 totaled \$68,000.

On November 26, 2008, the U.S. EPA Region 4 issued a permit to our DSSI facility to commercially store and dispose of PCBs. DSSI began the permitting process to add TSCA regulated wastes, namely PCBs, containing radioactive constituents to its authorization in 2004 in order to meet the demand for the treatment of government and commercially generated radioactive PCB wastes. In March 2009, we secured financial assurance coverage with AIG which will enable DSSI to receive and process wastes under this permit. We secured this financial assurance coverage requirement by increasing our initial 25-year finite risk insurance policy with AIG from maximum policy coverage of \$35,000,000 to \$39,000,000. Our coverage under this policy increased approximately \$5,421,000 from \$32,515,000 to approximately \$37,936,000 as result of this

additional financial assurance coverage requirement for the DSSI permit. Payment for this financial assurance coverage requires a total payment of approximately \$5,219,000, consisting of an upfront payment of \$2,000,000, of which approximately \$1,655,000 will be deposited into a sinking fund account, with the remaining representing fee payable to AIG. In addition, we are required to make three yearly payments of approximately \$1,073,000 starting December 31, 2009, of which \$888,000 will be deposited into a sinking fund account, with the remaining to represent fee payable to AIG. We made our initial \$2,000,000 payment to AIG on March 6, 2009 from funds made available from an Amendment to our loan Agreement entered between us, our subsidiary, and PNC Bank, National Association, on March 5, 2009 (see “Financing Activities” in this section for the Amendment made with PNC Bank and see “Risk Factors” for a discussion as to the potential risks relating to AIG).

On July 28, 2006, our Board of Directors has authorized a common stock repurchase program to purchase up to \$2,000,000 of our Common Stock, through open market and privately negotiated transactions, with the timing, the amount of repurchase transactions and the prices paid under the program as deemed appropriate by management and dependent on market conditions and corporate and regulatory considerations. We plan to fund any repurchases under this program through our internal cash flow and/or borrowing under our line of credit. As of the date of this report, we have not repurchased any of our Common Stock under the program as we continue to evaluate this repurchase program within our internal cash flow and/or borrowings under our line of credit.

#### *Financing Activities*

We entered into a Revolving Credit, Term Loan and Security Agreement (“Agreement”) with PNC Bank, National Association, a national banking association (“PNC”) acting as agent (“Agent”) for lenders, and as issuing bank. The Agreement provided 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 due on November 27, 2008, as amended. The Agreement also provided for a revolving line of credit (“Revolving Credit”) with a maximum principal amount outstanding at any one time of \$18,000,000. 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 the Agent reasonably deems proper and necessary. As of December 31, 2008, the excess availability under our revolving credit was \$5,394,000 based on our eligible receivables.

During 2008, we entered into various Amendments to the PNC Agreement. Under these Amendments, the due date of the credit facility with PNC was extended to July 31, 2012, the method of calculating the fixed charge coverage ratio covenant contained in the loan agreement in each quarter of 2008 was modified, and our Term Loan was increased back up to \$7,000,000 from the principal outstanding balance of \$0, with the revolving line of credit remaining at \$18,000,000. The Term Loan continues to be payable in monthly installments of approximately \$83,000, plus accrued interest, with the remaining unpaid principal balance and accrued interest, payable by July 31, 2012. We agreed to pay PNC 1.0% of the total financing in the event we pay off our obligations on or prior to August 4, 2009 and 1/2% of the total financing if we pay off our obligations on or after August 5, 2009, but prior to August 4, 2010. No early termination fee shall apply if we pay off our obligation after August 5, 2010. We agreed to grant mortgages to PNC as to certain of our facilities not previously granted to PNC under the Agreement. The \$7,000,000 in loan proceeds was used to reduce our revolver balance and our current liabilities.

On March 5, 2009, we entered into another Amendment with PNC Bank to our Agreement. This Amendment increased our borrowing availability by approximately an additional \$2,200,000. In addition, pursuant to the Amendment, monthly interest due on our revolving line of credit was amended from prime plus 1/2% to prime plus 2.0% and monthly interest due on our Term Loan was amended from prime plus 1.0% to prime plus 2.5%. The Company also has the option to pay monthly interest due on the revolving line of credit by using the London Interbank Offer Rate (“LIBOR”), with the minimum floor base LIBOR

[Table of Contents](#)

rate of 2.5%, plus 3.0% and to pay monthly interest due on the Term Loan using the minimum floor base LIBOR rate of 2.5%, plus 3.5%. In addition, pursuant to the Amendment, the fixed charge coverage ratio was amended to reduce the availability monthly by \$48,000. The Amendment also allowed us to retain funds received from the sale of our PFO property. All other terms and conditions to the credit facility remain principally unchanged. We utilized approximately \$2,000,000 of the additional availability in connection with AIG's financial assurance bond relating to our new permit to store and dispose of radioactive PCB waste as discussed above.

In connection with our acquisition of M&EC, M&EC issued a promissory note in the principal amount of \$3,700,000, together with interest at an annual rate equal to the applicable law rate pursuant to Section 6621 of the Internal Revenue Code, to Performance Development Corporation ("PDC"), dated June 25, 2001, for monies advanced to M&EC by PDC and certain services performed by PDC on behalf of M&EC prior to our acquisition of M&EC. The principal amount of the promissory note was payable over eight years on a semiannual basis on June 30 and December 31, with a final principal payment to be made by December 31, 2008. All accrued and unpaid interest on the promissory note was payable in one lump sum on December 31, 2008. PDC directed M&EC to make all payments under the promissory note directly to the IRS to be applied to PDC's obligations to the IRS. On December 29, 2008, M&EC and PDC entered into an amendment to the promissory note, whereby the outstanding principal and accrued interest due under the promissory note totaling approximately \$3,066,000 is to be paid in the following installments: \$500,000 payment to be made by December 31, 2008 and five monthly payment of \$100,000 to be made starting January 27, 2009, with the balance consisting of accrued and unpaid interest due on June 30, 2009. We made the \$500,000 payment on December 31, 2008. Interest is to continue to accrue at the applicable law rate pursuant to the provisions of section 6621 of the Internal Revenue Code of 1986, as amended. We have been directed by PDC to make all payments under the promissory note, as amended, directly to the IRS to be applied to PDC's obligations under its obligations with the IRS. As of December 31, 2008, and after payment of the \$500,000 installment, the outstanding balance due under the promissory note to PDC, as amended, was approximately \$2,566,000, which consists of interest only. We anticipate paying the balance from our working capital.

Additionally, M&EC entered into an installment agreement, effective June 25, 2001, with the IRS for a principal amount of \$923,000, plus accrued and unpaid interest, for certain withholding taxes owed by M&EC for periods prior to our acquisition of M&EC. Although the M&EC installment agreement was payable over eight years, we were advised by the IRS that due to the method that the IRS utilized to apply the previous payments made by us in connection with the PDC promissory note discussed above, the M&EC installment agreement has been paid in full.

In conjunction with our acquisition of Nuvotec (n/k/a Perma-Fix of Northwest, Inc.) and PEcoS (n/k/a Perma-Fix of Northwest Richland, Inc.), (collectively called "PFNWR") which was completed on June 13, 2007, we entered into a promissory note for a principal amount of \$4,000,000 to KeyBank National Association, dated June 13, 2007, which represents debt assumed by us as result of the acquisition. The promissory note is payable over a two year period with monthly principal repayment of \$160,000 starting July 2007 and \$173,000 starting July 2008, along with accrued interest. Interest is accrued at prime rate plus 1.125%. As of December 31, 2008, we have no outstanding balance on the note.

Additionally, in conjunction with our acquisition of PFNWR, we agreed to pay shareholders of Nuvotec that qualified as accredited investors pursuant to Rule 501 of Regulation D promulgated under the Securities Act of 1933, \$2,500,000, with principal payable in equal installment of \$833,333 on June 30, 2009, June 30, 2010, and June 30, 2011. Interest is accrued on outstanding principal balance at 8.25% starting in June 2007 and is payable on June 30, 2008, June 30, 2009, June 30, 2010, and June 30, 2011. Interest paid as of December 31, 2008 totaled \$216,000. Interest accrued as of December 31, 2008 totaled \$103,000. We anticipate paying the principal and interests due in 2009 from our working capital.

[Table of Contents](#)

During 2008, we issued 111,179 shares of our Common Stock upon exercise of 106,179 employee stock options, at exercise prices ranging from \$1.25 to \$1.86 and 5,000 director stock options, at an exercise price of \$1.75. Total proceeds received during 2008 related to option exercises totaled approximately \$184,000. In addition, we received the remaining \$25,000 from repayment of stock subscription resulting from exercise of warrants to purchase 60,000 shares of our Common Stock on a loan by the Company at an arms length basis in 2006 in the first six months of 2008.

In summary, the reclassification of debts (less current maturities) due to certain of our lenders resulting from our compliance of our fixed charge coverage ratio in the first quarter of 2008 back to long term from current has improved our working capital position as of December 31, 2008. In addition, cash received from the sale of substantially all of the assets of PFMD and PFD (net of collateralized portion held by our credit facility) in the first quarter of 2008 and the sale of substantially all of the assets of PFTS in the second quarter of 2008, was used to pay off our term note and reduce our revolver balance. The acquisition of PFNW and PFNWR in June 2007 continues to negatively impact our working capital as we continue to draw funds from our revolver to make payments on debt that we assumed as well as financial assurance payments requirement resulting from legacy wastes assumed from the acquisition. In connection with the acquisition of PFNW and PFNWR, we could be required to pay an earn-out amount not to exceed \$4,552,000 over a four year period. The earn-out amounts will be earned if certain annual revenue targets are met by the Company's consolidated Nuclear Segment. We anticipate that all or a portion of the first \$1,000,000 of the earn-out amount could be placed in an escrow account during the later part of 2009 to satisfy certain indemnification obligations under the Agreement. We continue to take steps to improve our operations and liquidity and to invest working capital into our facilities to fund capital additions in the Nuclear Segment. We restructured our credit facility with our lender in the third quarter of 2008 to better support the future needs of the Company. Although there are no assurances, we believe that our cash flows from operations and our available liquidity from our line of credit are sufficient to service the Company's current obligations.

### Contractual Obligations

The following table summarizes our contractual obligations at December 31, 2008, and the effect such obligations are expected to have on our liquidity and cash flow in future periods, (in thousands):

Contractual Obligations	Total	Payments due by period			
		2009	2010-2012	2013-2014	After 2014
Long-term debt	\$ 16,203	\$ 2,022	\$ 14,172	\$ 9	\$ —
Interest on long-term debt <sup>(1)</sup>	3,077	2,871	206	—	—
Interest on variable rate debt <sup>(2)</sup>	2,532	824	1,708	—	—
Operating leases	2,097	744	1,300	53	—
Finite risk policy <sup>(3)</sup>	10,756	4,525	6,231	—	—
Pension withdrawal liability <sup>(4)</sup>	1,129	181	625	323	—
Environmental contingencies <sup>(5)</sup>	1,833	776	559	386	112
Purchase obligations <sup>(6)</sup>	—	—	—	—	—
Total contractual obligations	<u>\$ 37,627</u>	<u>\$ 11,943</u>	<u>\$ 24,801</u>	<u>\$ 771</u>	<u>\$ 112</u>

- (1) Our PDC Note agreements dated June 2001, as amended on December 29, 2008, call for the remaining balance of \$2,566,000 which consists of interest, to be paid by June 30, 2009. Monthly payment of \$100,000 is to be made starting January 27, 2009. Interest is to be accrued at the applicable rate pursuant to the term of the original note. In conjunction with our acquisition of PFNWR, which was completed on June 13, 2007, we agreed to pay shareholders of Nuvotec that qualified as accredited investors pursuant to Rule 501 of Regulation D promulgated under the Securities Act of 1933, \$2,500,000, with principal payable in equal installment of \$833,333 on June 30, 2009, June 30, 2010,

and June 30, 2011. Interest is accrued on outstanding principal balance at 8.25% starting in June 2007 and is payable on June 30, 2008, June 30, 2009, June 30, 2010, and June 30, 2011.

- (2) We have variable interest rates on our Term Loan and Revolving Credit of 2.5% and 2.0% over the prime rate of interest, as amended, respectively, and as such we have made certain assumptions in estimating future interest payments on this variable interest rate debt. We assume an increase in prime rate of 1/2% in each of the years 2009 through July 2012.
- (3) Our finite risk insurance policy provides financial assurance guarantees to the states in the event of unforeseen closure of our permitted facilities. See Liquidity and Capital Resources – Investing activities earlier in this Management’s Discussion and Analysis for further discussion on our finite risk policy.
- (4) The pension withdrawal liability is the estimated liability to us upon termination of our union employees at our discontinued operation, PFMI. See Discontinued Operations earlier in this section for discussion on our discontinued operation.
- (5) The environmental contingencies and related assumptions are discussed further in the Environmental Contingencies section of this Management’s Discussion and Analysis, and are based on estimated cash flow spending for these liabilities. The environmental contingencies noted are for PFMI, PFM, PFSG, and PFD, which are the financial obligations of the Company. The environmental liability, as it relates to the remediation of the EPS site assumed by the Company as a result of the original acquisition of the PFD facility, was retained by the Company upon the sale of PFD in March 2008.
- (6) We are not a party to any significant long-term service or supply contracts with respect to our processes. We refrain from entering into any long-term purchase commitments in the ordinary course of business.

#### **Critical Accounting Estimates**

In preparing the consolidated financial statements in conformity with generally accepted accounting principles in the United States of America, 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. We believe the following critical accounting policies affect the more significant estimates used in preparation of the consolidated financial statements:

*Revenue Recognition Estimates.* We utilize a percentage of completion methodology for purposes of revenue recognition in our Nuclear Segment. As we accept more complex waste streams in this segment, the treatment of those waste streams becomes more complicated and time consuming. We have continued to enhance our waste tracking capabilities and systems, which has enabled us to better match the revenue earned to the processing phases achieved. The major processing phases are receipt, treatment/processing and shipment/final disposition. Upon receiving mixed waste we recognize a certain percentage (ranging from 20% to 33%) of revenue as we incur costs for transportation, analytical and labor associated with the receipt of mixed wastes. As the waste is processed, shipped and disposed of we recognize the remaining revenue and the associated costs of transportation and burial. The waste streams in our Industrial Segment are much less complicated, and services are rendered shortly after receipt, as such we do not use percentage of completion estimates in our Industrial segment. We review and evaluate our revenue recognition estimates and policies on a quarterly basis. Under our subcontract awarded by CHPRC in 2008, we are reimbursed for costs incurred plus a certain percentage markup for indirect costs, in accordance with contract provision. Costs incurred on excess of contract funding may be renegotiated for reimbursement. We also earn a fee based on the approved costs to complete the contract. We recognize this fee using the proportion of costs incurred to total estimated contract costs.

## Table of Contents

*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 are uncollectible. We regularly review all accounts receivable balances that exceed 60 days from the invoice date and based on an assessment of current credit worthiness, estimate the portion, if any, of the balances that are uncollectible. Specific accounts that are deemed to be uncollectible are reserved at 100% of their outstanding balance. The remaining balances aged over 60 days have a percentage applied by aging category (5% for balances 61-90 days, 20% for balances 91-120 days and 40% for balances over 120 days aged), based on a historical valuation, that allows us to calculate the total reserve required. This allowance was approximately 0.4% of revenue for 2008 and 2.4%, of accounts receivable as of December 31, 2008. Additionally, this allowance was approximately 0.3% of revenue for 2007 and 1.3% of accounts receivable as of December 31, 2007.

*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 identifiable assets acquired or goodwill and the recognized value of the permits required to operate the business. 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. We test each Segment's (or Reporting Unit's) goodwill and permits, separately, for impairment, annually as of October 1. Our annual impairment test as of October 1, 2008 and 2007 resulted in no impairment of goodwill and permits. The methodology utilized in performing this test estimates the fair value of our operating segments using a discounted cash flow valuation approach. Those cash flow estimates incorporate assumptions that marketplace participants would use in their estimates of fair value. The most significant assumptions used in the discounted cash flow valuation regarding each of the Segment's fair value in connection with goodwill valuations are: (1) detailed five year cash flow projections, (2) the risk adjusted discount rate, and (3) the expected long-term growth rate. The primary drivers of the cash flow projection in 2008 include sales revenue and projected margin which are based on our current revenue, projected government funding as it relates to our existing government contracts and future revenue expected as part of the government stimulus plan. The risk adjusted discount rate represents the weighted average cost of capital and is established based on (1) the 20 year risk-free rate, which is impacted by events external to our business, such as investor expectation regarding economic activity (2) our required rate of return on equity, and (3) the current after tax rate of return on debt. In valuing our goodwill for 2008, risk adjusted discount rate of 18% was used for the Nuclear and Industrial Segment and 16% for our Engineering Segment. As of December 31, 2008, the fair value of our reporting units exceeds carrying value by approximately \$6,616,000, \$616,000, and \$3,329,000 above its carrying value for the Nuclear, Engineering, and Industrial Segment, respectively.

### *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 income tax purposes. Generally, annual depreciation rates range from ten to forty years for buildings (including improvements and asset retirement costs) and three to seven years for office furniture and equipment, vehicles, and decontamination and processing equipment. Leasehold improvements are capitalized and amortized over the lesser of the term 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 improvement, which extend the useful lives of the assets, are capitalized. We include within buildings, asset retirement obligations, which represents our best estimates of the cost to close, at some undetermined future date, our permitted and/or licensed facilities. In 2008, due to change in estimate of the costs to close our DSSI and PFNWR facility based on federal/state regulatory guidelines, we increased our asset retirement obligation ("ARO") by \$726,000 and \$373,000 for our DSSI and PFNWR facility, respectively, which will be depreciated prospectively over the remaining life of the asset, in accordance with SFAS No. 143 "Accounting for Asset Retirement Obligations".

## Table of Contents

In accordance with Statement of Financial Accounting Standards No. 144 (“SFAS No. 144”), “Accounting for the Impairment or Disposal of Long-Lived Assets”, long-lived assets, such as property, plant and equipment, and purchased intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and are no longer depreciated. The assets and liabilities of a disposal group classified as held for sale would be presented separately in the appropriate asset and liability sections of the balance sheet. In 2007, as result of the approved divestiture of our Industrial Segment by our Board of Directors and in accordance with SFAS No. 144, we recorded \$2,727,000 and \$1,804,000 in tangible asset impairment loss for PFD and PFTS, respectively, which were included in “loss from discontinued operations, net of taxes” on our Consolidated Statements of Operations for the year ended December 31, 2007.

In September 2008, our Board of Directors approved retaining our Industrial Segment facilities/operations at PFFL, PFSG, and PFO. As a result of this decision, we restated the condensed consolidated financial statements for all periods presented to reflect the reclassification of these three facilities/operations back into our continuing operations. During the third quarter of 2008, we classified one of the two properties at PFO as “net property and equipment held for sale” within our continued operations in the Consolidated Balance Sheets in accordance to SFAS No. 144. We evaluated the fair value of PFO’s assets and as a result, recorded a credit of \$507,000 related to the recovery of previous impairment charges for PFO, which is included in “Asset Impairment Recovery” on the Consolidated Statements of Operations for the year ended December 31, 2008. On December 23, 2008, we sold the property at PFO for \$900,000 in cash resulting in a gain of \$483,000.

*Accrued Closure Costs.* Accrued closure costs represent a contingent environmental liability to clean up a facility in the event we cease operations in an existing facility. The accrued closure costs are estimates based on guidelines developed by federal and/or state regulatory authorities under Resource Conservation and Recovery Act (“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 2008 and 2007, have been approximately 2.7%, and 2.9%, respectively, and based on the historical information, we do 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. We have no current intention to close any of our facilities except for the Michigan and Pittsburgh facilities.

*Accrued Environmental Liabilities.* We have 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 our overall costs, to increased contamination levels that could arise as we complete remediation which could increase our costs, neither of which we anticipate 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. Our environmental liabilities also included \$391,000 in accrued long-term environmental liability as of December 31, 2007 for our Maryland facility acquired in March 2004. As previously disclosed, in January 2008, we sold substantially all of the assets of the Maryland facility. In connection with this sale, the buyer has assumed this liability, in addition to obligations and liabilities for environmental conditions at the Maryland facility except for fines, assessments, or judgments to governmental authorities prior to the closing of the transaction or third party tort claims existing prior to the closing of the sale. In connection with the sale of our PFD facility in March 2008, the Company has retained the environmental liability for the remediation of an independent site known as EPS. This liability was assumed by the Company as a result of the original acquisition of the

PFD facility. In connection with the sale of our PFTS facility in May 2008, the remaining environmental reserve of approximately \$35,000 was recorded as a “gain on disposal of discontinued operation, net of taxes” in the second quarter of 2008 on our “Consolidated Statement of Operations” as the buyer has assumed any future on-going environmental monitoring. The environmental liabilities of PFM, PFMI, PFSG, and PFD remain the financial obligations of the Company.

*Disposal/Transportation Costs.* We accrue 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.

*Share-Based Compensation.* On January 1, 2006, we adopted Financial Accounting Standards Board (“FASB”) Statement No. 123 (revised) (“SFAS 123R”), *Share-Based Payment*, a revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation*, superseding APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and its related implementation guidance. This Statement establishes accounting standards for entity exchanges of equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity’s equity instruments or that may be settled by the issuance of those equity instruments. SFAS 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative upon adopting SFAS 123R. We adopted SFAS 123R utilizing the modified prospective method in which compensation cost is recognized beginning with the effective date based on SFAS 123R requirements for all (a) share-based payments granted after the effective date and (b) awards granted to employees prior to the effective date of SFAS 123R that remain unvested on the effective date. In accordance with the modified prospective method, the consolidated financial statements for prior periods have not been restated to reflect, and do not include, the impact of SFAS 123R.

Pursuant to the adoption of SFAS 123R, we recorded stock-based compensation expense for the director stock options granted prior to, but not yet vested, as of January 1, 2006, using the fair value method required under SFAS 123R. For our employee and director stock option grants, we have estimated compensation expense based on the fair value at grant date using the Black-Scholes valuation model and have recognized compensation expense using a straight-line amortization method over the vesting period. As SFAS 123R requires that stock-based compensation expense be based on options that are ultimately expected to vest, our stock-based compensation is reduced for estimated forfeiture rates. When estimating forfeitures, we considered historical trends of actual option forfeitures. Forfeiture rates are evaluated, and revised when necessary. For the August 2008 and December 2008 employee stock option grants, we have estimated 5% and 0% forfeiture rates, respectively, for the first year of vesting. Our December 2008 employee option grants were made to employees hired resulting from the subcontract awarded to us from CHPRC. We based our forfeiture rate for these option grants on historical employment terms under similar type contracts. For the 2008 director stock option grants, we have estimated 0% forfeiture rate for the first year of vesting based on historical trend of actual forfeitures.

Our computation of expected volatility used to calculate the fair value of options granted using the Black-Scholes valuation model is based on historical volatility from our traded common stock over the expected term of the option grants. For our employee option grants made prior to 2008, we used the simplified method, defined in the SEC’s Staff Accounting Bulletin No. 107, to calculate the expected term. For our employee option grants made in August 2008, we computed the expected term based on the historical exercise and post-vesting data. For the December 2008 option grants made to employees working under the CHPRC subcontract, we computed the expected term based on the initial subcontract term of five years. For our director option grants, the expected term is calculated based on historical exercise and post-vesting

data. The interest rate for periods within the contractual life of the award is based on the U.S. Treasury yield curve in effect at the time of grant.

#### *FIN 48*

In July 2006, the FASB issued FIN 48, *Accounting for Uncertainty in Income Taxes*, which attempts to set out a consistent framework for preparers to use to determine the appropriate level of tax reserve to maintain for uncertain tax positions. This interpretation of FASB Statement No. 109 uses a two-step approach wherein a tax benefit is recognized if a position is more-likely-than-not to be sustained. The amount of the benefit is then measured to be the highest tax benefit which is greater than 50% likely to be realized. FIN 48 also sets out disclosure requirements to enhance transparency of an entity's tax reserves. The Company adopted this Interpretation as of January 1, 2007. The adoption of FIN 48 did not have a material impact on our financial statements.

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

*Seasonality.* Historically, we have experienced reduced activities and related billable hours throughout the November and December holiday periods within our Engineering Segment. Our Industrial Segment operations experience reduced activities during the holiday periods; however, one key product line is the servicing of cruise line business where operations are typically higher during the winter months, thus offsetting the impact of the holiday season. The DOE and DOD represent major customers for the Nuclear Segment. In conjunction with the federal government's September 30 fiscal year-end, the Nuclear Segment historically experienced seasonably large shipments during the third quarter, leading up to this government fiscal year-end, as a result of incentives and other quota requirements. Correspondingly for a period of approximately three months following September 30, the Nuclear Segment is generally seasonably slow, as the government budgets are still being finalized, planning for the new year is occurring, and we enter the holiday season. Over the past years, due to our efforts to work with the various government customers to smooth these shipments more evenly throughout the year, we have seen smaller fluctuations in the quarters. Although we have seen smaller fluctuation in the quarters in recent years, as government spending is contingent upon its annual budget and allocation of funding, we cannot provide assurance that we will not have larger fluctuations in the quarters in the near future. For 2008, government agencies were operated under "Continuing Resolution" without finalized budgets due in part to the impending change in Administration, which had a negative impact on availability of funding for services offered by our Nuclear Segment.

*Economic Conditions.* With much of our Nuclear Segment customer base being government or prime contractors treating government waste, economic upturns or downturns do not usually have a significant impact on the demand for our services. With our Industrial Segment, economic downturns or recessionary conditions can adversely affect the demand for our industrial services. However, with the recent high prices of oil, this economic condition has worked favorably for our oil sale revenues in our Industrial Segment. Our Engineering Segment relies more on commercial customers though this segment makes up a very small percentage of our revenue.

Demand for our services has been, and we expect that demand will continue to be, subject to significant fluctuations due to a variety of factors beyond our control, including the current economic recession and conditions, inability of the federal government to adopt its budget or reductions in the budget for spending to remediate federal sites due to numerous reasons, including, without limitation, the substantial deficits that the federal government has and is continuing to incur. During economic downturns, such as the current economic recession, and large budget deficits that the federal government and many states are experiencing, the ability of private and government entities to spend on nuclear services may decline significantly. Although the recently adopted economic stimulus package provides for substantial funds to remediate federal nuclear sites, we cannot be certain that economic or political conditions will be generally favorable or that there will not be significant fluctuations adversely affecting our industry as a whole. In addition, our operations depend, in large part, upon governmental funding, particularly funding levels at the DOE. Our governmental contracts and subcontracts relating to activities at governmental sites are subject to termination or renegotiation on 30 days notice at the government's option. Significant reductions in the

## [Table of Contents](#)

level of governmental funding (for example, the annual budget of the DOE) or specifically mandated levels for different programs that are important to our business could have a material adverse impact on our business, financial position, results of operations and cash flows.

### *Certain Legal Matters:*

*Perma-Fix of Dayton (“PFD”), Perma-Fix of Florida (“PFF”), Perma-Fix of Orlando (“PFO”), Perma-Fix of South Georgia (“PFSG”), and Perma-Fix of Memphis (“PFM”)*

In May 2007, the above facilities were named Partially Responsible Parties (“PRPs”) at the Marine Shale Superfund site in St. Mary Parish, Louisiana (“Site”). Information provided by the EPA indicates that, from 1985 through 1996, the Perma-Fix facilities above were responsible for shipping 2.8% of the total waste volume received by Marine Shale. Subject to finalization of this estimate by the PRP group, PFF, PFO and PFD could be considered de-minimus at .06%, .07% and .28% respectively. PFSG and PFM would be major at 1.12% and 1.27% respectively. However, at this time the contributions of all facilities are consolidated.

As of the date of this report, Louisiana DEQ (“LDEQ”) has collected approximately \$8,400,000 for the remediation of the site and has completed removal of above ground waste from the site. The EPA’s unofficial estimate to complete remediation of the site is between \$9,000,000 and \$12,000,000; however, based on preliminary outside consulting work hired by the PRP group, which we are a party to, the remediation costs can be below EPA’s estimation. The PRP Group has established a cooperative relationship with LDEQ and EPA, and is working closely with these agencies to assure that the funds held by LDEQ are used cost-effective. As a result of recent negotiations with LDEQ and EPA, further remediation work by LDEQ has been put on hold pending completion of a site assessment by the PRP Group. This site assessment could result in remediation activities to be completed within the funds held by LDEQ. As part of the PRP Group, we have paid an initial assessment of \$10,000 in the fourth quarter of 2007, which was allocated among the facilities. In addition, we accrued approximately \$27,000 in the third quarter of 2008 for our estimated portion of the cost of the site assessment, which was allocated among the facilities. Approximately \$9,000 of the accrued amount was paid to the PRP Group in the fourth quarter of 2008. As of the date of this report, we cannot accurately access our total liability. The Company records its environmental liabilities when they are probable of payment and can be estimated within a reasonable range. Since this contingency currently does not meet this criteria, a liability has not been established.

### *Notice of Violation - Perma-Fix Treatment Services, Inc. (“PFTS”)*

In July 2008, PFTS received a notice of violation (“NOV”) from the Oklahoma Department of Environmental Quality (“ODEQ”) alleging that eight loads of waste materials received by PFTS between January 2007 and July 2007 were improperly analyzed to assure that the treatment process rendered the waste non-hazardous before disposition in PFTS’ non-hazardous injection well. The ODEQ alleges the handling of these waste materials violated regulations regarding hazardous waste. The ODEQ did not assert any penalties against PFTS in the NOV and requested PFTS to respond within 30 days from receipt of the letter. PFTS responded on August 22, 2008 and is currently in settlement discussions with the ODEQ. PFTS sold most all of its assets to a non-affiliated third party on May 30, 2008.

### *Industrial Segment Divested Facilities/Operations*

We sold substantially all of the assets of PFTS pursuant to an Asset Purchase Agreement on May 30, 2008. Under this Agreement the buyer assumed certain debts and obligations of PFTS, including, but not limited to, certain debts and obligations of PFTS to regulatory authorities under certain consent agreements entered into by PFTS with the appropriate regulatory authority to remediate portions of the facility sold to the buyer. If any of these liabilities/obligations are not paid or preformed by the buyer, the buyer would be in breach of the Asset Purchase Agreement and we may assert claims against the buyer for such breach. We currently are discussing with the buyer of the PFTS’ assets regarding certain liabilities which the buyer assumed and agreed to pay but which the buyer has refused to satisfy as of the date of this report. In addition, the buyer of the PFTS assets is required to replace our financial assurance bond with its own financial assurance mechanism for facility closures. Our financial assurance bond of \$685,000 for PFTS was required to remain in place until the buyer has provided replacement coverage. The respective regulatory authority will

[Table of Contents](#)

not release us from our financial assurance obligations until the buyer complies with the appropriate financial assurance regulations. On March 24, 2009, the respective regulatory authority authorized the release of our financial assurance bond of \$685,000 for PFTS. The buyer of PFTS' assets has provided its own financial assurance bond which was approved by the respective regulatory authority.

*Significant Customers.* Our revenues are principally derived from numerous and varied customers. However, we have a significant relationship with the federal government within our Nuclear Segment, and have continued 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.

We performed services relating to waste generated by the federal government, either directly or indirectly as a subcontractor (including LATA/Parallax, Fluor Hanford, and CHPRC as discussed below) to the federal government, representing approximately \$43,464,000 or 57.6% of our total revenue from continuing operations during 2008, as compared to \$30,000,000 or 46.5% of our total revenue from continuing operations during 2007, and \$33,226,000 or 48.7% of our total revenue from continuing operations during 2006.

Included in the amounts discussed above, are revenues from LATA/Parallax Portsmouth LLC ("LATA/Parallax"). LATA/Parallax manages DOE environmental programs. Our revenues from LATA/Parallax contributed \$4,841,000 or 6.4%, \$8,784,000 or 13.6%, and 10,341,000 or 15.2% of our revenues from continuing operations for 2008, 2007, and 2006, respectively. In 2006, our M&EC facility was awarded a subcontract by LATA/Parallax to treat DOE special process wastes from the DOE Portsmouth Gaseous Diffusion Plant located in Piketon, Ohio. This subcontract has been extended through September 30, 2009. We currently have two other subcontracts with LATA/Parallax to treat wastes which are set to expire on September 30, 2009. As with most contracts relating to the federal government, LATA/Parallax can terminate the contract with us at any time for convenience, which could have a material adverse effect on our operations.

Since 2004, our Nuclear Segment has treated mixed low-level waste, as a subcontractor, for Fluor Hanford, who acts as a general contractor for the DOE. However, with the acquisition of our PFNWR facility in 2007, a significant amount of our revenues is derived from Fluor Hanford, a DOE general contractor since 1996. Fluor Hanford manages several major activities at the DOE's Hanford Site, including dismantling former nuclear processing facilities, monitoring and cleaning up the site's contaminated groundwater, and retrieving and processing transuranic waste for off-site shipment. The Hanford Site is one of DOE's largest nuclear weapon environmental remediation projects. Our PFNWR facility is located adjacent to the Hanford Site and treats low level radioactive and mixed wastes. We have three subcontracts with Fluor Hanford (who acts as the general contractor at the DOE site) at our PFNWR facility, with the initial contract dating back to 2003. Fluor Hanford's successor, CHPRC, was awarded the Plateau Remediation Contract for the Hanford Site in the second quarter of 2008 and has begun management of the waste activities previously managed by Fluor Hanford under these three subcontracts, effective October 1, 2008. CHPRC has extended these subcontracts to March 31, 2009 and we expect these subcontracts will be renegotiated by CHPRC beyond March 31, 2009. Revenue from Fluor Hanford has been transitioned to CHPRC and we expect these revenues to remain constant or possibly increase, dependent upon DOE funding, in fiscal year 2009. Revenues from Fluor Hanford totaled \$7,974,000 or 10.6% (approximately \$5,160,000 from PFNWR), \$6,985,000 (approximately \$3,100,000 from PFNWR) or 10.8%, and \$1,229,000 or 1.8% of our consolidated revenue from continuing operations for 2008, 2007, and 2006, respectively.

In connection with the CHPRC obligations under its DOE general contract, our M&EC facility was awarded a subcontract by CHPRC to participate in the cleanup of the central portion of the Hanford Site, which once housed certain chemical separation buildings and other facilities that separated and recovered plutonium and

other materials for use in nuclear weapons. This subcontract became effective on June 19, 2008, the date DOE awarded CHPRC the general contract. DOE's general contract and M&EC's subcontract provided a transition period from August 11, 2008 through September 30, 2008, a base period from October 1, 2008 through September 30, 2013, and an option period from October 1, 2013 through September 30, 2018. M&EC's subcontract is a cost plus award fee contract. On October 1, 2008, operations of this subcontract commenced at the DOE Hanford Site. We believe full operations under this subcontract will result in revenues for on-site and off-site work of approximately \$200,000,000 to \$250,000,000 over the five year base period. As of December 31, 2008, revenue from this subcontractor accounted for \$8,120,000 or 10.8% of total revenue from our continuing operations. As of the date of this report, we have employed an additional 177 employees to service this subcontract.

*Insurance.* We maintain 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. We evaluate our insurance policies annually to determine adequacy, cost effectiveness and desired deductible levels. Due to the downturn in the economy, changes within the environmental insurance market, and the financial difficulties of AIG, the provider of our financial assurance policies, we have no guarantees as to continued coverage by AIG, that we will be able to obtain similar insurance in future years, or that the cost of such insurance will not increase materially.

#### **Profit Sharing Plan**

The Company adopted its 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 full-time employees who have attained the age of 18 are eligible to participate in the 401(k) Plan. Eligibility is immediate upon employment but enrollment is only allowed during two yearly open periods of January 1 and July 1. Participating employees may make annual pretax contributions to their accounts up to 100% 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 matched 25% of our employees' contributions. We contributed \$401,000 in matching funds during 2008. Effective March 1, 2009, the Company suspended its matching contribution in an effort to reduce costs in light of the recent economic environment. The Company will evaluate the reversal of this suspension as the economic environment improves.

#### **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 non-hazardous, 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 further be notified, in the future, that we are a PRP at a remedial action site, which could have a material adverse effect.

We have budgeted for 2009, \$776,000 in environmental remediation expenditures to comply with federal, state and local regulations in connection with remediation of certain contaminants at our facilities. Our facilities where the remediation expenditures will be made are the Leased Property in Dayton, Ohio (EPS), a

[Table of Contents](#)

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. The environmental liability of PFD (as it relates to the remediation of the EPS site assumed by the Company as a result of the original acquisition of the PFD facility) was retained by the Company upon the sale of PFD in March 2008. While no assurances can be made that we will be able to do so, we expect to fund the expenses to remediate these sites from funds generated internally.

At December 31, 2008, we had total accrued environmental remediation liabilities of \$1,833,000 of which \$776,000 is recorded as a current liability, which reflects a decrease of \$1,040,000 from the December 31, 2007, balance of \$2,873,000. The decrease represents payments of approximately \$614,000 on remediation projects, approximately \$391,000 in environmental reserve which was assumed by the buyer upon the sale of substantially all of the assets of PFMD in January 2008, and reduction of approximately \$35,000 in reserve which we recorded as "gain on disposal of continued operations, net of taxes" in the second quarter of 2008 upon the sale of substantially all of the assets of PFTS in May 2008 as the buyer has assumed any future on-going environmental monitoring. In connection with the sale of substantially all of the assets of PFMD in January 2008, the buyer assumed all obligations and liabilities for environmental conditions at the Maryland facility except for fines, assessments, or judgments to governmental authorities prior to the closing of the transaction or third party tort claims existing prior to the closing of the sale. The December 31, 2008, current and long-term accrued environmental balance is recorded as follows (in thousands):

	Current Accrual	Long-term Accrual	Total
PFD	\$ 165	\$ 324	\$ 489
PFM	74	201	275
PFSG	112	419	531
PFMI	425	113	538
Total Liability	<u>\$ 776</u>	<u>\$ 1,057</u>	<u>\$ 1,833</u>

**ITEM QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

**7A.**

For the year 2008, we were exposed to certain market risks arising from adverse changes in interest rates, primarily due to the potential effect of such changes on our variable rate loan arrangements with PNC and variable rate promissory note agreement with KeyBank National Association. The interest rates payable to PNC and KeyBank National Association are based on a spread over prime rate. If our floating rates of interest experienced an upward increase of 1%, our debt service would have increased by approximately \$110,000 for the year ended December 31, 2008. As of December 31, 2008, we had no interest swap agreement outstanding.

## 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 achieve profitability on an annualized basis;
- ability to comply with our general working capital requirements;
- ability to retain or receive certain permits, licenses, or patents;
- ability to renew permits and licenses with minimal effort and costs;
- ability to be able to continue to borrow under our revolving line of credit;
- ability to meet our fixed charge coverage ratio in the future;
- we anticipate meeting our fixed charge ratio in 2009;
- ability to generate sufficient cash flow from operations to fund all costs of operations;
- ability to close and remediate certain contaminated sites for projected amounts;
- our ability to develop or adopt new and existing technologies in the conduct of our operations;
- ability to fund budgeted capital expenditures during 2009 through our operations and lease financing;
- 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;
- we believe that our cash flows from operations and our available liquidity from our line of credit are sufficient to service the Company's current obligations;
- we believe that we are able to compete in the market 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;
- we believe that we are a significant provider in the delivery of off-site waste treatment services in the Southeast portion of the United States;
- we believe we maintain insurance coverage adequate for our needs and similar to, or greater than the coverage maintained by other companies of our size in the industry;
- we anticipate paying the promissory note to PDC and the principal and interests due in 2009 on our shareholder note from our working capital;
- funding and timing of the financial assurance related to the PCB permit at DSSI has yet to be finalized;
- under our insurance contracts, we usually accept self-insured retentions, which we believe is appropriate for our specific business risks;
- 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;
- due to the downturn in the economy and changes within the environmental insurance market, we have no guarantee that we will be able to obtain similar insurance in future years, or that the cost of such insurance will not increase materially;
- 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;
- as with most contracts relating to the federal government, LATA/Parallax and/or CHPRC can terminate the contract with us at any time for convenience, which could have a material adverse effect on our operations;
- CHPRC has extended these contracts to March 31, 2009 and we expect these contracts will be renegotiated by CHPRC beyond March 31, 2009;
- revenue from Fluor Hanford has been transitioned to CHPRC and we expect these revenues to remain constant or possibly increase, dependent upon DOE funding, in fiscal year 2009;

Table of Contents

- we believe full operations under the CHPRC subcontract will result in revenues for on-site and off-site work of approximately \$200,000,000 to \$250,000,000 over the five year base period;
- we do not expect any impact or reduction to PFO's operating capability from the sale of the property at PFO;
- we believe that government funding made available for DOE remediation projects under the recently enacted government stimulus plan could have a positive impact on our government subcontracts within our Nuclear Segment;
- we believe that at least one third of DOE mixed waste contains organic components;
- if EnergySolutions should refuse to accept our waste or cease operations at its Clive, Utah facility, such would have a material adverse effect on us;
- although we have seen smaller fluctuation in the quarters in recent years, as government spending is contingent upon its annual budget and allocation of funding, we cannot provide assurance that we will not have larger fluctuations in the quarters in the near future;
- 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 saving alternative to more traditional remediation and disposal methods offered by certain of our competitors;
- no further impairment to intangible assets;
- no expectation of material future inflationary changes;
- waste backlog will continue to fluctuate in 2009 depending on the complexity of waste streams and the timing of receipts and processing materials;
- we do not believe we are dependent on any particular trademark in order to operate our business or any significant segment thereof;
- based on the current status of Corrective Action for the PFMI facility, we believe that the remaining reserve is adequate to cover the liability;
- despite our aggressive compliance and auditing procedure for disposal of wastes, we could further be notified, in the future, that we are a PRP at a remedial action site, which could have a material adverse effect;
- we do not believe that any adverse changes to our estimates in environmental accrual would be material;
- the Company will evaluate the reversal of the 401k match contribution suspension as the economic environment improves;
- placing the first \$1,000,000 of the escrow amount we may be required to pay in connection with the acquisition of PFNWR and PFNW in an escrow account during the later part of 2009;
- we plan to fund any repurchases under our common stock repurchase plan through our internal cash flow and/or borrowing under our line of credit;
- the acquisition of our PFNWR facility positions the Nuclear Segment future revenue stream well as the facility is located adjacent to the Hanford site, which represents one of the most expansive of DOE's nuclear weapons' facilities to remediate;
- we do not expect SFAS No. 160, 162, SAB No. 110, EITF 08-3, and EITF Issue No. 08-06 to have a material impact on our financial position or result of operations;
- the Company expects SFAS No. 141R will have an impact on its consolidated financial statements when effective, but the nature and magnitude of the specific effects will depend upon the nature, terms and size of acquisitions it consummates after the effect date;
- goal to improve our balance sheet, pay down debt and improve our liquidity; and
- we anticipate that employment agreement will be finalized during the second quarter of 2009 for each of our CEO, CFO, and COO, subject to review of our Audit Committee and approval by the Board of Directors.

[Table of Contents](#)

While the Company believes the expectations reflected in such forward-looking statements are reasonable, it can give no assurance such expectations will prove to be 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 any of the sites or facilities leased or owned by us or our subsidiaries which would result in a material increase in remediation expenditures;
- 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 more/less than expected;
- the requirement to use internally generated funds for purposes not presently anticipated;
- the inability to maintain the listing of our Common Stock on the NASDAQ;
- terminations of contracts with federal agencies or subcontracts involving federal agencies, or reduction in amount of waste delivered to us under these contracts or subcontracts;
- disposal expense accrual could prove to be inadequate in the event the waste requires retreatment; and
- Risk Factors contained in Item 1A of this report.

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

**ITEM FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

**8.**

Index to Consolidated Financial Statements

<b><u>Consolidated Financial Statements</u></b>	<b><u>Page No.</u></b>
<a href="#">Report of Independent Registered Public Accounting Firm, BDO Seidman, LLP</a>	60
<a href="#">Consolidated Balance Sheets as of December 31, 2008 and 2007</a>	61
<a href="#">Consolidated Statements of Operations for the years ended December 31, 2008, 2007, and 2006</a>	63
<a href="#">Consolidated Statements of Cash Flows for the years ended December 31, 2008, 2007, and 2006</a>	64
<a href="#">Consolidated Statements of Stockholders' Equity for the years ended December 31, 2008, 2007, and 2006</a>	65
<a href="#">Notes to Consolidated Financial Statements</a>	66

**Financial Statement Schedule**

<a href="#">II Valuation and Qualifying Accounts for the years ended December 31, 2008, 2007, and 2006</a>	134
--	-----

**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 Registered Public Accounting Firm

Board of Directors and Stockholders  
Perma-Fix Environmental Services, Inc.  
Atlanta, Georgia

We have audited the accompanying consolidated balance sheets of Perma-Fix Environmental Services, Inc. and subsidiaries as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2008. In connection with our audits of the consolidated financial statements, we have also audited the financial statement 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 the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. 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, 2008 and 2007, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2008, in conformity with accounting principles generally accepted in the United States of America.

Also, in our opinion, the financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Perma-fix Environmental Services, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2008, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated March 30, 2009, expressed an adverse opinion thereon.

/s/ BDO Seidman, LLP

Atlanta, Georgia  
March 30, 2009

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

(Amount in Thousands, Except for Share Amounts)	2008	2007
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash	\$ 129	\$ 118
Restricted cash	55	55
Accounts receivable, net of allowance for doubtful accounts of \$333 and \$203, respectively	13,416	14,961
Unbilled receivables - current	13,104	10,433
Inventories	344	332
Prepaid and other assets	2,565	3,206
Current assets related to discontinued operations	110	3,505
Total current assets	29,723	32,610
<b>Property and equipment:</b>		
Buildings and land	24,726	23,929
Equipment	31,315	32,240
Vehicles	637	1,302
Leasehold improvements	11,455	11,462
Office furniture and equipment	1,904	2,349
Construction-in-progress	1,159	1,673
	71,196	72,955
Less accumulated depreciation and amortization	(23,762)	(23,161)
Net property and equipment	47,434	49,794
Net property and equipment held for sale	—	349
Property and equipment related to discontinued operations	651	3,942
<b>Intangibles and other long term assets:</b>		
Permits	17,125	16,826
Goodwill	11,320	9,046
Unbilled receivables – non-current	3,858	3,772
Finite Risk Sinking Fund	11,345	6,034
Other assets	2,256	2,496
Intangible and other assets related to discontinued operations	—	1,179
Total assets	\$ 123,712	\$ 126,048

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,*

(Amount in Thousands, Except for Share Amounts)	2008	2007
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>Current liabilities:</b>		
Accounts payable	\$ 11,076	\$ 5,907
Current environmental accrual	186	475
Accrued expenses	8,896	9,982
Disposal/transportation accrual	5,847	6,850
Unearned revenue	4,371	4,978
Current liabilities related to discontinued operations	1,211	6,220
Current portion of long-term debt	2,022	15,352
<b>Total current liabilities</b>	<b>33,609</b>	<b>49,764</b>
Environmental accruals	620	705
Accrued closure costs	10,141	8,901
Other long-term liabilities	457	968
Long-term liabilities related to discontinued operations	1,783	2,817
Long-term debt, less current portion	14,181	2,880
<b>Total long-term liabilities</b>	<b>27,182</b>	<b>16,271</b>
<b>Total liabilities</b>	<b>60,791</b>	<b>66,035</b>
<b>Commitments and Contingencies</b>		
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	1,285	1,285
<b>Stockholders' equity:</b>		
Preferred Stock, \$.001 par value; 2,000,000 shares authorized, no shares issued and outstanding	—	—
Common Stock, \$.001 par value; 75,000,000 shares authorized, 53,934,560 and 53,704,516 shares issued and outstanding, respectively	54	54
Additional paid-in capital	97,381	96,409
Stock subscription receivable	—	(25)
Accumulated deficit	(35,799)	(37,710)
<b>Total stockholders' equity</b>	<b>61,636</b>	<b>58,728</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 123,712</b>	<b>\$ 126,048</b>

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 per Share Amounts)	2008	2007	2006
Net revenues	\$ 75,504	\$ 64,544	\$ 68,205
Cost of goods sold	55,310	45,544	43,160
Gross profit	20,194	19,000	25,045
Selling, general and administrative expenses	18,832	18,082	17,803
Asset (recovery) impairment loss	(507)	1,836	—
(Gain) loss on disposal of property and equipment	(295)	172	27
Income (loss) from operations	2,164	(1,090)	7,215
Other income (expense):			
Interest income	226	312	280
Interest expense	(1,317)	(1,321)	(1,255)
Interest expense – financing fees	(137)	(196)	(192)
Other	(6)	(85)	(119)
Income (loss) from continuing operations before income taxes	930	(2,380)	5,929
Income tax expense	10	—	507
Income (loss) from continuing operations	920	(2,380)	5,422
Loss from discontinued operations, net of taxes	(1,332)	(6,830)	(711)
Gain on disposal of discontinued operations, net of taxes	2,323	—	—
Net income (loss)	<u>\$ 1,911</u>	<u>\$ (9,210)</u>	<u>\$ 4,711</u>
Net income (loss) per common share – basic:			
Continuing operations	\$ .02	\$ (.05)	\$ .11
Discontinued operations	(.02)	(.13)	(.01)
Disposal of discontinued operations	.04	—	—
Net income (loss) per common share	<u>\$ .04</u>	<u>\$ (.18)</u>	<u>\$ .10</u>
Net income (loss) per common share – diluted:			
Continuing operations	\$ .02	\$ (.05)	\$ .11
Discontinued operations	(.02)	(.13)	(.01)
Disposal of discontinued operations	.04	—	—
Net income (loss) per common share	<u>\$ .04</u>	<u>\$ (.18)</u>	<u>\$ .10</u>
Number of common shares used in computing net income (loss) per share:			
Basic	53,803	52,549	48,157
Diluted	54,003	52,549	48,768

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)	2008	2007	2006
<b>Cash flows from operating activities:</b>			
Net income (loss)	\$ 1,911	\$ (9,210)	\$ 4,711
Less: Income (loss) on discontinued operations	991	(6,830)	(711)
Income (loss) from continuing operations	920	(2,380)	5,422
Adjustments to reconcile net income (loss) from continuing operations to cash provided by operations:			
Depreciation and amortization	4,866	4,092	3,629
Asset impairment (recovery) loss	(507)	1,836	—
Provision (benefit) for bad debt and other reserves	187	119	(33)
(Gain) loss on disposal of plant, property and equipment	(295)	172	27
Issuance of common stock for services	257	391	172
Share based compensation	531	457	338
Changes in operating assets and liabilities of continuing operations, net of effect from business acquisitions:			
Accounts receivable	1,358	(614)	748
Unbilled receivables	(3,254)	1,132	(3,593)
Prepaid expenses, inventories and other assets	3,019	2,121	(1,604)
Accounts payable, accrued expenses and unearned revenue	(2,872)	(579)	(2,598)
Cash provided by continuing operations	4,210	6,747	2,508
Cash (used in) provided by discontinued operations	(3,745)	274	(409)
<b>Cash provided by operating activities</b>	<b>465</b>	<b>7,021</b>	<b>2,099</b>
<b>Cash flows from investing activities:</b>			
Purchases of property and equipment	(981)	(2,926)	(5,561)
Proceeds from sale of plant, property and equipment	881	75	73
Change in restricted cash, net	—	—	435
Payments to finite risk sinking fund	(4,943)	(1,516)	(1,179)
Cash used for acquisition consideration, net of cash acquired	(14)	(2,991)	—
Cash used in investing activities of continuing operations	(5,057)	(7,358)	(6,232)
Proceeds from sale of discontinued operations (Note 8)	6,734	—	—
Cash provided by (used in) discontinued operations	75	(219)	(610)
<b>Net cash provided by (used in) investing activities</b>	<b>1,752</b>	<b>(7,577)</b>	<b>(6,842)</b>
<b>Cash flows from financing activities:</b>			
Net (repayments) borrowings of revolving credit	(335)	6,851	(2,447)
Principal repayments of long term debt	(8,842)	(8,593)	(2,386)
Proceeds from issuance of long-term debt	7,000	—	—
Proceeds from issuance of stock	184	418	12,053
Repayment of stock subscription receivable	25	54	26
Cash (used in) provided by financing activities of continuing operations	(1,968)	(1,270)	7,246
Principal repayment of long-term debt for discontinued operations	(238)	(277)	(308)
<b>Cash (used in) provided by financing activities</b>	<b>(2,206)</b>	<b>(1,547)</b>	<b>6,938</b>
Increase (decrease) in cash	11	(2,103)	2,195
Cash at beginning of period	118	2,221	26
<b>Cash at end of period</b>	<b>\$ 129</b>	<b>\$ 118</b>	<b>\$ 2,221</b>
<b>Supplemental disclosure:</b>			
Interest paid, net of amounts capitalized	\$ 1,485	\$ 1,090	\$ 982
Income taxes paid	3	311	276
<b>Non-cash investing and financing activities:</b>			
Long-term debt incurred for purchase of property and equipment	148	614	94
Sinking fund financed	368	—	—

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)*

	Common Stock		Additional	Stock	Accumulated	Common	Total
	Shares	Amount	Paid-In	Subscription	Deficit	Stock Held In Hand Treasury	Stockholders' Equity
<b>Balance at December 31, 2005</b>	<u>45,813,916</u>	<u>\$ 46</u>	<u>\$ 82,180</u>	<u>\$ —</u>	<u>\$ (33,211)</u>	<u>\$ (1,862)</u>	<u>\$ 47,153</u>
Net income	—	—	—	—	4,711	—	4,711
Retirement of Treasury Stock	(988,000)	(1)	(1,861)	—	—	1,862	—
Issuance of Common Stock for cash and services	121,038	—	216	—	—	—	216
Issue Stock Subscription Receivable	60,000	—	—	(105)	—	—	(105)
Repayment of Stock Subscription Receivable	—	—	—	26	—	—	26
Issuance of Common Stock upon exercise of Warrants and Options	7,046,790	7	12,107	—	—	—	12,114
Share Based Compensation	—	—	338	—	—	—	338
<b>Balance at December 31, 2006</b>	<u>52,053,744</u>	<u>\$ 52</u>	<u>\$ 92,980</u>	<u>\$ (79)</u>	<u>\$ (28,500)</u>	<u>\$ —</u>	<u>\$ 64,453</u>
Net Loss	—	—	—	—	(9,210)	—	(9,210)
Issuance of Common Stock for services	143,005	—	391	—	—	—	391
Common Stock issued in conjunction with acquisition	709,207	1	2,164	—	—	—	2,165
Repayment of Stock Subscription Receivable	—	—	—	54	—	—	54
Issuance of Common Stock upon exercise of Options and Warrants	798,560	1	417	—	—	—	418
Share Based Compensation	—	—	457	—	—	—	457
<b>Balance at December 31, 2007</b>	<u>53,704,516</u>	<u>\$ 54</u>	<u>\$ 96,409</u>	<u>\$ (25)</u>	<u>\$ (37,710)</u>	<u>\$ —</u>	<u>\$ 58,728</u>
Net Income	—	—	—	—	1,911	—	1,911
Issuance of Common Stock for services	118,865	—	257	—	—	—	257
Issuance of Common Stock upon exercise of Options	111,179	—	184	—	—	—	184
Repayment of Stock Subscription Receivable	—	—	—	25	—	—	25
Share Based							

Compensation	—	—	531	—	—	—	531
<b>Balance at December 31, 2008</b>	<u>53,934,560</u>	<u>\$ 54</u>	<u>\$ 97,381</u>	<u>\$ —</u>	<u>\$ (35,799)</u>	<u>\$ —</u>	<u>\$ 61,636</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, 2008, 2007, and 2006**

---

**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 and technology know-how company, is a Delaware corporation, engaged through its subsidiaries, in:

- Nuclear Waste Management Services (“Nuclear Segment”), which includes:
  - o Treatment, storage, processing and disposal of mixed waste (which is waste that contains both low-level radioactive and hazardous waste) including on and off-site waste remediation and processing;
  - o Nuclear, low-level radioactive, and mixed waste treatment, processing and disposal; and
  - o Research and development of innovative ways to process low-level radioactive and mixed waste.
- Consulting Engineering Services (“Engineering Segment”), which includes:
  - o Consulting services regarding broad-scope environmental issues, including air, water, and hazardous waste permitting, air, soil, and water sampling, compliance reporting, emission reduction strategies, compliance auditing, and various compliance and training activities to industrial and government customers, as well as engineering and compliance support needed by our other segments.
- Industrial Waste Management Services (“Industrial Segment”), which includes:
  - o Treatment, storage, processing, and disposal of hazardous and non-hazardous waste; and
  - o Wastewater management services, including the collection, treatment, processing and disposal of hazardous and non-hazardous wastewater.

In May 2007, our Board of Directors authorized the divestiture of our Industrial Segment. In May 2007, the Industrial Segment met the held for sale criteria under SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets”, and therefore, certain assets and liabilities of the Industrial Segment were reclassified as discontinued operations in the Consolidated Balance Sheets as of December 31, 2007, and we ceased depreciation of the Industrial Segment’s long-lived assets classified as held for sale. The results of operations and cash flows of the Industrial Segment were reported in the Consolidated Financial Statements as discontinued operations as of December 31, 2007.

In 2008, we completed the sale of substantially all of the assets of three of our Industrial Segment facilities/operations as follows: on January 8, 2008, we completed the sale of substantially all of the assets of Perma-Fix Maryland, Inc. (“PFMD”) for \$3,825,000 in cash and the assumption by the buyer of certain liabilities of PFMD, with a final working capital adjustment of \$170,000 received by us from the buyer in the fourth quarter of 2008; on March 14, 2008, we completed the sale of substantially all of the assets of Perma-Fix of Dayton, Inc. (“PFD”) for approximately \$2,143,000 in cash, plus assumption by the buyer of certain of PFD’s liabilities and obligations. In June 2008, we paid the buyer \$209,000 in final working capital adjustment; and on May 30, 2008, we completed the sale of substantially all of the assets of Perma-Fix Treatment Services, Inc. (“PFTS”) for approximately \$1,503,000, and assumption by the buyer of certain liabilities of PFTS. In July 2008, we paid the buyer \$135,000 in final working capital adjustments.

On September 26, 2008, our Board of Directors approved retaining our Industrial Segment facilities/operations at Perma-Fix of Fort Lauderdale, Inc. (“PFFL”), Perma-Fix of South Georgia, Inc. (“PFSG”), and Perma-Fix of Orlando, Inc. (“PFO”). The subsequent decision to retain these operations within our Industrial Segment is based on our belief that these operations are self-sufficient, which should allow senior management the freedom to focus on growing our Nuclear operations, while benefiting from the cash flow and growth prospects of these three facilities and the fact that we were unable in the current economic climate to obtain the values for these companies that we believe they are worth. As a result of our Board of Directors approving the retention of our PFFL, PFO, and PFSG facilities/operations, we have

restated the consolidated financial statements for all periods presented to reflect the reclassification of these three facilities/operations back into our continuing operations. In the third quarter of 2008, we classified one of the two properties at our PFO facility as “net property and equipment held for sale” within our continued operations in the Consolidated Balance Sheets in accordance to SFAS No. 144. We sold this property on December 23, 2008 for \$900,000 in cash. We do not expect any impact or reduction to PFO’s operating capability from the sale of the property.

We are subject to certain risks as we are involved in the treatment, handling, storage and transportation of hazardous and non-hazardous, mixed and industrial wastes and wastewater. Such activities contain risks against which we believe we are adequately insured.

Our consolidated financial statements include our accounts and the accounts of our wholly-owned subsidiaries as follows:

*Continuing Operations:* Schreiber, Yonley and Associates (“SYA”), Diversified Scientific Services, Inc. (“DSSI”), East Tennessee Materials & Energy Corporation (“M&EC”), Perma-Fix of Florida, Inc. (“PFF”), Perma-Fix of Northwest Richland, Inc. (“PFNWR”), Perma-Fix of Ft. Lauderdale, Inc. (“PFFL”), Perma-Fix of Orlando, Inc. (“PFO”), and Perma-Fix of South Georgia, Inc. (“PFSG”).

*Discontinued Operations (See “Note 8”):* Perma-Fix of Maryland (“PFMD”), Perma-Fix of Dayton, Inc. (“PFD”), and Perma-Fix Treatment Services, Inc. (“PFTS”), which were sold in January 2008, March 2008, and May 2008, respectively, and two non-operational facilities, Perma-Fix of Michigan, Inc. (“PFMI”), and Perma-Fix of Pittsburgh, Inc. (“PFP”).

---

## **NOTE 2**

### **SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

#### **Principles of Consolidation**

Our consolidated financial statements include our accounts and those of 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**

When we prepare financial statements in conformity with generally accepted accounting principles in the United States of America, we make 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. Actual results could differ from those estimates. See Notes 8, 12, 13, and 15 for estimates of discontinued operations, closure costs, environmental liabilities and contingencies for details on significant estimates.

#### **Restricted Cash**

Restricted cash of \$55,000 reflects secured collateral relative to the various bonding requirements required for the PFFL treatment, storage, and disposal facility and escrow for our workers’ compensation policy.

#### **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 advice. 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. We regularly review all accounts receivable balances that exceed 60 days from the invoice date

and based on an assessment of current credit worthiness, estimate the portion, if any, of the balance that will not be collected. This analysis excludes government related receivables due to our past successful experience in their collectability. Specific accounts that are deemed to be uncollectible are reserved at 100% of their outstanding balance. The remaining balances aged over 60 days have a percentage applied by aging category (5% for balances 61-90 days, 20% for balances 91-120 days and 40% for balances over 120 days aged), based on a historical valuation, that allows us to calculate the total reserve required. Once we have exhausted all options in the collection of a delinquent accounts receivable balance, which includes collection letters, demands for payment, collection agencies and attorneys, the account is deemed uncollectible and subsequently written off. The write off process involves approvals, based on dollar amount, from senior management.

### **Unbilled Receivables**

Unbilled receivables are generated by differences between invoicing timing and the percentage of completion methodology used for revenue recognition purposes. As major processing and milestone phases are completed and the costs incurred, we recognize the corresponding percentage of revenue. We experience delays in processing invoices due to the complexity of the documentation that is required for invoicing, as well as, the difference between completion of revenue recognition milestones and agreed upon invoicing terms, which results in unbilled receivables. The timing differences occur for several reasons, partially from delays in the final processing of all wastes associated with certain work orders and partially from delays for analytical testing that is required after we have processed waste but prior to our release of waste for disposal. The difference also occurs due to our end disposal sites requirement of pre-approval prior to our shipping waste for disposal and our contract terms with the customer that we dispose of the waste prior to invoicing. These delays usually take several months to complete but are normally considered collectible within twelve months. As we now have historical data to review the timing of these delays, we realize that certain issues, including but not limited to delays at our third party disposal site, can postpone and delay the collection of some of these receivables greater than twelve months. However, our historical experience suggests that a significant part of unbilled receivables are ultimately collectible with minimal concession on our part. We therefore, segregate the unbilled receivables between current and long term.

### **Inventories**

Inventories consist of treatment chemicals, salable used oils, and certain supplies. Additionally, we have replacement parts in inventory, which are deemed critical to the operating equipment and may also have extended lead times should the part fail and need to be replaced. 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 income tax purposes. Generally, annual depreciation rates range from ten to forty years for buildings (including improvements and asset retirement costs) and three to seven years for office furniture and equipment, vehicles, and decontamination and processing equipment. Leasehold improvements are capitalized and amortized over the lesser of the term 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. Included within buildings is an asset retirement obligation, which represents our best estimate of the cost to close, at some undetermined future date, our permitted and/or licensed facilities. The asset retirement cost was originally recorded at \$4,559,000 and depreciates over the estimated useful life of the property. In 2007, as result of the acquisition of PNFWR, we recorded an additional asset retirement obligation cost of \$3,768,000, which has been depreciated over the estimated useful life of the property. In 2008, due to change in estimate of the costs to close our DSSI and PNFWR facility based on federal/state regulatory guidelines, we increased our asset retirement obligation by \$726,000 and \$373,000 for our DSSI and PNFWR facility, respectively,

which will be depreciated prospectively over the remaining life of the asset, in accordance with SFAS No. 143 “Accounting for Asset Retirement Obligations”.

In accordance with Statement 144, long-lived assets, such as property, plant and equipment, and purchased intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and are no longer depreciated. The assets and liabilities of a disposal group classified as held for sale would be presented separately in the appropriate asset and liability sections of the balance sheet.

In 2007, as result of the approved divestiture of our Industrial Segment by our Board of Directors and in accordance with SFAS No. 144, we recorded \$2,727,000 and \$1,804,000 in tangible asset impairment loss for PFD and PFTS, respectively, which were included in “loss from discontinued operations, net of taxes” on our Consolidated Statements of Operations for the year ended December 31, 2007.

In September 2008, our Board of Directors approved retaining our Industrial Segment facilities/operations at PFFL, PFSG, and PFO. As a result of this decision, we restated the condensed consolidated financial statements for all periods presented to reflect the reclassification of these three facilities/operations back into our continuing operations. During the third quarter of 2008, we classified one of the two properties at PFO as “net property and equipment held for sale” within our continued operations in the Consolidated Balance Sheets in accordance to SFAS No. 144. We evaluated the fair value of PFO’s assets and as a result, recorded a credit of \$507,000 related to the recovery of previous impairment charges for PFO, which is included in “Asset Impairment Recovery” on the Consolidated Statements of Operations for the year ended December 31, 2008. On December 23, 2008, we sold the property at PFO for \$900,000 in cash resulting in a gain of \$483,000.

### Capitalized Interest

The Company’s policy is to capitalize interest cost incurred on debt during the construction of major projects exceeding one year. A reconciliation of our total interest cost to “Interest Expense” as reported on our consolidated statements of operations for 2008, 2007 and 2006 is as follows:

(Amounts in Thousands)	2008	2007	2006
Interest cost capitalized	\$ —	\$ 144	\$ —
Interest cost charged to income	1,317	1,321	1,255
Total Interest	<u>\$ 1,317</u>	<u>\$ 1,465</u>	<u>\$ 1,255</u>

### Goodwill and Other 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 identifiable assets acquired (“goodwill”) and the recognized permit value of the business. Goodwill and intangible assets that have indefinite useful lives are tested annually for impairment, or more frequently if triggering events occur or other impairment indicators arise which might impair recoverability. An impairment loss is recognized to the extent that the carrying amount exceeds the asset’s fair value. For goodwill, the impairment determination is made at the Reporting unit and consists of two steps. First, the Company determines the fair value of a reporting unit and compares it to its carrying amount. Second, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized for any excess of the carrying amount of the reporting unit’s goodwill over the implied fair value of the goodwill. The implied value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation, in accordance with SFAS Statement No. 141, *Business Combinations*. Our annual financial valuations performed as of October 1, 2008, 2007, and 2006,

indicated no impairments. The Company estimates the fair value of our reporting units using a discounted cash flow valuation approach. This approach is dependent on estimates for future sales, operating income, working capital changes, and capital expenditures, as well as, expected growth rates for cash flows and long-term interest rates, all of which are impacted by economic conditions related to our industry as well as conditions in the U.S. capital (see “Note 5 – Goodwill and Other Intangible Assets” for further discussion on goodwill and other intangible assets).

#### **Accrued Closure Costs**

Accrued closure costs represent our estimated environmental liability to clean up our facilities as required by our permits, in the event of closure.

SFAS No. 143, *Accounting for Asset Retirement Obligations*, requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made, and that the associated asset retirement costs be capitalized as part of the carrying amount of the long-lived asset. In conjunction with the state mandated permit and licensing requirements, we are obligated to determine our best estimate of the cost to close, at some undetermined future date, our permitted and/or licensed facilities. We subsequently increase this liability as a result of changes to the facility, changes in estimated cost for closure, and/or for inflation. The associated asset retirement cost is recorded as property and equipment (buildings). We depreciate the asset retirement cost on a straight-line basis over its estimated useful life in accordance with our depreciation policy.

#### **Income Taxes**

The provision for income taxes is determined in accordance with SFAS No. 109, *Accounting for Income Taxes*. Under this method, deferred tax assets and liabilities are recognized for future tax consequences attributed to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using enacted income tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Any effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

In July 2006, the FASB issued FIN 48, *Accounting for Uncertainty in Income Taxes*, which attempts to set out a consistent framework for the recognition and measurement of uncertain tax positions. This interpretation of FASB Statement No. 109 uses a two-step approach wherein a tax benefit is recognized if a position is more-likely-than-not to be sustained. The amount of the benefit is then measured to be the highest tax benefit which is greater than 50% likely to be realized. FIN 48 also sets out disclosure requirements to enhance transparency of an entity’s tax reserves. The Company adopted this Interpretation as of January 1, 2007. The adoption of FIN 48 did not have a material impact on our financial statements.

#### **Concentration Risk**

Approximately 84 or 15.2% of the Company's employees are unionized and are covered by a collective bargaining agreement. All of these employees were hired as result of the subcontract awarded to us by CHPRC in the second quarter of 2008. The agreement has a term of three years effective April 1, 2007 and expires on March 31, 2010 and is subject to a two year extension pending wage and benefit renegotiation

#### **Gross Receipts Taxes and Other Charges**

We adopted EITF Issue No. 06-03, *How Taxes Collected from Customers and Remitted to Governmental Authorities Should be Presented in the Income Statement*, (EITF 06-03), for the year ended December 31, 2006. EITF 06-03 provides guidance regarding the accounting and financial statement presentation for certain taxes assessed by a governmental authority. These taxes and surcharges include, among others, universal service fund charges, sales, use, waste, and some excise taxes. In determining whether to include such taxes in our revenue and expenses, we assess, among other things, whether we are the primary obligor or principal taxpayer for the taxes assessed in each jurisdiction where we do business. As we are merely a collection agent for the government authority in certain of our facilities, we record the taxes on a net method and do not include them in our revenue and cost of services. The adoption of EITF 06-03 did not change our accounting for these taxes.

#### **Revenue Recognition**

*Nuclear revenues.* The processing of mixed waste is complex and may take several months or more to complete, as such we recognize revenues on a percentage of completion basis with our measure of progress towards completion determined based on output measures consisting of milestones achieved and completed. We have waste tracking capabilities, which we continue to enhance, to allow us to better match the revenues

earned to the processing phases achieved. The revenues are recognized as each of the following three processing phases are completed: receipt, treatment/processing and shipment/final disposal. However, based on the processing of certain waste streams, the treatment/processing and shipment/final disposal phases may be combined as they are completed concurrently. As major processing phases are completed and the costs incurred, we recognize the corresponding percentage of revenue. We experience delays in processing invoices due to the complexity of the documentation that is required for invoicing, as well as the difference between completion of revenue recognition milestones and agreed upon invoicing terms, which results in unbilled receivables. The timing differences occur for several reasons, partially from delays in the final processing of all wastes associated with certain work orders and partially from delays for analytical testing that is required after we have processed waste but prior to our release of waste for disposal. The difference also occurs due to our end disposal sites requirement of preapproval prior to our shipping waste for disposal and our contract terms with the customer that we dispose of the waste prior to invoicing. As the waste moves through these processing phases and revenues are recognized, the correlating costs are expensed as incurred. Although we use our best estimates and all available information to accurately determine these disposal expenses, the risk does exist that these estimates could prove to be inadequate in the event the waste requires retreatment. Furthermore, should the waste be returned to the generator, the related receivables could be uncollectible; however, historical experience has not indicated this to be a material uncertainty. Under our subcontract awarded by CH Plateau Remediation Company (“CHPRC”) in 2008, we are reimbursed for costs incurred plus a certain percentage markup for indirect costs, in accordance with contract provision. Costs incurred in excess of contract funding may be renegotiated for reimbursement. We also earn a fee based on the approved costs to complete the contract. We recognize this fee using the proportion of costs incurred to total estimated contract costs. We include in revenues the amount of the reimbursement for costs incurred plus the markup for indirect costs as well as the fee that we have earned. Cost of revenue under this subcontract consists of direct and indirect costs. Our revenue under this subcontract is recorded gross versus net in accordance with the criteria under EITF Issue No. 99-19, “Reporting Revenue Gross as a Principal versus Net as an Agent”.

*Consulting revenues.* Consulting revenues are recognized as services are rendered. The services provided are based on billable hours and revenues are recognized in relation to incurred labor and consulting costs. Out of pocket costs reimbursed by customers are also included in revenues.

*Industrial waste revenues.* Since industrial waste streams are much less complicated than mixed waste streams and they require a short processing period, we recognize revenues for industrial services at the time the services are substantially rendered, which generally happens upon receipt of the waste, or shortly thereafter. These large volumes of bulk waste are received and immediately commingled with various customers' wastes, which transfers the legal and regulatory responsibility and liability to us upon receipt.

#### **Self-Insurance**

We are self-insured for a significant portion of our group health. The Company estimates expected losses based on statistical analyses of historical industry data, as well as our own estimates based on the Company’s actual historical data to determine required self-insurance reserves. The assumptions are closely reviewed, monitored, and adjusted when warranted by changing circumstances. The estimated accruals for these liabilities could be affected if actual experience related to the number of claims and cost per claim differs from these assumptions and historical trends. Based on the information known on December 31, 2008, we believe we have provided adequate reserves for our self-insurance exposure. As of December 31, 2008 and 2007, self-insurance reserves were \$535,000 and \$736,000, respectively, and were included in accrued expenses in the accompanying consolidated balance sheets. The total amounts expensed for self-insurance during 2008, 2007, and 2006 were \$2,794,000, \$3,100,000 and \$2,118,000, respectively, for our continuing operations, and \$144,000, \$1,050,000, and \$750,000 for our discontinued operations, respectively.

## **Share-Based Compensation**

On January 1, 2006, we adopted Financial Accounting Standards Board (“FASB”) Statement No. 123 (revised) (“SFAS 123R”), *Share-Based Payment*, a revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation*, superseding APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and its related implementation guidance. This Statement establishes accounting standards for entity exchanges of equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity's equity instruments or that may be settled by the issuance of those equity instruments. SFAS 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values. Pro forma disclosure is no longer an alternative upon adopting SFAS 123R.

We adopted SFAS 123R utilizing the modified prospective method in which compensation cost is recognized beginning with the effective date based on SFAS 123R requirements for all (a) share-based payments granted after the effective date and (b) awards granted to employees prior to the effective date of SFAS 123R that remain unvested on the effective date. In accordance with the modified prospective method, the consolidated financial statements for prior periods have not been restated to reflect, and do not include, the impact of SFAS 123R.

Before our adoption of SFAS 123R in January 1, 2006, the Company previously accounted for stock option grants under the recognition and measurement principles of APB Opinion No. 25, “Accounting for Stock Issued to Employees (“APB 25”)” and related interpretations and disclosure requirements established by SFAS 123.

Prior to our adoption of SFAS 123R, on July 28, 2005, the Compensation and Stock Option Committee of the Board of Directors approved the acceleration of vesting for all the outstanding and unvested options to purchase Common Stock awarded to employees as of the approval date. The Board of Directors approved the accelerated vesting of these options based on the belief that it was in the best interest of our stockholders to reduce future compensation expense that would otherwise be required in the statement of operations upon adoption of SFAS 123R, effective beginning January 1, 2006. The accelerated vesting triggered the re-measurement of compensation cost under current accounting standards. See “Note 3 – Share Based Compensation” for further detail of SFAS 123R and the impact on our financial statement.

The Company estimates fair value of stock options using the Black-Scholes valuation model. Assumptions used to estimate the fair value of stock options granted include the exercise price of the award, the expected term, the expected volatility of the Company's stock over the option's expected term, the risk-free interest rate over the option's expected term, and the expected annual dividend yield.

Our computation of expected volatility used to calculate the fair value of options granted using the Black-Scholes valuation model is based on historical volatility from our traded common stock over the expected term of the option grants. For our employee option grants made prior to 2008, we used the simplified method, defined in the SEC's Staff Accounting Bulletin No. 107, to calculate the expected term. For our employee and director option grants made in 2008, we computed the expected term based on the historical exercise and post-vesting data. The interest rate for periods within the contractual life of the award is based on the U.S. Treasury yield curve in effect at the time of grant.

We recognized share based compensation expense using a straight-line amortization method over the requisite period, which is the vesting period of the stock option grant. As SFAS 123R requires that stock based compensation expense be based on options that are ultimately expected to vest, our stock based compensation expense is reduced at an estimated forfeiture rate. Our estimated forfeiture rate is generally based on historical trends of actual forfeitures. Forfeiture rates are evaluated, and revised as necessary.

**Net Income (Loss) Per Share**

Basic earnings per share excludes any dilutive effects of stock options, warrants, and convertible preferred stock. In periods where they are anti-dilutive, such amounts are excluded from the calculations of dilutive earnings per share.

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, 2008, 2007, and 2006:

(Amounts in Thousands, Except for Per Share Amounts)	2008	2007	2006
<b>Income (loss) per share from continuing operations</b>			
Income (loss) from continuing operations	\$ 920	\$ (2,380)	\$ 5,422
Basic income (loss) per share	\$ .02	\$ (.05)	\$ .11
Diluted income (loss) per share	\$ .02	\$ (.05)	\$ .11
<b>Loss per share from discontinued operations</b>			
Loss – basic and diluted	\$ (1,332)	\$ (6,830)	\$ (711)
Basic loss per share	\$ (.02)	\$ (.13)	\$ (.01)
Diluted loss per share	\$ (.02)	\$ (.13)	\$ (.01)
<b>Income per share from disposal of discontinued operations</b>			
Gain on disposal of discontinued operations	\$ 2,323	\$ —	\$ —
Basic income per share	\$ .04	\$ —	\$ —
Diluted income per share	\$ .04	\$ —	\$ —
Weighted average common shares outstanding – basic	53,803	52,549	48,157
Potential shares exercisable under stock option plans	200	—	286
Potential shares upon exercise of Warrants	—	—	325
Weighted average shares outstanding – diluted	54,003	52,549	48,768
<b>Potential shares excluded from above weighted average share calculations due to their anti-dilutive effect include:</b>			
Upon exercise of options	1,908	132	1,030
Upon exercise of Warrants	—	—	1,776

**Fair Value of Financial Instruments**

The carrying values of cash, trade accounts receivable, trade accounts payable, accrued expenses and unearned revenues approximate their fair values principally because of the short-term maturities of these financial 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 carrying value at December 31, 2008 and 2007. The carrying value of our subsidiary's preferred stock is not significantly different than its fair value.

**Recent Accounting Pronouncements**

In September 2006, the Financial Accounting Standards Board (“FASB”) issued SFAS 157, “Fair Value Measurements”, which codifies guidance on fair value measurements under generally accepted accounting principles. This standard defines fair value, establishes a framework for measuring fair value, and prescribes expanded disclosures about fair value measurements. In February 2008, the FASB issued FASB Staff Position No. 157-2, “Effective Date of FASB Statement No. 157” (“FSP FAS 157-2”), which delays the effective date of SFAS 157 for certain non-financial assets and non-financial liabilities. SFAS 157 is effective for financial assets and liabilities in fiscal years beginning after November 15, 2007 and for non

financial assets and liabilities in fiscal years beginning after March 15, 2008. We have evaluated the impact of the provisions applicable to our financial assets and liabilities and have determined that there is no current impact on our financial condition, results of operations, and cash flow. The aspects that have been deferred by FSP FAS 157-2 pertaining to non-financial assets and non-financial liabilities will be effective for us beginning January 1, 2009. The Company does not expect SFAS 157 for non-financial assets and liabilities to materially impact the Company's financial position and results of operations.

On October 10, 2008, the FASB issued FSP FAS No. 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset is Not Active", which clarifies the application of SFAS No. 157 in an inactive market and provides an example to demonstrate how the fair value of a financial asset is determined when the market for that financial asset is inactive. FSP FAS 157-3 was effective upon issuance, including prior periods for which financial statements have not been issued. The adoption of this FSP had no impact on our financial statements.

In February 2007, the FASB issued SFAS 159, "The Fair Value Option for Financial Assets and Financial Liabilities", permitting entities to measure many financial instruments and certain other items at fair value. The objective is to improve financial reporting by providing entities with the opportunities to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions. SFAS 159 is expected to expand use of fair value measurement, consistent with the Board's long-term measurement objectives for accounting for financial instruments. SFAS 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. If the fair value option is elected, the effect of the first re-measurement to fair value is reported as a cumulative effect adjustment to the opening balance of retained earnings. We have not elected the fair value option for any of our assets or liabilities.

In December 2007, the FASB issued SFAS No. 141R, *Business Combinations*. SFAS No. 141R establishes principles and requirements for how the acquirer of a business recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree. The statement also provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. SFAS No. 141R is effective for financial statements issued for fiscal years beginning after December 15, 2008. Accordingly, any business combinations the Company engages in will be recorded and disclosed following existing GAAP until December 31, 2008. The Company expects SFAS No. 141R will have an impact on its consolidated financial statements when effective, but the nature and magnitude of the specific effects will depend upon the nature, terms, and size of acquisitions it consummates after the effective date.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB 51*. SFAS No. 160 changes the accounting and reporting for minority interest. Minority interest will be recharacterized as noncontrolling interest and will be reported as a component of equity separate from the parent's equity, and purchases or sales of equity interest that do not result in a change in control will be accounted for as equity transactions. In addition, net income attributable to the noncontrolling interest will be included in consolidated net income on the face of the income statement and upon a loss of control, the interest sold, as well as any interest retained, will be recorded at fair value with any gain or loss recognized in earnings. SFAS No. 160 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim period within those fiscal years, except for the presentation and disclosure requirements, which will apply retrospectively. We do not expect this standard will materially impact the Company's financial position and results of operations.

In December 2007, the SEC issued SAB No. 110, which expressed the views of the staff regarding the use of a "simplified" method, as discussed in SAB No. 107, in developing an estimate of expected term of "plain vanilla" share options in accordance with SFAS No. 123R, *Share-Based Payment*. In particular, the staff indicated in SAB No. 107 that it will accept a company's election to use the simplified method, regardless of whether the Company has sufficient information to make more refined estimates of expected

term. At the time SAB No. 107 was issued, the staff believed that more detailed external information about employee exercise behavior would, over time, become readily available to companies. Therefore, the SEC staff stated in SAB No. 107 that it would not expect a company to use the simplified method for share option grants after December 31, 2007. The staff understands that such detailed information about employee exercise behavior may not be widely available by December 31, 2007. Accordingly, SAB No. 110 states that the staff will continue to accept, under certain circumstances, the use of the simplified method beyond December 31, 2007. The Company does not expect SAB No. 110 to materially impact its operations or financial position.

In March 2008, the FASB issued SFAS 161, “Disclosures about Derivative Instruments and Hedging Activities”. SFAS 161 amends and expands the disclosure requirements of SFAS 133, “Accounting for Derivative Instruments and Hedging Activities”, and requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of and gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. SFAS 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. This standard will not materially impact the Company’s current disclosure process.

In April 2008, the FASB issued FSP No. 142-3, *Determination of the Useful Life of Intangible Assets* (“FSP FAS 142-3”), which amends the factors to be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under FASB Statement No. 142, *Goodwill and Other Intangible Assets* (“SFAS 142”). The intent of FSP FAS 142-3 is to improve the consistency between the useful life of a recognized intangible asset under SFAS 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS 141(R) and other U.S. generally accepted accounting principles. FSP FAS 142-3 requires an entity to disclose information for a recognized intangible asset that enables users of the financial statements to assess the extent to which the expected future cash flows associated with the asset are affected by the entity’s intent and/or ability to renew or extend the arrangement. FSP FAS 142-3 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. We do not expect FSP No. 142-3 to materially impact the Company’s financial position or results of operations.

In May 2008, the FASB issued SFAS No. 162, “The Hierarchy of Generally Accepted Accounting Principles”. SFAS No. 162 identifies the sources of accounting principles and the framework for selecting the principles used in the preparation of financial statements. SFAS No. 162 is effective 60 days following the SEC’s approval of the Public Company Accounting Oversight Board amendments to AU Section 411, “The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles”. The implementation of this standard will not have a material impact on our consolidated financial position and results of operations.

In June 2008, the FASB ratified EITF (Emerging Issues Task Force) Issue No. 08-3, “Accounting for Lessees for Maintenance Deposits Under Lease Arrangement” (EITF 08-3), to provide guidance on the accounting of nonrefundable maintenance deposits. It also provides revenue recognition accounting guidance for the lessor. EITF 08-3 is effective for fiscal years beginning after December 15, 2008. We do not expect EITF 08-3 to materially impact our financial condition, result of operations, and cash flows.

In June 2008, the FASB ratified EITF Issue No. 07-5, “Determining Whether an Instrument (or an Embedded Feature) Is Indexed to an Entity’s Own Stock” (EITF 07-5). EITF 07-5 provides that an entity should use a two step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including the instrument’s contingent exercise and settlement provisions. It also clarifies on the impact of foreign currency denominated strike prices and market-based employee stock option valuation instruments on the evaluation. EITF 07-5 is effective for fiscal year beginning and after December 15, 2008. EITF 07-5 will not materially impact our financial condition, result of operations, and cash flows.

In September 2008, the FASB issued FSP FAS 133-1 and FIN 45-4, "Disclosures about Credit Derivatives and Certain Guarantees: An Amendment of FASB Statements No. 133 and FASB Interpretation No. 45; and Clarification of the Effective Date of FASB Statement No. 161" ("FSP FAS 133-1 and FIN 45-4"). The FSP amends the disclosure requirements of FAS 133, "Accounting for Derivative Instruments and Hedging Activities", requiring that the seller of a credit derivative, or writer of the contract, to disclose various items for each balance sheet presented including the nature of the credit derivative, the maximum amount of potential future payments the seller could be required to make, the fair value of the derivative at the balance sheet date, and the nature of any recorded provisions available to the seller to recover from third parties any of the amounts paid under the credit derivative. The FSP also amends FASB Interpretation No. 45 ("FIN 45") "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" to require disclosure of the current status of the payment performance risk of the guarantee. The additional disclosure requirements above will be effective for reporting periods ending after November 15, 2008. The FSP also clarifies that the effective date of FAS 161 will be for any period, annual or interim, beginning after November 15, 2008. This standard will not materially impact the Company's current disclosure process.

In November 2008, the Emerging Issues Task Force issued EITF Issue No. 08-06, "Equity Method Investment Considerations", which clarifies the accounting for certain transactions involving equity method investments. This interpretation is effective for financial statements issued for fiscal years beginning on or after December 15, 2008 and interim periods within those years. The Company does not expect EITF Issue No. 08-06 to materially impact the Company's financial position or results of operations.

In December 2008, the FASB issued FASB Staff Position FSP 132(R)-1, "Employers Disclosures about Postretirement Benefit Plan Assets", which provides additional guidance on employers' disclosures about plan assets of a defined benefit pension or other postretirement plan. This interpretation is effective for financial statements issued for fiscal years ending after December 15, 2009. We are currently evaluating the impact of this standard on our consolidated financial position and results of operations.

---

### **NOTE 3**

#### **SHARE BASED COMPENSATION**

We follow the provisions of Financial Accounting Standards Board ("FASB") Statement No. 123 (revised) ("SFAS 123R"), *Share-Based Payment*, a revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation*, superseding APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and its related implementation guidance. This Statement establishes accounting standards for entity exchanges of equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity's equity instruments or that may be settled by the issuance of those equity instruments. SFAS 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values.

The Company has certain stock option plans under which it awards incentive and non-qualified stock options to employees, officers, and outside directors. Stock options granted to employees have either a ten year contractual term with one fifth yearly vesting over a five year period or a six year contractual term with one third yearly vesting over a three year period. Stock options granted to outside directors have a ten year contractual term with vesting period of six months. On August 5, 2008, our Board of Directors authorized the grant of 918,000 Incentive Stock Options ("ISO") to certain officers and employees of the Company which allows for the purchase of Common Stock from the Company's 2004 Stock Option Plan. The options granted were for a contractual term of six years with vesting over a three year period at one third increments per year. The exercise price of the options granted was \$2.28 per share which was based on our closing stock price on the date of grant. We also granted 84,000 options from the Company's 2003 Outside Directors Stock Plan to our seven outside directors as a result of the reelection our Board of Directors at our Annual Meeting of Stockholders on August 5, 2008. The options granted were for a contractual term of ten years with vesting period of six months. The exercise price of the options was \$2.34

[Table of Contents](#)

per share which was equal to our closing stock price the day preceding the grant date, pursuant to the 2003 Outside Directors Stock Plan. On December 19, 2008, our Board of Directors authorized the grant of 165,000 Incentive Stock Options (“ISO”) to certain employees of the Company which allows for the purchase of Common Stock from the Company’s 2004 Stock Option Plan. The options granted were for a contractual term of six years with vesting over a three year period at one third increments per year. The exercise price of the options granted was \$2.09 per share which was not less than the fair market value of the shares of Common Stock subject to the Stock Option at the time the ISO is granted pursuant to the 2004 Stock Option Plan.

As of December 31, 2008, we had 2,772,347 employee stock options outstanding, of which 1,552,847 are vested. The weighted average exercise price of the 1,552,847 outstanding and fully vested employee stock option is \$1.85 with a remaining weighted contractual life of 3.04 years. The fair value of the employee options which vested in 2008, 2007, and 2006 totaled \$219,000, \$240,000, and \$0, respectively. Additionally, we had 645,000 director stock options outstanding, of which 561,000 are vested. The weighted average exercise price of the 561,000 outstanding and fully vested director stock option is \$2.16 with a weighted remaining contractual life of 5.67 years. The fair value of the director options which vested in 2008, 2007, and 2006 totaled \$234,000, \$157,000, and \$11,425, respectively.

The Company estimates fair value of stock options using the Black-Scholes valuation model. Assumptions used to estimate the fair value of stock options granted include the exercise price of the award, the expected term, the expected volatility of the Company’s stock over the option’s expected term, the risk-free interest rate over the option’s expected term, and the expected annual dividend yield. The fair value of the employee and director stock options granted and the related assumptions used in the Black-Scholes option pricing model used to value the options granted for fiscal year 2008, 2007, and 2006 were as follows:

	Employee Stock Option Granted		
	For Year Ended		
	2008	2007 <sup>(4)</sup>	2006
Weighted-average fair value per share	\$ 1.03	\$ —	\$ .87
Risk -free interest rate <sup>(1)</sup>	1.35%-3.28	—	4.70%-5.03%
Expected volatility of stock <sup>(2)</sup>	55.54%-58.85%	—	54.0%-54.61%
Dividend yield	None	—	None
Expected option life (in years) <sup>(3)</sup>	5.0-5.1	—	4.0

	Outside Director Stock Option Granted		
	For Year Ended		
	2008	2007	2006
Weighted-average fair value per share	\$ 1.79	\$ 2.30	\$ 1.74
Risk -free interest rate <sup>(1)</sup>	4.04%	4.77%	4.98%
Expected volatility of stock <sup>(2)</sup>	66.53%	67.60%	73.31%
Dividend yield	None	None	None
Expected option life (in years) <sup>(3)</sup>	10.0	10.0	10.0

<sup>(1)</sup> The risk-free interest rate is based on the U.S. Treasury yield in effect at the grant date over the expected term of the option.

<sup>(2)</sup> The expected volatility is based on historical volatility from our traded Common Stock over the expected term of the option.

<sup>(3)</sup> The expected option life is based on historical exercises and post-vesting data for employee grants made in 2008 and director option grants made in 2008, 2007, and 2006. The expected option life is calculated using the simplified method as defined in SEC’s Staff Accounting Bulletin No. 107 for employee option grants made prior to 2008.

<sup>(4)</sup> No employee option grants were made in 2007.

The following table summarizes stock-based compensation recognized for the fiscal year 2008, 2007, and 2006.

	Year Ended		
	2008	2007	2006
Employee Stock Options	\$ 368,000	\$ 242,000	\$ 194,000
Director Stock Options	163,000	215,000	144,000
<b>Total</b>	<b>\$ 531,000</b>	<b>\$ 457,000</b>	<b>\$ 338,000</b>

We recognized share based compensation expense using a straight-line amortization method over the requisite period, which is the vesting period of the stock option grant. As SFAS 123R requires that stock based compensation expense be based on options that are ultimately expected to vest, we have reduced our stock based compensation for the August 5, 2008 employee, December 19, 2008 employee, and August 5, 2008 director stock option grants at an estimated forfeiture rate of 5.0%, 0.0%, and 0.0%, respectively, for the first year of vesting. Our estimated forfeiture rate is based on historical trends of actual forfeitures. Forfeiture rates are evaluated, and revised as necessary. In 2008, we reevaluated our forfeiture rate for our May 15, 2006 option grant due to the resignation of our Chief Financial Officer in October 2008 and as a result, our compensation expense for our employee stock option was reduced by approximately \$18,000. As of December 31, 2008, we have approximately \$935,000 of total unrecognized compensation cost related to unvested options, of which \$382,000 is expected to be recognized in 2009, \$319,000 in 2010, and \$234,000 in 2011.

---

#### **NOTE 4**

#### **CAPITAL STOCK, EMPLOYEE STOCK PLAN AND INCENTIVE COMPENSATION**

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

At our Annual Meeting of Stockholders held on July 29, 2003, our stockholders approved the adoption of the Perma-Fix Environmental Services, Inc. 2003 Employee Stock Purchase Plan. The plan provides our eligible employees an opportunity to become stockholders and purchase our Common Stock through payroll deductions. The maximum number of shares issuable under this plan is 1,500,000. The Plan authorized the purchase of shares two times per year, at an exercise price per share of 85% of the market price of our Common Stock on the offering date of the period or on the exercise date of the period, whichever is lower. The first purchase period commenced July 1, 2004.

On May 15, 2006, the Board of Directors of the Company terminated the 2003 Employee Stock Purchase Plan due to lack of employee participation and the cost of managing the plan. The Plan allows the Board of Directors to terminate the Plan at anytime without prior notice to the participants and without liability to the participants. A total of 96,380 shares had been purchased under the Plan prior to the Plan's termination, of which 65,257 shares of our Common Stock were issued in 2005 and 31,123 shares of Common Stock were issued in 2006. Upon termination of the Plan, the balance, if any, then standing to the credit of each participant in the participant stock purchase stock purchase account was refunded to the participant.

##### **Employment Options**

During October 1997, Dr. Centofanti, our current Chairman of the Board, President and Chief Executive Officer, entered into an Employment Agreement, which expired in October 2000 and provided for, 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 300,000 Non-qualified Stock Options expired and were forfeited in October 2007.

## **Stock Option Plans**

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 our 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. On September 13, 2003, the plan expired. No new options will be issued under this plan, but the options issued under the Plan prior to the expiration date will remain in effect until their respective maturity dates.

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 of our outside directors 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. As amended and approved at the December 1996 Annual Meeting, the plan 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 us as a member of the Board in Common Stock. The number of shares of our Common Stock issuable to the eligible director shall be determined by valuing our Common Stock at 75% of its fair market value as defined by the Outside Directors Plan. As amended and approved at the May 1998 Annual Meeting, the Plan authorized 500,000 shares to be issued under the Plan. On December 12, 2003, the plan expired. No new options will be issued under this plan, but the options issued under the Plan prior to the expiration date will remain in effect until their respective maturity dates.

Effective July 29, 2003, we adopted the 2003 Outside Directors Stock Plan, which was approved by our stockholders at the Annual Meeting of Stockholders on such date. A maximum of 1,000,000 shares of our Common Stock are authorized for issuance under this plan. The plan provides for the grant of an option to purchase up to 30,000 shares of Common Stock for each outside director upon initial election to the Board of Directors, and the grant of an option to purchase up to 12,000 shares of Common Stock upon each reelection. The options granted generally have vesting period of six months from the date of grant, with exercise price equal to the closing trade price on the date prior to grant date. The plan also provides for the issuance to each outside director a number of shares of Common Stock in lieu of 65% or 100% of the fee payable to the eligible director for services rendered as a member of the Board of Directors. The number of shares issued is determined at 75% of the market value as defined in the plan. During the annual meeting held on August 5, 2008, the stockholders approved the First Amendment to our 2003 Outside Director Stock Plan which increased from 1,000,000 to 2,000,000 the number of shares reserved for issuance under the plan.

Effective July 28, 2004, we adopted the 2004 Stock Option Plan, which was approved by our stockholders at the Annual Meeting of Stockholders on such date. The plan provides for the grants of options to selected officers and employees, including any employee who is also a member of the Board of Directors of the Company. A maximum of 2,000,000 shares of our Common Stock are authorized for issuance under this plan in the form of either incentive or non-qualified stock options. The option grants under the plan are exercisable for a period of up to 10 years from the date of grant at an exercise price of not less than market price of the Common Stock at grant date.

Effective on January 1, 2006, we began accounting for employee and director stock options pursuant to SFAS 123R, which requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pursuant to our adoption of SFAS 123R we began recognizing compensation expense for all unvested stock options. Prior to adopting

[Table of Contents](#)

SFAS 123R we applied APB Opinion 25, “Accounting for Stock Issued to Employees,” and related interpretations in accounting for options issued to employees and directors. Accordingly, prior to 2006, no compensation cost was recognized for options granted to employees and directors at exercise prices, which equaled or exceeded the market price of our Common Stock at the date of grant. Pursuant to the standards in SFAS 123R and our belief that it is in the best interest of our stockholders to reduce future compensation expense, in July 2005 we accelerated the vesting of all unvested employee stock options outstanding at that date. As of December 31, 2008, we have 1,303,500 unvested options outstanding. See “Note 3 – Shared Based Compensation” for further discussion on SFAS 123R.

During 2008, we issued 111,179 shares of our Common Stock upon exercise of 106,179 employee stock options, at exercise prices ranging from \$1.25 to \$1.86 and 5,000 director stock options, at an exercise price of \$1.75. Total proceeds received during 2008 related to option exercises totaled approximately \$184,000. During 2007, we issued 234,927 shares of our Common Stock upon exercise of 237,225 employee stock options, at exercise prices from \$1.25 to \$2.19 per share. An optionee surrendered 2,298 shares of personally held Common Stock of the Company as payment for the exercise of the 4,000 options. Total proceeds received during 2007 for option exercises totaled approximately \$418,000. We issued 433,500 shares of our Common Stock upon exercise of 433,500 employee options in 2006, resulting in total proceeds of approximately \$575,000.

[Table of Contents](#)

Summary of the status of options under the plans as of December 31, 2008, 2007, and 2006 and changes during the years ending on those dates is presented below:

	2008			2007			2006		
	Shares	Weighted Average Exercise Price	Intrinsic Value <sup>(a)</sup>	Shares	Weighted Average Exercise Price	Intrinsic Value <sup>(a)</sup>	Shares	Weighted Average Exercise Price	Intrinsic Value <sup>(a)</sup>
<b>Performance Equity Plan:</b>									
Balance at beginning of year	9,000	\$ 1.25		12,000	\$ 1.25		27,000	\$ 1.16	
Exercised	(4,000)	1.25	\$ 5,300	(3,000)	1.25	\$ 5,470	(14,000)	1.07	\$ 12,940
Forfeited	(5,000)	1.25		—	—		(1,000)	1.25	
Balance at end of year	<u>—</u>	—	<u>\$ —</u>	<u>9,000</u>	1.25	<u>\$ 10,980</u>	<u>12,000</u>	1.25	<u>\$ 12,840</u>
Options exercisable at year end	—	—		9,000	1.25		12,000	1.25	
<b>Non-qualified Stock Option Plan:</b>									
Balance at beginning of year	1,174,859	\$ 1.85		1,297,750	\$ 1.85		1,989,250	\$ 1.78	
Granted	—	—		—	—		—	—	
Exercised	(60,511)	1.54	\$ 60,352	(119,391)	1.91	\$ 112,546	(419,500)	1.34	\$ 287,328
Forfeited	(29,500)	1.91		(3,500)	1.72		(272,000)	2.13	
Balance at end of year	<u>1,084,848</u>	1.86	<u>\$ —</u>	<u>1,174,859</u>	1.85	<u>\$ 731,441</u>	<u>1,297,750</u>	1.85	<u>\$ 606,720</u>
Options exercisable at year end	1,084,848	1.86		1,174,859	1.85		1,297,750	1.85	
<b>1992 Outside Directors Stock Plan:</b>									
Balance at beginning of year	150,000	\$ 2.04		165,000	\$ 2.05		200,000	\$ 2.00	
Granted	—	—		—	—		—	—	
Exercised	(5,000)	1.75	\$ 3,450	—	—	\$ —	—	—	\$ —
Forfeited	(10,000)	1.75		(15,000)	2.13		(35,000)	1.75	
Balance at end of year	<u>135,000</u>	2.08	<u>\$ 468</u>	<u>150,000</u>	2.04	<u>\$ 78,680</u>	<u>165,000</u>	2.05	<u>\$ 69,006</u>
Options exercisable at year end	135,000	2.08		150,000	2.04		165,000	2.05	
<b>2003 Outside Directors Stock Plan:</b>									
Balance at beginning of year	426,000	\$ 2.18		324,000	\$ 1.94		234,000	\$ 1.85	
Granted	84,000	2.34		102,000	2.95		90,000	2.15	
Balance at end of year	<u>510,000</u>	2.21	<u>\$ —</u>	<u>426,000</u>	2.18	<u>\$ 172,800</u>	<u>324,000</u>	1.94	<u>\$ 124,200</u>
Options exercisable at year end	426,000	2.18		324,000	1.94		234,000	1.85	

**2004 Stock  
Option Plan:**

Balance at beginning of year	830,167	\$ 1.84	1,018,000	\$ 1.82	96,500	\$ 1.44
Granted	1,083,000	1.93	—	—	978,000	1.86
Exercised	(41,668)	1.85	\$26,000	(114,834)	1.68	\$134,901
Forfeited	(184,000)	2.05	(72,999)	1.86	(56,500)	1.77
Balance at end of year	<u>1,687,499</u>	2.08	<u>\$ —</u>	<u>830,167</u>	1.84	<u>\$522,819</u>
Options exercisable at year end	467,999	1.83	272,833	1.80	85,000	1.44
					<u>1,018,000</u>	1.82
						<u>\$504,980</u>

(a) Represents the difference between the market price at the date of exercise or the end of the year, as applicable, and the exercise price.

[Table of Contents](#)

The summary of the Company's total Plans as of December 31, 2008, and changes during the period then ended are presented as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Options outstanding January 1, 2008	2,590,026	\$ 1.91		
Granted	1,167,000	1.96		
Exercised	(111,179)	1.66		\$ 95,102
Forfeited	(228,500)	2.00		
Options outstanding End of Period <sup>(1)</sup>	<u>3,417,347</u>	2.03	4.4	\$ 468
Options Exercisable at December 31, 2008 <sup>(1)</sup>	<u>2,113,847</u>	\$ 1.94	3.7	\$ 468
Options Vested and expected to be vested at December 31, 2008	<u>3,358,356</u>	\$ 2.03	4.4	\$ 468

<sup>(1)</sup> Option with exercise price ranging from \$1.22 to \$2.98

### Shares Reserved

At December 31, 2008, we have reserved approximately 3,417,347 shares of Common Stock for future issuance under all of the above option arrangements.

### 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.

We issued no warrants in 2008, 2007, and 2006. As of December 31, 2008, we had no outstanding warrants for the purchase of our Common Stock. During 2008, we received the remaining \$25,000 from repayment of stock subscription resulting from exercise of warrants to purchase 60,000 shares of our Common Stock on a loan by the Company at an arms length basis in 2006. During 2007, we issued 563,633 shares of Common Stock upon exercise of 1,281,731 warrants on a cashless basis, resulting in the surrendering of the remaining 718,098 warrants. In addition, 1,775,638 warrants expired in 2007. We received \$54,000 from repayment of stock subscription resulting from exercise of warrants to purchase 60,000 shares of our Common Stock on loan by the Company at an arms length basis in 2006. During 2006, a total of 6,673,290 shares of Common Stock were issued upon the exercise of 6,904,149 warrants, both on a cash and cashless basis and on a loan by the Company on an arms length basis. We received proceeds of \$11,460,000 for the exercises, and 306,262 warrants expired.

### Put Options

In 2001, we entered into an Option Agreement with Associated Mezzanine Investors ("AMI") and Bridge East Capital, L.P. ("BEC"), dated July 31, 2001 (the "Option Agreement"). Pursuant to the Option Agreement, we granted each purchaser an irrevocable option requiring us 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 could be exercised at any time commencing July 31, 2004, and ending July 31, 2008. In addition, each purchaser granted to us an irrevocable option to purchase all the Warrants or the Warrant Shares then held by the purchaser (the "Call Option"). The Call Option could 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 was based on the quotient obtained by dividing (a) the sum of six times our consolidated EBITDA for the period of the 12 most recent consecutive months minus Net Debt plus the Warrant Proceeds by (b) our Diluted Shares (as the terms EBITDA, Net Debt, Warrant Proceeds, and Diluted Shares are defined in the Option Agreement). On November 8, 2007, BEC exercised the 569,658 Warrants on a cashless basis, resulting in issuance of 273,321 shares of Common Stock and on December 31,

2007, AMI exercised the 712,073 Warrants on a cashless basis, resulting in issuance of 290,312 shares of Common Stock, with the remaining warrants forfeited. At December 31, 2006 and for the life of the Put Option to the warrant exercise date, this instrument has been measured regularly to have no value and thus no liability has been recorded. As result of the exercises by BEC and AMI, the Company has no further obligations under the “Option Agreement”.

**NOTE 5**

**GOODWILL AND OTHER INTANGIBLE ASSETS**

The following table is a summary of changes in the carrying amount of goodwill for the years ended December 31, 2006, 2007, and 2008. As a result of the acquisition of the PFNWR facility within our Nuclear Segment on June 13, 2007, we recorded \$7,716,000 in goodwill within our Nuclear Segment in 2007. In 2008, we recorded an additional \$1,777,000 in goodwill related to the acquisition of PFNWR as we finalized the allocation of the purchase price to the net assets acquired in this acquisition in the second quarter of 2008. In the fourth quarter of 2008, we determined that we had not appropriately recorded purchased unbilled receivables. Accordingly, we recorded an adjustment in the fourth quarter of 2008 to correct goodwill and unbilled receivables related to the PFNWR acquisition. This correction increased goodwill and decreased unbilled receivable by \$497,000. We did not amend our prior financial statements as this correction was not considered material to the Consolidated Balance Sheet and had no impact on our Consolidated Statement of Operations, loss per share, accumulated deficit or our cash flows. We had no goodwill for our Industrial Segment since December 31, 2005. (See “Note 6” below for finalized goodwill recorded as result of the acquisition of PFNWR facility).

Goodwill (amounts in thousands)	Nuclear Segment	Engineering Segment	Total
Balance as of December 31, 2005 and 2006	\$ —	\$ 1,330	\$ 1,330
Goodwill Recorded as Result of Acquisition	7,716	—	7,716
Balance as of December 31, 2007	\$ 7,716	\$ 1,330	\$ 9,046
Additional Goodwill Recorded as Result of Acquisition	2,274	—	2,274
Balance as of December 31, 2008	\$ 9,990	\$ 1,330	\$ 11,320

The following table is a summary of changes in the carrying amount of permits for the years ended December 31, 2006, 2007, and 2008. We recorded \$4,500,000 in permit costs within our Nuclear Segment as result of the acquisition of our PFNWR facility on June 13, 2007 (See “Note 6” below for permit recorded as result of the acquisition of PFNWR facility). Our Engineering Segment has been excluded as it has no permits recorded.

Permit (amount in thousands)	Nuclear Segment	Industrial Segment	Total
Balance as of December 31, 2005	\$ 10,819	\$ 1,190	\$ 12,009
Permits in progress	206	—	206
Balance as of December 31, 2006	11,025	1,190	12,215
Permits in progress	111	—	111
Acquired Permit as Result of Acquisition	4,500	—	4,500
Balance as of December 31, 2007	15,636	1,190	16,826
Permits in progress	299	—	299
Balance as of December 31, 2008	\$ 15,935	\$ 1,190	\$ 17,125

---

**NOTE 6**

**BUSINESS ACQUISITION**

*Acquisition of Nuvotec*

On June 13, 2007, the Company completed its acquisition of Nuvotec and its wholly owned subsidiary, Pacific EcoSolutions, Inc (“PEcoS”), pursuant to the terms of the Merger Agreement, between Perma-Fix, Perma-Fix’s wholly owned subsidiary, Transitory, Nuvotec, and PEcoS, dated April 27, 2007, which was subsequently amended on June 13, 2007. The Company acquired 100% of the outstanding shares of Nuvotec. The acquisition was structured as a reverse subsidiary merger, with Transitory being merged into Nuvotec, and Nuvotec being the surviving corporation. As a result of the merger, Nuvotec became a wholly owned subsidiary of ours. Nuvotec’s name was changed to Perma-Fix Northwest, Inc. (“PFNW”). PEcoS, whose name was changed to Perma-Fix Northwest Richland, Inc. (“PFNWR”) on August 2, 2007, is a wholly-owned subsidiary of PFWN. PEcoS is a permitted hazardous, low level radioactive and mixed waste treatment, storage and disposal facility located in the Hanford U.S. Department of Energy site in the eastern part of the state of Washington.

Under the terms of the Merger Agreement, the purchase price paid by the Company in connection with the acquisition was approximately \$17,299,000, consisting of as follows:

- (a) \$2,300,000 in cash at closing of the merger, with \$1,500,000 payable to unaccredited shareholders and \$800,000 payable to shareholders of Nuvotec that qualified as accredited investors pursuant to Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the “Act”).
- (b) Also payable only to the shareholders of Nuvotec that qualified as accredited investors:
  - \$2,500,000, payable over a four year period, unsecured and nonnegotiable and bearing an annual rate of interest of 8.25%, with (i) accrued interest only payable on June 30, 2008, (ii) \$833,333.33, plus accrued and unpaid interest, payable on June 30, 2009, (iii) \$833,333.33, plus accrued and unpaid interest, payable on June 30, 2010, and (iv) the remaining unpaid principal balance, plus accrued and unpaid interest, payable on June 30, 2011 (collectively, the “Installment Payments”). The Installment Payments may be prepaid at any time by Perma-Fix without penalty; and
  - 709,207 shares of Perma-Fix common stock, which were issued on July 23, 2007, with such number of shares determined by dividing \$2,000,000 by 95% of average of the closing price of the common stock as quoted on the NASDAQ during the 20 trading days period ending five business days prior to the closing of the merger. The value of these shares on June 13, 2007 was approximately \$2,165,000, which was determined by the average closing price of the common stock as quoted on the NASDAQ four days prior to and following the completion date of the acquisition, which was June 13, 2007.
- (c) The assumption of \$9,412,000 of debt, \$8,900,000 of which was payable to KeyBank National Association which represents debt owed by PFWN under a credit facility. As part of the closing, the Company paid down \$5,412,000 of this debt resulting in debt remaining of \$4,000,000.
- (d) Transaction costs totaling approximately \$922,000.

In addition to the above, the agreement contains a contingency of an earn-out amount not to exceed \$4,400,000 over a four year period (“Earn-Out Amount”). The earn-out amounts will be earned if certain annual revenue targets are met by the Company’s consolidated Nuclear Segment. The first \$1,000,000 of the earn-out amount, when earned, will be placed in an escrow account to satisfy certain indemnification obligations under the Merger Agreement of Nuvotec, PEcoS, and the shareholders of Nuvotec to Perma-Fix that are identified by Perma-Fix within the escrow period as provided in the Merger Agreement. The earn-out amount, if and when paid, will increase goodwill.

The EPA alleged that prior to the date that we acquired the PEcoS facility in June 2007, the PEcoS facility was in violation of certain regulatory provisions relating to the facility’s handling of certain hazardous waste

and PCB waste. During May 2008, the EPA advised the facility as to these alleged violations that a total penalty of \$317,500 is appropriate to settle the alleged violations. The \$317,500 was recorded as a liability in the purchase acquisition of Nuvotec and its wholly owned subsidiary, PEcoS. On September 26, 2008, PFNWR entered into a consent agreement with the EPA to resolve the allegations and to pay a penalty amount of \$304,500. Under the consent agreement, PFNWR neither admits nor denies the specific EPA allegations. We may claim reimbursement of the penalty, plus out of pocket expenses, paid or to be paid by us in connection with this matter from the escrow account as discussed above. As of the date of this report, we have not been required to pay any earn-out to the former shareholders of Nuvotec or deposit any amount into the escrow account pursuant to the agreement. Irrespective of the fact no amounts have been deposited into the escrow account, the former shareholders of Nuvotec (including Mr. Ferguson, a member of our Board of Directors) have paid \$152,250 of the \$304,500 penalty in satisfaction of their obligation under the indemnity provision in connection with the settlement with the EPA. Under the agreement between the Company and the former shareholders of Nuvotec, the \$152,250 penalty paid by the former shareholders of Nuvotec can be recouped by the Nuvotec shareholder by adding it to the potential \$4,400,000 earn-out payment. The \$152,250 can only be recouped if the \$4,400,000 has been entirely earned. The \$304,500 was paid to the EPA on November 18, 2008.

The acquisition was accounted for using the purchase method of accounting, pursuant to SFAS 141, "Business Combinations". The consideration for the acquisition was attributed to net assets on the basis of the fair value of assets acquired and liabilities assumed as of June 13, 2007. The results of operations after June 13, 2007 have been included in the consolidated financial statements. In the second quarter of 2008, the Company finalized the allocation of the purchase price to the net asset acquired in this acquisition. The excess of the cost of the acquisition over the estimated fair value of the net tangible assets and intangible assets on the acquisition date, which amounted to approximately \$9,493,000, was allocated to goodwill. In the fourth quarter of 2008, we determined that we had not appropriately recorded purchased unbilled receivables. Accordingly, we recorded an adjustment in the fourth quarter of 2008 to correct goodwill and unbilled receivables related to the PFNWR acquisition. This correction increased goodwill and decreased unbilled receivable by \$497,000. We did not amend our prior financial statements as this correction was not considered material to the Consolidated Balance Sheet and had no impact on our Consolidated Statement of Operations, loss per share, accumulated deficit or our cash flows. The total goodwill recorded for this acquisition totaled \$9,990,000, which is not amortized but subject to an annual impairment test. The following table summarized the final purchase price to the net assets acquired in this acquisition.

<u>(Amounts in thousands)</u>	
Cash	\$ 2,300
Assumed debt	9,412
Installment payments	2,500
Common Stock of the Company	2,165
Transaction costs	922
Total consideration	<u>\$ 17,299</u>

The following table presents the allocation of the final acquisition cost, including professional fees and other related acquisition costs, to the assets acquired and liabilities assumed based on their estimated fair values:

(Amounts in thousands)

---

Current assets (including cash acquired of \$249)	\$	2,400
Property, plant and equipment		14,978
Permits		4,500
Goodwill		9,990
Total assets acquired		31,868
Current liabilities		(10,801)
Non-current liabilities		(3,768)
Total liabilities assumed		(14,569)
Net assets acquired	\$	17,299

---

**NOTE 7**

**CHANGES TO PLAN OF SALE AND ASSET IMPAIRMENT CHARGES (RECOVERY)**

On May 18, 2007, our Board of Directors authorized the divestiture of our Industrial Segment. On September 26, 2008, our Board of Directors approved retaining our Industrial Segment facilities/operations PFFL, PFSG, and PFO. This subsequent decision to retain operations at PFFL, PFSG, and PFO within our Industrial Segment is based on our belief that these operations are self-sufficient, which should allow senior management the freedom to focus on growing our nuclear operations, while benefiting from the cash flow and growth prospects of these three facilities and the fact that we were unable in the current economic climate to obtain the values for these companies that we believe they are worth.

In May 2007, our Industrial Segment met the held for sale criteria under SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", and therefore, certain assets and liabilities of the Industrial Segment were classified as discontinued operations in the Consolidated Balance Sheets, and we ceased depreciation of these facilities' long-lived assets classified as held for sale. In accordance with SFAS No. 144, the long-lived assets were written down to fair value less anticipated selling costs and we recorded \$4,531,000 in impairment charges which were included in "loss from discontinued operations, net of taxes" on our Consolidated Statement of Operations for the year ended December 31, 2007.

As a result of our Board of Directors approving the retention of our PFFL, PFO, and PFSG facilities/operations in the third quarter of 2008, we restated the condensed consolidated financial statements for all periods presented to reflect the reclassification of these three facilities/operations back into our continuing operations. During the third quarter of 2008, we classified one of the two properties at PFO as "net property and equipment held for sale" within our continued operations in the Consolidated Balance Sheets in accordance to SFAS No. 144. We evaluated the fair value of PFO's assets and as a result, recorded a credit of \$507,000 related to the recovery of previous impairment charges for PFO, which is included in "Asset Impairment Recovery" on the Consolidated Statements of Operations for the year ended December 31, 2008. We sold the property at PFO for \$900,000 in cash on December 23, 2008 and recognized a gain of \$483,000 from the sale of this property. We do not expect any impact or reduction to PFO's operating capability from the sale of the property at PFO.

As the long-lived assets for PFFL, PFSG, and PFO (except for the property at PFO classified as held for sale) facilities no longer met the held for sale criteria under SFAS No. 144 in the third quarter of 2008, long-lived assets for these facilities were reported individually at the lower of their respective carrying amount before they were initially classified as held for sale, adjusted for any depreciation expense that would have been recognized had these assets been continuously classified as held and used or the fair value at the date of the subsequent decision not to sell. As a result of our decision to retain PFFL, PFSG, and PFO

facilities/operations, we incurred incremental depreciation expense of approximately \$372,000, which is included in our Consolidated Statements of Operations for the year ended December 31, 2008.

---

**NOTE 8**

**DISCONTINUED OPERATIONS AND DIVESTITURES**

Our discontinued operations encompass our PFMD, PFD, and PFTS facilities within our Industrial Segment as well as two previously shut down locations, PFP and PFMI, two facilities which were approved as discontinued operations by our Board of Directors effective November 8, 2005, and October 4, 2004, respectively. As discussed in “Note 1 – Description of Business and Basis of Presentation”, in May 2007, PFMD, PFD, and PFTS met the held for sale criteria under SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets”, and therefore, certain assets and liabilities of these facilities were classified as discontinued operations in the Consolidated Balance Sheet, and we ceased depreciation of these facilities’ long-lived assets classified as held for sale in May 2007. In accordance with SFAS No. 144, the long-lived assets for these facilities were written down to fair value less anticipated selling costs. We recorded \$4,531,000 in impairment charges for PFD and PFTS, all of which were included in “loss from discontinued operations, net of taxes” on our Consolidated Statement of Operations for the year ended December 31, 2007. The results of operations and cash flows of the aforementioned facilities have been reported in the Consolidated Financial Statements as discontinued operations for all periods presented.

On January 8, 2008, we sold substantially all of the assets of PFMD within our Industrial Segment, pursuant to the terms of an Asset Purchase Agreement, dated January 8, 2008. In consideration for such assets, the buyer paid us \$3,811,000 (purchase price of \$3,825,000 less closing costs) in cash at the closing and assumed certain liabilities of PFMD. The cash consideration is subject to certain working capital adjustments during 2008. Pursuant to the terms of our credit facility, \$1,400,000 of the proceeds received was used to pay down our term loan, with the remaining funds used to pay down our revolver. As of December 31, 2008, we have sold \$3,100,000 of PFMD’s assets, which excludes approximately \$10,000 of restricted cash. The buyer assumed liabilities in the amount of approximately \$1,108,000. As of December 31, 2008, expenses relating to the sale of PFMD totaled approximately \$132,000, of which \$1,000 remains to be paid. As of December 31, 2008, the gain on the sale of PFMD totaled approximately \$1,786,000 (net of taxes of \$71,000), which includes a final working capital adjustment of \$170,000 we received from the buyer in the fourth quarter of 2008. The gain is recorded separately on the Consolidated Statement of Operations as “Gain on disposal of discontinued operations, net of taxes”.

On March 14, 2008, we completed the sale of substantially all of the assets of PFD within our Industrial Segment, pursuant to the terms of an Asset Purchase Agreement, dated March 14, 2008, for approximately \$2,143,000 in cash, subject to certain working capital adjustments after the closing, plus the assumption by the buyer of certain of PFD’s liabilities and obligations. We received cash of approximately \$2,139,000 at closing, which was net of certain closing costs. The proceeds received were used to pay down our term loan. As of December 31, 2008, we sold approximately \$3,103,000 of PFD’s assets. The buyer assumed liabilities in the amount of approximately \$1,635,000. As of December 31, 2008, expenses relating to the sale of PFD totaled approximately \$206,000, of which all have been paid. As of December 31, 2008, our gain on the sale of PFD totaled approximately \$256,000, net of taxes of \$0, which includes a final working capital adjustment of approximately \$209,000 paid to the buyer in the second quarter of 2008. The gain is recorded separately on the Consolidated Statement of Operations as “Gain on disposal of discontinued operations, net of taxes”.

On May 30, 2008, we completed sale of substantially all of the assets of PFTS within our Industrial Segment, pursuant to the terms of an Asset Purchase Agreement, dated May 14, 2008 as amended by a First Amendment dated May 30, 2008. In consideration for such assets, the buyer paid us \$1,468,000 (purchase price of \$1,503,000 less certain closing/settlement costs) in cash at closing and assumed certain liabilities of PFTS. The cash consideration is subject to certain working capital adjustments after closing. Pursuant to the terms of our credit facility, the proceeds received were used to pay down our term loan with the remaining funds used to pay down our revolver. As of December 31, 2008, we had sold approximately

[Table of Contents](#)

\$1,861,000 of PFTS's assets. The buyer assumed liabilities in the amount of approximately \$996,000. As of December 31, 2008, expenses relating to the sale of PFTS totaled approximately \$186,000, of which approximately \$13,000 remains to be paid. As of December 31, 2008, our gain on the sale of PFTS totaled approximately \$281,000, net of taxes of \$0, which includes a \$135,000 final working capital adjustment paid to the buyer in July 2008. The gain is recorded separately on the Consolidated Statement of Operations as "Gain on disposal of discontinued operations, net of taxes".

The following table summarizes the results of discontinued operations for the years ended December 31, 2008, 2007, and 2006. The gains on disposals of discontinued operations, net of taxes, as mentioned above, are reported separately on our Consolidated Statements of Operations as "Gain on disposal of discontinued operations, net of taxes". The operating results of discontinued operations are included in our Consolidated Statements of Operations as part of our "Loss from discontinued operations, net of taxes".

(Amounts in Thousands)	For The Year Ended December 31,		
	2008	2007	2006
Net revenues	\$ 3,195	\$ 19,965	\$ 19,724
Interest expense	(121)	(194)	(165)
Operating (loss) income from discontinued operations <sup>(1)</sup>	(1,332)	(6,830)	(711)
Gain on disposal of discontinued operations <sup>(2)</sup>	2,323	—	—
Income (loss) from discontinued operations	991	(6,830)	(711)

<sup>(1)</sup> Net of taxes of \$0 for each of the year ended December 31.

<sup>(2)</sup> Net of taxes of \$71,000 for year ended December 31, 2008.

Assets related to discontinued operations total \$761,000 and \$8,626,000 as of December 31, 2008, and 2007, respectively, and liabilities related to discontinued operations total \$2,994,000 and \$9,037,000 as of December 31, 2008 and 2007, respectively.

The following table presents the Industrial Segment's major classes of assets and liabilities of discontinued operations that are classified as held for sale as of December 31, 2008 and 2007. The held for sale asset and liabilities balances as of December 31, 2008 may differ from the respective balances at closing:

(Amounts in Thousands)	December 31,	December
	2008	31, 2007
Account receivable, net <sup>(1)</sup>	\$ —	\$ 2,828
Inventories	—	313
Other assets	22	1,533
Property, plant and equipment, net <sup>(2)</sup>	651	3,942
Total assets held for sale	<u>\$ 673</u>	<u>\$ 8,616</u>
Account payable	\$ —	\$ 1,707
Deferred revenue	—	7
Accrued expenses and other liabilities	5	3,595
Note payable	—	604
Environmental liabilities	—	428
Total liabilities held for sale	<u>\$ 5</u>	<u>\$ 6,341</u>

<sup>(1)</sup> net of allowance for doubtful accounts of \$0, and \$204,000 as of December 31, 2008 and 2007, respectively.

<sup>(2)</sup> net of accumulated depreciation of \$13,000 and \$9,292,000 as of December 31, 2008 and 2007, respectively.

[Table of Contents](#)

The following table presents the Industrial Segment's major classes of assets and liabilities of discontinued operations that are not held for sale as of December 31, 2008 and 2007:

(Amounts in Thousands)	December 31, 2008	December 31, 2007
Other assets	\$ 88	\$ 10
Total assets of discontinued operations	<u>\$ 88</u>	<u>\$ 10</u>
Account payable	\$ 15	\$ 144
Accrued expenses and other liabilities	1,947	1,287
Deferred revenue	—	—
Environmental liabilities	1,027	1,265
Total liabilities of discontinued operations	<u>\$ 2,989</u>	<u>\$ 2,696</u>

The Industrial Segment includes two previously shut-down facilities which were presented as discontinued operations in prior years. These facilities include Perma-Fix of Pittsburgh (PFP) and Perma-Fix of Michigan (PFMI). Our decision to discontinue operations at PFP was due to our reevaluation of the facility and our inability to achieve profitability at the facility. During February 2006, we completed the remediation of the leased property and the equipment at PFP, and released the property back to the owner. Our decision to discontinue operations at PFMI was principally a result of two fires that significantly disrupted operations at the facility in 2003, and the facility's continued drain on the financial resources of our Industrial Segment. As a result of the discontinued operations at the PFMI facility, we were required to complete certain closure and remediation activities pursuant to our RCRA permit, which were completed in January 2006. In September 2006, PFMI signed a Corrective Action Consent Order with the State of Michigan, requiring performance of studies and development and execution of plans related to the potential clean-up of soils in portions of the property. The level and cost of the clean-up and remediation are determined by state mandated requirements. Upon discontinuation of operations in 2004, we engaged our engineering firm, SYA, to perform an analysis and related estimate of the cost to complete the RCRA portion of the closure/clean-up costs and the potential long-term remediation costs. Based upon this analysis, we estimated the cost of this environmental closure and remediation liability to be \$2,464,000. During 2006, based on state-mandated criteria, we re-evaluated our required activities to close and remediate the facility, and during the quarter ended June 30, 2006, we began implementing the modified methodology to remediate the facility. As a result of the reevaluation and the change in methodology, we reduced the accrual by \$1,182,000. We have spent approximately \$745,000 for closure costs since September 30, 2004, of which \$26,000 was spent during 2008 and \$81,000 was spent during 2007. In the 4<sup>th</sup> quarter of 2007, we reduced our reserve by \$9,000 as a result of our reassessment of the cost of remediation. We have \$538,000 accrued for the closure, as of December 31, 2008, and we anticipate spending \$425,000 in 2009 with the remainder over the next six years. Based on the current status of the Corrective Action, we believe that the remaining reserve is adequate to cover the liability.

As of December 31, 2008, PFMI has a pension payable of \$1,129,000. The pension plan withdrawal liability is a result of the termination of the union employees of PFMI. The PFMI union employees participate in the Central States Teamsters Pension Fund ("CST"), which provides that a partial or full termination of union employees may result in a withdrawal liability, due from PFMI to CST. The recorded liability is based upon a demand letter received from CST in August 2005 that provided for the payment of \$22,000 per month over an eight year period. This obligation is recorded as a long-term liability, with a current portion of \$181,000 that we expect to pay over the next year.

---

**NOTE 9**

**PREFERRED STOCK ISSUANCE AND CONVERSION**

**Series B Preferred Stock**

As partial consideration of the M&EC Acquisition, 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. We began accruing dividends for the Series B Preferred Stock in July 2002, and have accrued a total of approximately \$419,000 since July 2002, of which \$64,000 was accrued in each of the years ended December 31, 2003 to 2008.

**NOTE 10**  
**LONG-TERM DEBT**

Long-term debt consists of the following at December 31, 2008 and 2007:

(Amounts in Thousands)	December 31, 2008	December 31, 2007
<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 ½% (4.5% at December 31, 2008), balance due in July 2012. Weighted average interest rate on year end balances are 5.7% and 8.7%, respectively	\$ 6,516	\$ 6,851
<b>Term Loan</b> dated December 22, 2000, payable in equal monthly installments of principal of \$83, balance due in July 2012, variable interest paid monthly at prime rate plus 1% (5.0% at December 31, 2008).	6,667	4,500
<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 Section (8.0% on December 31, 2008) and is payable in one lump sum at the end of installment period.	—	635
<b>Promissory Note</b> dated June 25, 2007, payable in monthly installments of principal of \$160 starting July 2007 and \$173 starting July 2008, variable interest paid monthly at prime rate plus 1.125% (5.125% at December 31, 2008)	—	3,039
<b>Installment Agreement</b> in the Agreement and Plan of Merger with Nuvotec and PEcoS, dated April 27, 2007, payable in three equal yearly installment of principal of \$833 beginning June 2009. Interest accrues at annual rate of 8.25% on outstanding principal balance starting June 2007 and payable yearly starting June 2008	2,500	2,500
<b>Installment Agreement</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 Internal Revenue Code Section (8.0% on December 31, 2008) and is payable in one lump sum at the end of installment period.	—	153
Various capital lease and promissory note obligations, payable 2009 to 2013, interest at rates ranging from 5.0% to 12.6%.	520	1,158
	16,203	18,836
Less current portion of long-term debt	2,022	15,352
Less long-term debt related to assets held for sale	—	604
	<u>\$ 14,181</u>	<u>\$ 2,880</u>

**Revolving Credit and Term Loan Agreement**

On December 22, 2000, we entered into a Revolving Credit, Term Loan and Security Agreement (“Agreement”) with PNC Bank, National Association, a national banking association (“PNC”) acting as agent (“Agent”) for lenders, and as issuing bank. The Agreement initially provided 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 due on December 22, 2005. The Agreement also provided for a revolving line of credit (“Revolving Credit”) with a maximum principal amount outstanding at any one time of \$18,000,000, as

[Table of Contents](#)

amended. 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 the Agent reasonably deems proper and necessary. Our revolving credit and term loan are collateralized by substantially all of the assets of the Company, excluding the assets of PFNWR. As of December 31, 2008, the excess availability under our revolving credit was \$5,394,000 based on our eligible receivables.

Pursuant to the Agreement, as amended, the Term Loan bears interest at a floating rate equal to the prime rate plus 1%, and the Revolving Credit at a floating rate equal to the prime rate plus ½%. The Agreement was subject to a prepayment fee of 1% until March 25, 2006, and ½% until March 25, 2007 had we elected to terminate the Agreement with PNC.

On June 12, 2007, we entered into Amendment No. 6 with PNC. Pursuant to Amendment No. 6, PNC provided Consent to the Company's acquisition of Nuvotec (n/k/a Perma-Fix Northwest, Inc.) and its wholly owned subsidiary, PEcoS (n/k/a Perma-Fix Northwest Richland, Inc.), which was completed on June 13, 2007. PNC also provided consent for the Company to issue a corporate guaranty for a portion of the debt being assumed as result of the acquisition. In addition, the Amendment provided us with an additional \$2,000,000 of availability via a sub-facility within our secured revolver loan. The availability from this sub-facility will be amortized at a rate of \$83,333 per month.

On July 18, 2007, we entered into Amendment No. 7 with PNC, which extended the due date of the \$25,000,000 credit facility entered into on December 22, 2000 from May 31, 2008 to August 29, 2008. Pursuant to the term of the Amendment, we may terminate the agreement upon 60 days' prior written notice upon payment in full of the obligation.

On November 2, 2007, we entered into Amendment No. 8 with PNC, which extended the due date of the \$25,000,000 credit facility from August 29, 2008 to November 27, 2008. Pursuant to the term of the Amendment, we may terminate the agreement upon 60 days' prior written notice upon payment in full of the obligation.

On December 18, 2007, we entered into Amendment No. 9 with PNC, which entitled the Company to pay off the collateralized property sold from the sales proceeds upon the sale of each of the Industrial Segment facility, with any remaining proceeds to be used to pay off the term note and the revolver in such order. As a condition of the amendment, we paid a \$10,000 fee to PNC.

On March 26, 2008, we entered into Amendment No. 10 with PNC, which extended the due date of the \$25,000,000 credit facility from November 27, 2008 to September 30, 2009. This amendment also waived the Company's violation of the fixed charge coverage ratio as of December 31, 2007 and revised and modified the method of calculating the fixed charge coverage ratio covenant contained in the loan agreement in each quarter of 2008. Pursuant to the amendment, we may terminate the agreement upon 60 days' prior written notice upon payment in full of the obligation. As a condition to this amendment, we paid PNC a fee of \$25,000.

On July 25, 2008, we entered into Amendment No. 11 with PNC which extended the additional \$2,000,000 of availability via a sub-facility resulting from the acquisition of Nuvotec (n/k/a Perma-fix Northwest, Inc.) and PEcoS (n/k/a Perma-Fix Northwest Richland, Inc.) within our secured revolver loan, pursuant to Amendment No. 6, dated June 12, 2007 to the earlier of August 30, 2008 or the date that our Revolving Credit, Term Loan and Security Agreement is restructured with PNC.

On August 4, 2008, we entered into Amendment No. 12 with PNC. Pursuant to Amendment No. 12, PNC renewed and extended our credit facility by increasing our term loan back up to \$7,000,000 from the principal outstanding balance of \$0, with the revolving line of credit remaining at \$18,000,000. Under

Amendment No. 12, the due date of the \$25,000,000 credit facility is extended through July 31, 2012. The Term Loan continues to be payable in monthly installments of approximately \$83,000, plus accrued interest, with the remaining unpaid principal balance and accrued interest, payable by July 31, 2012. Pursuant to the Amendment No. 12, we may terminate the agreement upon 90 days' prior written notice upon payment in full of the obligation. We agreed to pay PNC 1% of the total financing in the event we pay off our obligations on or prior to August 4, 2009 and 1/2% of the total financing if we pay off our obligations on or after August 5, 2009, but prior to August 4, 2010. No early termination fee shall apply if we pay off our obligation after August 5, 2010. As part of Amendment No. 12, we agreed to grant mortgages to PNC as to certain of our facilities not previously granted to PNC under the Agreement. Amendment No. 12 also terminated the \$2,000,000 of availability pursuant to Amendment No. 11 noted above in its entirety. All other terms and conditions to the credit facility remain principally unchanged. The \$7,000,000 in loan proceeds was used to reduce our revolver balance and our current liabilities. As a condition of Amendment No. 12, we agreed to pay PNC a fee of \$120,000.

#### **Promissory Notes and Installment Agreements**

In connection with our acquisition of M&EC, M&EC issued a promissory note in the principal amount of \$3,700,000, together with interest at an annual rate equal to the applicable law rate pursuant to Section 6621 of the Internal Revenue Code, to Performance Development Corporation ("PDC"), dated June 25, 2001, for monies advanced to M&EC by PDC and certain services performed by PDC on behalf of M&EC prior to our acquisition of M&EC. The principal amount of the promissory note was payable over eight years on a semiannual basis on June 30 and December 31, with a final principal payment to be made by December 31, 2008. All accrued and unpaid interest on the promissory note was payable in one lump sum on December 31, 2008. PDC directed M&EC to make all payments under the promissory note directly to the IRS to be applied to PDC's obligations to the IRS. On December 29, 2008, M&EC and PDC entered into an amendment to the promissory note, whereby the outstanding principal and accrued interest due under the promissory note totaling approximately \$3,066,000 is to be paid in the following installments: \$500,000 payment to be made by December 31, 2008 and five monthly payment of \$100,000 to be made starting January 27, 2009, with the balance consisting of accrued and unpaid interest due on June 30, 2009. We made the \$500,000 payment on December 31, 2008. Interest is to continue to accrue at the applicable law rate pursuant to the provisions of section 6621 of the Internal Revenue Code of 1986, as amended. We have been directed by PDC to make all payments under the promissory note, as amended, directly to the IRS to be applied to PDC's obligations under its obligations with the IRS. As of December 31, 2008, and after payment of the \$500,000 installment, the outstanding balance due under the promissory note to PDC, as amended, was approximately \$2,566,000, which consists of interest only.

Additionally, M&EC entered into an installment agreement, effective June 25, 2001, with the IRS for a principal amount of \$923,000, plus accrued and unpaid interest, for certain withholding taxes owed by M&EC for periods prior to our acquisition of M&EC. Although the M&EC installment agreement was payable over eight years, we were advised by the IRS that due to the method that the IRS utilized to apply the previous payments made by us in connection with the PDC promissory note discussed above, the M&EC installment agreement has been paid in full.

In conjunction with our acquisition of Nuvotec (n/k/a Perma-Fix of Northwest, Inc.) and PEcoS (n/k/a Perma-Fix of Northwest Richland, Inc.), (collectively called "PFNWR") which was completed on June 13, 2007, we entered into a promissory note for a principal amount of \$4,000,000 to KeyBank National Association, dated June 13, 2007, which represents debt assumed by us as result of the acquisition. The promissory note is payable over a two year period with monthly principal repayment of \$160,000 starting July 2007 and \$173,000 starting July 2008, along with accrued interest. Interest is accrued at prime rate plus 1.125%. As of December 31, 2008, we have no outstanding balance on the note.

Additionally, in conjunction with our acquisition of PFNWR, we agreed to pay shareholders of Nuvotec that qualified as accredited investors pursuant to Rule 501 of Regulation D promulgated under the Securities Act of 1933, \$2,500,000, with principal payable in equal installment of \$833,333 on June 30, 2009, June 30, 2010, and June 30, 2011. Interest is accrued on outstanding principal balance at 8.25% starting in June

[Table of Contents](#)

2007 and is payable on June 30, 2008, June 30, 2009, June 30, 2010, and June 30, 2011. Interest paid as of December 31, 2008 totaled \$216,000. Interest accrued as of December 31, 2008 totaled \$103,000.

The aggregate approximate amount of the maturities of long-term debt maturing in future years as of December 31, 2008, is \$2,022,000 in 2009; \$1,978,000 in 2010; 1,965,000 in 2011; \$10,229,000 in 2012, and \$9,000 in 2013.

### Capital Leases

The following table lists components of the capital leases as of December 31, 2008 (in thousands):

	Capital Leases	Operating Leases
Year ending December 31:		
2009	\$ 189	\$ 744
2010	144	609
2011	132	437
2012	46	254
2013	9	53
Later years beyond	—	—
Total Minimum Lease Payments	520	\$ 2,097
Less amount representing interest (effective interest rate of 8.10%)	(67)	
Less estimated executory costs	—	
Net minimum lease payments	453	
Less current installments of obligations under capital leases	189	
Obligations under capital leases excluding current installments	\$ 264	

---

### NOTE 11

#### ACCRUED EXPENSES

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

	2008	2007
Salaries and employee benefits	\$ 3,173	\$ 3,478
Accrued sales, property and other tax	519	671
Interest payable	2,722	2,769
Insurance payable	1,553	2,268
Other	929	796
Total accrued expenses	\$ 8,896	\$ 9,982

---

### NOTE 12

#### ACCRUED CLOSURE COSTS

We accrue for the estimated closure costs as determined pursuant to RCRA guidelines for all fixed-based regulated operating and discontinued facilities, even though we do not intend to or have present plans to close any of our 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. We recognize the closure cost as a liability on the balance sheet. Since all our 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 of fair value to identifiable 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. If there is a change to the closure estimate, we record this change in the liability and asset, with the asset depreciated in accordance with our depreciation policy. Annual inflation factor increases are expensed during the current year. In 2008, due to change in estimate of the costs to close our DSSI and PFNWR facilities based on federal/state regulatory guidelines, we increased our closure accrual by \$726,000 and \$373,000 for our DSSI and PFNWR facility, respectively.

During 2008, the accrued long-term closure cost increased by \$1,240,000 to a total of \$10,141,000 as compared to the 2007 total of \$8,901,000 for our continuing operations. This increase is principally a result of normal inflation factor increases as well as changes in estimates to close our DSSI and PFNWR facilities as discussed above.

---

**NOTE 13**

**ENVIRONMENTAL LIABILITIES**

We have four remediation projects, which are currently in progress at certain of our permitted Industrial Segment facilities (two within our discontinued operations, PFD and PFMI) owned and operated by our subsidiaries. These remediation projects principally entail the removal/remediation of contaminated soil and, in some cases, the remediation of surrounding ground water. All of the remedial clean-up projects in question were an issue for that facility for years prior to our acquisition 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. Three of the facilities, (PFD, PFM, and PFSG) are RCRA permitted facilities, and as a result, the remediation activities are closely reviewed and monitored by the applicable state regulators. Additionally, we recorded environmental liabilities upon acquisition of PFMD and PFP in March 2004, which were not RCRA permitted facilities. In January 2008, we sold substantially all of the assets of our PFMD facility. We recognized our best estimate of such environmental liabilities upon the acquisition of these five facilities, as part of the acquisition cost. In the normal course of our business, the operations will on occasion create a minor environmental remediation issue, which will be evaluated and a corresponding remedial liability recorded. Minor environmental remediation liabilities were recognized and recorded for the PFTS facility during 2004. In May 2008, we sold substantially all of the assets of our PFTS facility. As further discussed in the discontinued operations and divestiture footnote, we accrued environmental liabilities for PFMI, one of our two non-operating discontinued operations. See “Note 8” – “Discontinued Operations and Divestitures”.

At December 31, 2008, we had total accrued environmental remediation liabilities of \$1,833,000, which reflects a decrease of \$1,040,000 from the December 31, 2007, balance of \$2,873,000. The decrease represents payments of approximately \$614,000 on remediation projects, approximately \$391,000 in environmental reserve which was assumed by the buyer upon the sale of substantially all of the assets of PFMD in January 2008, and reduction of approximately \$35,000 in reserve which we recorded as “gain on disposal of continued operations, net of taxes” in the second quarter of 2008 upon the sale of substantially all of the assets of PFTS in May 2008. In connection with the sale of substantially all of the assets of PFMD in January 2008, the buyer assumed all obligations and liabilities for environmental conditions at the Maryland facility except for fines, assessments, or judgments to governmental authorities prior to the closing of the transaction or third party tort claims existing prior to the closing of the sale. The December 31, 2008, current and long-term accrued environmental balance is recorded as follows (in thousands):

	Current Accrual	Long-term Accrual	Total
PFD	\$ 165	\$ 324	\$ 489
PFM	74	201	275
PFSG	112	419	531
PFMI	425	113	538
Total Liability	<u>\$ 776</u>	<u>\$ 1,057</u>	<u>\$ 1,833</u>

**PFD**

In June 1994, we acquired from Quadrex Corporation and/or a subsidiary of Quadrex Corporation (collectively, "Quadrex") three treatment, storage and disposal companies, including the PFD facility. The former owners of PFD had merged 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 this facility leased by PFD ("Leased Property") but never used or operated by PFD, 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 our recording of purchase accounting for the acquisition of PFD, we recognized an environmental liability of approximately \$1,200,000 for the remediation of this leased facility. This environmental liability for the EPS site was retained by the Company upon the sale of PFD in March 2008. We have pursued remedial activities for the past ten years and after evaluating various technologies, are seeking approval from appropriate governmental authority for the final remedial process. In 2008, we performed a field investigation to gather additional information required to close certain soil contamination issues and to support development of the final groundwater remediation approach. During 2008, we incurred remedial expenditures of \$213,000, which reduced the reserve. We have \$489,000 accrued for the closure as of December 31, 2008, and we anticipate spending \$165,000 in 2009 with the remainder over the next six years.

**PFM**

Pursuant to our acquisition, effective December 31, 1993, of Perma Fix of Memphis, Inc. ("PFM") (f/k/a American Resource Recovery, Inc.), we assumed certain liabilities relative to the removal of contaminated soil and to undergo groundwater remediation at the facility. 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. The groundwater remediation at this facility has been ongoing since approximately 1990. With approval of a remediation approach in 2006, PFM began final remediation of this facility in 2007. In 2008, we completed all soil remediation with the exception of that associated with the groundwater remediation. In 2008, we incurred remediation expenditure of \$200,000. We have \$275,000 accrued for the closure as of December 31, 2008, and we anticipate spending \$74,000 in 2009 with the remainder over the next four years.

**PFSG**

During 1999, we recognized an environmental accrual of \$2,199,000, in conjunction with the acquisition of PFSG. This amount represented our 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 have over the past five years, completed the initial valuation, and selected the remedial process to be utilized. Approval to proceed with final remediation has not yet been received from the appropriate agency. Remedial activities began in 2003. In 2008, we incurred remedial expenditures of \$173,000. We have \$531,000 accrued for the closure, as of December 31, 2008, and we anticipate spending \$112,000 in 2009 with the remainder over the next six years.

**PFTS**

In conjunction with an oil spill, we accrued approximately \$69,000 to remediate the contaminated soil and ground water at this location. For the year ended December 31, 2007, we had \$37,000 accrued for the

[Table of Contents](#)

closure. In 2008, we incurred approximately \$2,000 in remedial expenditure. The remaining \$35,000 in reserve was recorded as a “gain on disposal of discontinued operations, net of taxes” on the “Consolidated Statement of Operations” upon the sale of substantially all of PFTS’s assets on May 30, 2008, as the buyer had assumed any future on-going environmental monitoring.

**PFMI**

As a result of the discontinued operations at the PFMI facility in 2004, we were required to complete certain closure and remediation activities pursuant to our RCRA permit, which were completed in January 2006. In September 2006, PFMI signed a Corrective Action Consent Order with the State of Michigan, requiring performance of studies and development and execution of plans related to the potential clean-up of soils in portions of the property. The level and cost of the clean-up and remediation are determined by state mandated requirements. Upon discontinuation of operations in 2004, we engaged our engineering firm, SYA, to perform an analysis and related estimate of the cost to complete the RCRA portion of the closure/clean-up costs and the potential long-term remediation costs. Based upon this analysis, we estimated the cost of this environmental closure and remediation liability to be \$2,464,000. During 2006, based on state-mandated criteria, we re-evaluated our required activities to close and remediate the facility, and during the quarter ended June 30, 2006, we began implementing the modified methodology to remediate the facility. As a result of the reevaluation and the change in methodology, we reduced the accrual by \$1,182,000. We have spent approximately \$745,000 for closure costs since September 30, 2004, of which \$26,000 was spent during 2008 and \$81,000 was spent during 2007. In the 4<sup>th</sup> quarter of 2007, we reduced our reserve by \$9,000 as a result of our reassessment of the cost of remediation. We have \$538,000 accrued for the closure, as of December 31, 2008, and we anticipate spending \$425,000 in 2009 with the remainder over the next six years. Based on the current status of the Corrective Action, we believe that the remaining reserve is adequate to cover the liability.

**PFMD**

In conjunction with the acquisition of PFMD in March 2004, we accrued for long-term environmental liabilities of \$391,000 as a best estimate of the cost to remediate the hazardous and/or non-hazardous contamination on certain properties owned by PFMD. In connection with the sale of PFMD facility in January 2008, the buyer assumed this liability in addition to obligations and liabilities for environmental conditions at the Maryland facility except for fines, assessments, or judgments to governmental authorities prior to the closing of the transaction or third party tort claims existing prior to the closing of the sale.

We 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 us to assist in our review. Based upon our expertise and the analysis performed, we have accrued our best estimate of the cost to complete the remedial projects. No insurance or third party recovery was taken into account in determining our cost estimates or reserve, nor do our cost estimates or reserves reflect any discount for present value purposes. We do not believe that any adverse changes to our estimates would be material to us. The circumstances that could affect the outcome range from new technologies, that are being developed every day that reduce our overall costs, to increased contamination levels that could arise as we complete remediation which could increase our costs, neither of which we anticipate at this time.

---

**NOTE 14**  
**INCOME TAXES**

Income tax from the continuing operations for the years ended December 31, consisted of the following (in thousands):

Current:	2008	2007	2006
Federal	\$ —	\$ —	\$ 83
State	10	—	424
Total income tax expense	\$ 10	\$ —	\$ 507

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):

Deferred tax assets:	2008	2007
Net operating losses	\$ 9,040	\$ 7,724
Environmental and closure reserves	3,114	2,770
Impairment of assets	7,658	10,015
Other	2,151	2,167
Valuation allowance	(14,130)	(14,237)
Deferred income tax assets	\$ 7,833	\$ 8,439
Deferred tax liabilities:		
Depreciation and amortization	(7,833)	(8,439)
Total deferred income tax liability	—	—
Net deferred income tax asset	\$ —	\$ —

An overall reconciliation between the expected tax benefit using the federal statutory rate of 34% and the provision for income taxes from continuing operations as reported in the accompanying consolidated statements of operations is provided below.

	2008	2007	2006
Tax (benefit) expense at statutory rate	\$ 261	\$ (809)	\$ 2,016
State taxes, net of federal benefit	7	206	236
Permanent items	37	(1)	105
Other	(153)	(5)	118
Increase (decrease) in valuation allowance	(142)	609	(1,968)
Provision for income taxes	<u>\$ 10</u>	<u>\$ —</u>	<u>\$ 507</u>

Effective January 1, 2007, the Company adopted the provisions of FIN No. 48, *Accounting for Uncertainty in Income Taxes*. FIN No. 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes*. FIN No. 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This pronouncement also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The adoption of FIN No. 48 did not result in the identification of material uncertain tax positions through December 31, 2008.

The Company has provided a valuation allowance on substantially all of its deferred tax assets. The Company will continue to monitor the realizability of these net deferred tax assets and will reverse some or all of the valuation allowance as appropriate. In making this determination, the Company considers a number of factors including whether there is a historical pattern of consistent and significant profitability in combination with the Company's assessment of forecasted profitability in the future periods. Such patterns and forecasts allow us to determine whether our most significant deferred tax assets such as net operating losses will more likely than not be realizable in future years, in whole or in part. These deferred tax assets in particular will require us to generate significant taxable income in the applicable jurisdictions in future years in order to recognize their economic benefits. At this point, the Company does not believe that it has enough positive evidence to conclude that some or all of the valuation allowance on deferred tax assets should be reversed. However, facts and circumstances could change in future years and at such point the Company may reverse the allowance as appropriate. Our valuation allowance (decreased) increased by approximately \$(107,000), \$3,263,000, and \$(1,757,000) for the years ended December 31, 2008, 2007, and 2006, respectively, which represents the effect of changes in the temporary differences and net operating losses (NOLs). Included in deferred tax assets as of December 31, 2008 is a future deductible tax benefit associated with the impairment of assets for financial reporting purposes in the amount of \$7,658,000. Of this amount, approximately \$7,175,000 was recorded in conjunction with our acquisition of DSSI in August 2000 and approximately \$483,000 was in conjunction with impairment of assets at PFSG in 2007. For income tax reporting purposes, the future benefit of these impairment charges will be recognized when the underlying assets are actually disposed.

We have estimated net operating loss carryforwards (NOL's) for federal income tax purposes of approximately \$26,589,000 at December 31, 2008 for continuing operations. These net operating losses can be carried forward and applied against future taxable income, if any, and expire in the years 2009 through 2028. 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. As of December 31, 2008, we have approximately \$16,556,000 of net operating loss carryforwards available to offset future taxable income without any restrictions as imposed by Section 382. Additionally, NOLs may be further limited under the provisions of Treasury Regulation 1.1502-21 regarding Separate Return Limitation Years.

---

## **NOTE 15**

### **COMMITMENTS AND CONTINGENCIES**

#### **Hazardous Waste**

In connection with our waste management services, we handle both hazardous and non-hazardous 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 Matters**

*Perma-Fix of Dayton ("PFD"), Perma-Fix of Florida ("PFF"), Perma-Fix of Orlando ("PFO"), Perma-Fix of South Georgia ("PFSG"), and Perma-Fix of Memphis ("PFM")*

In May 2007, the above facilities were named Partially Responsible Parties ("PRPs") at the Marine Shale Superfund site in St. Mary Parish, Louisiana ("Site"). Information provided by the EPA indicates that, from 1985 through 1996, the Perma-Fix facilities above were responsible for shipping 2.8% of the total waste volume received by Marine Shale. Subject to finalization of this estimate by the PRP group, PFF, PFO and PFD could be considered de-minimus at .06%, .07% and .28% respectively. PFSG and PFM would be major at 1.12% and 1.27% respectively. However, at this time the contributions of all facilities are consolidated.

As of the date of this report, Louisiana Department of Environmental Quality ("LDEQ") has collected approximately \$8,400,000 for the remediation of the site and has completed removal of above ground waste from the site. The EPA's unofficial estimate to complete remediation of the site is between \$9,000,000 and

[Table of Contents](#)

\$12,000,000; however, based on preliminary outside consulting work hired by the PRP group, which we are a party to, the remediation costs can be below EPA's estimation. The PRP Group has established a cooperative relationship with LDEQ and EPA, and is working closely with these agencies to assure that the funds held by LDEQ are used cost-effectively. As a result of recent negotiations with LDEQ and EPA, further remediation work by LDEQ has been put on hold pending completion of a site assessment by the PRP Group. This site assessment could result in remediation activities to be completed within the funds held by LDEQ. As part of the PRP Group, we have paid an initial assessment of \$10,000 in the fourth quarter of 2007, which was allocated among the facilities. In addition, we accrued approximately \$27,000 in the third quarter of 2008 for our estimated portion of the cost of the site assessment, which was allocated among the facilities. Approximately \$9,000 of the accrued amount was paid to the PRP Group in the fourth quarter of 2008. As of the date of this report, we cannot accurately access our ultimate liability. The Company records its environmental liabilities when they are probable of payment and can be estimated within a reasonable range. Since this contingency currently does not meet this criteria, a liability has not been established.

*Perma-Fix Northwest Richland, Inc. ("PFNWR" - f/k/a Pacific EcoSolutions, Inc - "PEcoS")*

The EPA alleged that prior to the date that we acquired the PEcoS facility in June 2007, the PEcoS facility was in violation of certain regulatory provisions relating to the facility's handling of certain hazardous waste and PCB waste. During May 2008, the EPA advised the facility as to these alleged violations that a total penalty of \$317,500 is appropriate to settle the alleged violations. The \$317,500 was recorded as a liability in the purchase acquisition of Nuvotec and its wholly owned subsidiary, PEcoS. On September 26, 2008, PFNWR entered into a consent agreement with the EPA to resolve the allegations and to pay a penalty amount of \$304,500. Under the consent agreement, PFNWR neither admits nor denies the specific EPA allegations. Under the agreements relating to our acquisition of Nuvotec and PEcoS, we are required, if certain revenue targets are met, to pay to the former shareholders of Nuvotec an earn-out amount not to exceed \$4,400,000 over a four year period ending June 30, 2011, with the first \$1,000,000 of the earn-out amount to be placed into an escrow account to satisfy certain indemnification obligations to us of Nuvotec, PEcoS, and the former shareholders of Nuvotec (including Mr. Robert Ferguson, a current member of our Board of Directors) (See "Note 17 - Related Party Transaction" in "Note to Consolidated Financial Statements"). We may claim reimbursement of the penalty, plus out of pocket expenses, paid or to be paid by us in connection with this matter from the escrow account. As of the date of this report, we have not been required to pay any earn-out to the former shareholders of Nuvotec or deposit any amount into the escrow account pursuant to the agreement. Irrespective of the fact no amounts have been deposited into the escrow account, the former shareholders of Nuvotec (including Mr. Ferguson, a member of our Board of Director) have paid \$152,250 of the \$304,500 penalty in satisfaction of their obligation under the indemnity provision in connection with the settlement with the EPA. Under the agreement between the Company and the former shareholders of Nuvotec, the \$152,250 penalty paid by the former shareholders of Nuvotec can be recouped by the Nuvotec shareholder by adding it to the potential \$4,400,000 earn-out payment. The \$152,250 can only be recouped if the \$4,400,000 has been entirely earned. The \$304,500 was paid to the EPA on November 18, 2008.

*Notice of Violation - Perma-Fix Treatment Services, Inc. ("PFTS")*

In July 2008, PFTS received a notice of violation ("NOV") from the Oklahoma Department of Environmental Quality ("ODEQ") alleging that eight loads of waste materials received by PFTS between January 2007 and July 2007 were improperly analyzed to assure that the treatment process rendered the waste non-hazardous before disposition in PFTS' non-hazardous injection well. The ODEQ alleges the handling of these waste materials violated regulations regarding hazardous waste. The ODEQ did not assert any penalties against PFTS in the NOV and requested PFTS to respond within 30 days from receipt of the letter. PFTS responded on August 22, 2008 and is currently in settlement discussions with the ODEQ. PFTS sold most all of its assets to a non-affiliated third party on May 30, 2008.

*Industrial Segment Divested Facilities/Operations*

We sold substantially all of the assets of PFTS pursuant to an Asset Purchase Agreement on May 30, 2008. Under this Agreement the buyer assumed certain debts and obligations of PFTS, including, but not limited

to, certain debts and obligations of PFTS to regulatory authorities under certain consent agreements entered into by PFTS with the appropriate regulatory authority to remediate portions of the facility sold to the buyer. If any of these liabilities/obligations are not paid or preformed by the buyer, the buyer would be in breach of the Asset Purchase Agreement and we may assert claims against the buyer for such breach. We currently are discussing with the buyer of the PFTS' assets regarding certain liabilities which the buyer assumed and agreed to pay but which the buyer has refused to satisfy as of the date of this report. In addition, the buyer of the PFTS assets is required to replace our financial assurance bond with its own financial assurance mechanism for facility closures. Our financial assurance bond of \$685,000 for PFTS was required to remain in place until the buyer has provided replacement coverage. The respective regulatory authority will not release us from our financial assurance obligations until the buyer complies with the appropriate financial assurance regulations. The buyer of PFTS has submitted its financial assurance documentation, which has been under review by regulatory authority (see "Note 20 – Subsequent Event – Financial Assurance for PFTS (Divested Industrial Segment Facility)" for authorization provided to the Company for release of our financial assurance for PFTS of \$685,000.

In addition to the above matters and in the normal course of conducting our business, we are involved in various other litigations. 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.

### **Pension Liability**

We had a pension withdrawal liability of \$1,129,000 at December 31, 2008, based upon a withdrawal letter received from Central States Teamsters Pension Fund ("CST"), resulting from the termination of the union employees at PFMI and a subsequent actuarial study performed. In August 2005, we received a demand letter from CST, amending the liability to \$1,629,000, and provided for the payment of \$22,000 per month over an eight year period.

### **Insurance**

In June 2003, we entered into a 25-year finite risk insurance policy with AIG (see "Part I, Item 1A. - Risk Factors" for certain potential risk related to AIG), which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. Prior to obtaining or renewing operating permits, we are required to provide financial assurance that guarantees to the states that in the event of closure, our permitted facilities will be closed in accordance with the regulations. The policy provides a maximum \$35,000,000 of financial assurance coverage of which the coverage amount totals \$32,515,000 at December 31, 2008, and has available capacity to allow for annual inflation and other performance and surety bond requirements. In 2008, we increased our assurance coverage by \$1,697,000 due to a revision to our DSSI facility closure estimate. Our finite risk insurance policy required an upfront payment of \$4,000,000, of which \$2,766,000 represented the full premium for the 25-year term of the policy, and the remaining \$1,234,000, was deposited in a sinking fund account representing a restricted cash account. In February 2008, we paid our fifth of nine required annual installments of \$1,004,000, of which \$991,000 was deposited in the sinking fund account, the remaining \$13,000 represents a terrorism premium. As of December 31, 2008, we have recorded \$6,918,000 in our sinking fund related to this policy on the balance sheet, which includes interest earned of \$730,000 on the sinking fund as of December 31, 2008. We recorded \$155,000 of interest income on the sinking fund for 2008. On the fourth and subsequent anniversaries of the contract inception, we may elect to terminate this contract. If we so elect, the Insurer will pay us an amount equal to 100% of the sinking fund account balance in return for complete releases of liability from both us and any applicable regulatory agency using this policy as an instrument to comply with financial assurance requirements.

In August 2007, we entered into a second finite risk insurance policy for our PFNWR facility, which we acquired in June 2007, with AIG (see "Part I, Item 1A. - Risk Factors" for certain potential risk related to AIG). The policy provides an initial \$7,800,000 of financial assurance coverage with annual growth rate of 1.5%, which at the end of the four year term policy, will provide maximum coverage of \$8,200,000. The policy will renew automatically on an annual basis at the end of the four year term and will not be subject to

any renewal fees. The policy requires total payment of \$7,158,000, consisting of an annual payment of \$1,363,000, two annual payments of \$1,520,000, starting July 31, 2007 and an additional \$2,755,000 to be paid in five quarterly payments of \$551,000 beginning September 2007. In July 2007, we paid the \$1,363,000, of which \$1,106,000 represented premium on the policy and the remaining was deposited into a sinking fund account. In July 2008, we paid the first of the two \$1,520,000 payments, with \$1,344,000 deposited into a sinking fund account and the remaining representing premium. As of December 31, 2008, we have made all of the five quarterly payments which were deposited into a sinking fund. As of December 31, 2008, we have recorded \$4,427,000 in our sinking fund related to this policy on the balance sheet, which includes interest earned of \$71,000 on the sinking fund as of December 31, 2008. Interest income for 2008 totaled \$68,000.

### **Operating Leases**

We lease certain facilities and equipment under operating leases. Future minimum rental payments as of December 31, 2008, required under these leases for our continuing operations are \$744,000 in 2009, \$609,000 in 2010, \$437,000 in 2011, \$254,000 in 2012, and \$53,000 in 2013.

Net rent expense was \$1,409,000, \$1,464,000, and \$1,561,000 for 2008, 2007, and 2006, respectively for our continuing operations. These amounts include payments on operating leases of approximately \$652,000, \$1,075,000, and \$1,261,000 for 2008, 2007, and 2006, respectively. The remaining rent expense is for non-contractual monthly and daily rentals of specific use vehicles, machinery and equipment.

Net rent expense was \$177,000, \$1,134,000, and \$981,000 for 2008, 2007, and 2006, respectively for our discontinued operations. These amounts include payments on operating leases of approximately \$0, \$476,000, and \$488,000, respectively. The remaining rent expense is for non-contractual monthly and daily rentals of specific use vehicles, machinery and equipment.

---

## **NOTE 16**

### **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 100% 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 matched up to 25% of our employees' contributions. We contributed \$401,000, \$418,000, and \$378,000 in matching funds during 2008, 2007, and 2006, respectively. Effective March 1, 2009, the Company suspended its matching contribution in an effort to reduce costs in light of the recent economic environment. The Company will evaluate the reversal of this suspension as the economic environment improves.

---

**NOTE 17**

**RELATED PARTY TRANSACTIONS**

**Lawrence Properties LLC**

During February 2006, our Board of Directors approved and we entered into a lease agreement, whereby we lease property from Lawrence Properties LLC, a company jointly owned by the president of Schreiber, Yonley and Associates, Robert Schreiber, Jr. and his spouse. Mr. Schreiber is a member of our executive management team. The lease is for a term of five years from June 1, 2006. We pay monthly rent expense of \$10,000, which we believe is lower than costs charged by unrelated third party landlords. Additional rent will be assessed for any increases over the initial lease commencement year for property taxes or assessments and property and casualty insurance premiums.

**Mr. David Centofanti**

Mr. David Centofanti serves as our Director of Information Services. For such services, he received total compensation in 2008 of approximately \$162,000. Mr. David Centofanti is the son of our Chief Executive Officer and Chairman of our board, Dr. Louis F. Centofanti. We believe the compensation received by Mr. Centofanti for his technical expertise which he provides to the Company is competitive and comparable to compensation we would have to pay to an unaffiliated third party with the same technical expertise.

**Mr. Robert L. Ferguson**

On June 13, 2007, we acquired Nuvotec and Nuvotec's wholly owned subsidiary, PEcoS (our PFNWR facility), pursuant to the terms of the Merger Agreement, between us, Nuvotec, PEcoS, and our wholly owned subsidiary. At the time of the acquisition, Robert L. Ferguson was the Chairman, Chief Executive Officer, and individually or through entities controlled by him, the owner of approximately 21.29% of Nuvotec's outstanding common stock. In connection with the acquisition, Mr. Ferguson was nominated to serve as a Director and subsequently elected as a Director at our Annual Meeting of Stockholders held in August 2007. Mr. Ferguson was reelected to serve as a Director at our August 2008 Annual Meeting of Stockholders.

As consideration for the acquisition, Mr. Ferguson: (a) received a total of \$224,560 cash and 192,783 shares of Perma-Fix Common Stock in July 2007 as a former shareholder of Nuvotec who is "accredited" under the rules of Regulation D under the Act, (b) is entitled to receive certain contingent consideration under the terms of the acquisition as described below, (c) guaranteed \$4,000,000 of bank debt, which was paid off by Perma-Fix in December 2008, and a \$1,750,000 line of credit assumed by us in the acquisition, which the \$1,750,000 line of credit was released when we replaced the financial assurance of PEcoS deposited with the State of Washington with our financial assurance, and (d) as a former shareholder of Nuvotec, is entitled to his proportionate share of a \$2,500,000 note payable by the Company to the former shareholders of Nuvotec. The foregoing consideration includes the amounts and shares paid and payable to entities controlled by Mr. Ferguson.

The EPA alleged that prior to the date that we acquired the PEcoS facility in June 2007, the PEcoS facility was in violation of certain regulatory provisions relating to the facility's handling of certain hazardous waste and PCB waste. During May 2008, the EPA advised the facility as to these alleged violations that a total penalty of \$317,500 is appropriate to settle the alleged violations. On September 26, 2008, PFNWR entered into a consent agreement with the EPA to resolve the allegations and to pay a penalty amount of \$304,500. Under the consent agreement, PFNWR neither admits nor denies the specific EPA allegations. Under the agreements relating to our acquisition of Nuvotec and PEcoS, we are required, if certain revenue targets are met, to pay to the former shareholders of Nuvotec an earn-out amount not to exceed \$4,400,000 over a four year period ending June 30, 2011, with the first \$1,000,000 of the earn-out amount to be placed into an escrow account to satisfy certain indemnification obligations to us of Nuvotec, PEcoS, and the former shareholders of Nuvotec, which includes Mr. Robert Ferguson. We may claim reimbursement of the penalty, plus out of pocket expenses, paid or to be paid by us in connection with this matter from the escrow account. As of the date of this report, we have not been required to pay any earn-out to the former

shareholders of Nuvotec or deposit any amount into the escrow account pursuant to the agreement. Irrespective of the fact no amounts have been deposited into the escrow account, the former shareholders of Nuvotec, including Mr. Ferguson, agreed to pay and have paid \$152,250 of the \$304,500 penalty in satisfaction of their obligation under the indemnity provision in connection with the settlement with the EPA. Under the agreement between the Company and the former shareholders of Nuvotec, the \$152,250 penalty paid by the former shareholders of Nuvotec can be recouped by the Nuvotec shareholder by adding it to the potential \$4,400,000 earn-out payment. The \$152,250 can only be recouped if the \$4,400,000 has been entirely earned. The \$304,500 was paid to the EPA on November 18, 2008.

---

**NOTE 18**

**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 segment president to make decisions about resources to be allocated to the segment and assess its performance; and
- for which discrete financial information is available.

We currently have three operating segments, which are defined as each business line that we operate. This however, excludes corporate headquarters, which does not generate revenue, and our discontinued operations, which include certain facilities within our Industrial Segment. (See “Note 8 – Discontinued Operations and Divestitures” to “Notes to Consolidated Financial Statements”).

Our operating segments are defined as follows:

The Nuclear Waste Management Services Segment (“Nuclear Segment”) provides treatment, storage, processing and disposal of nuclear, low-level radioactive, mixed (waste containing both hazardous and non-hazardous constituents), hazardous and non-hazardous waste through our four facilities: Perma-Fix of Florida, Inc., Diversified Scientific Services, Inc., East Tennessee Materials and Energy Corporation, and Perma-Fix of Northwest Richland, Inc., which was acquired in June 2007.

The Consulting Engineering Services Segment (“Engineering Segment”) provides environmental engineering and regulatory compliance services through Schreiber, Yonley & Associates, Inc. which includes oversight management of environmental restoration projects, air, soil, and water sampling, compliance reporting, emission reduction strategies, compliance auditing, and various compliance and training activities to industrial and government customers, as well as, engineering and compliance support needed by our other segments.

The Industrial Waste Management Services Segment (“Industrial Segment”) provides on-and-off site treatment, storage, processing and disposal of hazardous and non-hazardous industrial waste, and wastewater through our three facilities; Perma-Fix of Ft. Lauderdale, Inc., Perma-Fix of Orlando, Inc., and Perma-Fix of South Georgia, Inc.

[Table of Contents](#)

The table below shows certain financial information of our operating segment for 2008, 2007, and 2006 (in thousands).

**Segment Reporting as of and for the year ended December 31, 2008**

	Nuclear Services	Engineering	Industrial	Segments Total	Corporate And Other <sup>(2)</sup>	Consolidated Total
Revenue from external customers	\$ 61,359(3)	\$ 3,194	\$ 10,951	\$ 75,504	\$ —	\$ 75,504
Intercompany revenues	2,915	709	886	4,510	—	4,510
Gross profit	15,610	1,072	3,512	20,194	—	20,194
Interest income	2	—	—	2	224	226
Interest expense	678	1	16	695	622	1,317
Interest expense-financing fees	—	—	—	—	137	137
Depreciation and amortization	4,328	32	463	4,823	43	4,866
Segment profit (loss)	4,908	418	1,803	7,129	(6,209)	920
Segment assets <sup>(1)</sup>	98,748	2,024	6,115	106,887	16,825(4)	123,712
Expenditures for segment assets	976	61	76	1,113	16	1,129
Total long-term debt	2,836	28	156	3,020	13,183	16,203

**Segment Reporting as of and for the year ended December 31, 2007**

	Nuclear Services	Engineering	Industrial	Segments Total	Corporate And Other <sup>(2)</sup>	Consolidated Total
Revenue from external customers	\$ 51,704(3)	\$ 2,398	\$ 10,442	\$ 64,544	\$ —	\$ 64,544
Intercompany revenues	3,103	1,069	785	4,957	—	4,957
Gross profit	16,505	760	1,735	19,000	—	19,000
Interest income	1	—	—	1	311	312
Interest expense	546	1	19	566	755	1,321
Interest expense-financing fees	—	—	—	—	196	196
Depreciation and amortization	3,763	36	225	4,024	68	4,092
Segment profit (loss)	6,599	245	(3,132)	3,712	(6,092)	(2,380)
Segment assets <sup>(1)</sup>	98,037	1,986	5,732	105,755	20,293(4)	126,048
Expenditures for segment assets	2,943	20	382	3,345	19	3,364
Total long-term debt	6,659	6	216	6,881	11,351	18,232

**Segment Reporting as of and for the year ended December 31, 2006**

	Nuclear Services	Engineering	Industrial	Segments Total	Corporate And Other <sup>(2)</sup>	Consolidated Total
Revenue from external customers	\$ 49,423(3)	\$ 3,358	\$ 15,424	\$ 68,205	\$ —	\$ 68,205
Intercompany revenues	2,433	558	1,432	4,423	—	4,423
Gross profit	20,930	797	3,318	25,045	—	25,045
Interest income	—	—	—	—	280	280
Interest expense	475	1	14	490	765	1,255
Interest expense-financing fees	1	—	—	1	191	192
Depreciation and amortization	2,931	38	583	3,552	77	3,629
Segment profit (loss)	12,452	252	(903)	11,801	(6,379)	5,422
Segment assets <sup>(1)</sup>	68,523	2,182	8,843	79,548	26,807(4)	106,355
Expenditures for segment assets	5,329	62	113	5,504	57	5,561
Total long-term debt	1,984	15	125	2,124	5,500	7,624

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

(2) Amounts reflect the activity for corporate headquarters, not included in the segment information.

(3) The consolidated revenues within the Nuclear Waste Management Services Segment include the LATA/Parallax revenue of \$4,841,000 or 6.4%, \$8,784,000 or 13.6%, and \$10,341,000 or 15.2% for 2008, 2007, and 2006, of total consolidated revenue, respectively. The consolidated revenue within the Nuclear Segment also include the Fluor Hanford revenue of \$7,974,000 or



10.6%, \$6,985,000 or 10.8%, and \$1,229,000 or 1.8% for 2008, 2007, and 2006, of total consolidated revenue, respectively. In addition, the consolidated revenue within the Nuclear Segment includes the CHPRC revenue of \$8,120,000 or 10.6% for 2008. We were awarded the subcontract from CHPRC in the second quarter of 2008.

- (4) Amount includes assets from our discontinued operations of \$761,000, \$8,626,000, and \$13,600,000 as of December 31, 2008, 2007, and 2006, respectively.

**NOTE 19**

**QUARTERLY OPERATING RESULTS (UNAUDITED)**

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

	Three Months Ended (unaudited)				
	March 31	June 30	Sept 30	Dec. 31	Total
<b>2008</b>					
Revenues	\$ 17,470	\$ 18,502	\$ 15,989	\$ 23,543	\$ 75,504
Gross profit	4,446	5,874	4,105	5,769	20,194
(Loss) income from continuing operations	(363)	733	(276)	826	920
Loss from discontinued operations, net of taxes	(675)	(383)	(159)	(115)	(1,332)
Gain on disposal of discontinued operations, net of taxes	2,107	108	94	14	2,323
Net income (loss)	1,069	458	(341)	725	1,911
Basic net (loss) income per common share:					
Continuing operations	(.01)	.02	(.01)	.01	.02
Discontinued operations	(.01)	(.01)	—	—	(.02)
Disposal of discontinued operations	.04	—	—	—	.04
Net (loss) income per common share	.02	.01	(.01)	.01	.04
Diluted net (loss) income per common share:					
Continued operations	(.01)	.02	(.01)	.01	.02
Discontinued operations	(.01)	(.01)	—	—	(.02)
Disposal of discontinued operations	.04	—	—	—	.04
Net (loss) income per common share	.02	.01	(.01)	.01	.04
<b>2007</b>					
Revenues	\$ 15,919	\$ 16,227	\$ 16,306	\$ 16,092	\$ 64,544
Gross Profit	5,062	5,213	4,613	4,112	19,000
Income (loss) from continuing operations	371	382	(404)	(2,729)	(2,380)
(Loss) income from discontinued operations, net of taxes	(1,455)	840	(1,549)	(4,666)	(6,830)
Net (loss) income applicable to Common Stockholders	(1,084)	1,222	(1,953)	(7,395)	(9,210)
Basic net income (loss) per common share:					
Continuing operations	.01	.01	(.01)	(.05)	(.05)
Discontinued operations	(.03)	.01	(.03)	(.09)	(.13)
Net income (loss) per common share	(.02)	.02	(.04)	(.14)	(.18)
Diluted net income (loss) per common share:					
Continued operations	.01	.01	(.01)	(.05)	(.05)
Discontinued operations	(.03)	.01	(.03)	(.09)	(.13)
Net income (loss) per common share	(.02)	.02	(.04)	(.14)	(.18)

Net loss in the third quarter of 2008 includes a recovery of impairment loss of \$507,000 for PFO within our continuing operations. Net income in the fourth quarter of 2008 includes a gain on the sale of property at PFO of \$483,000 within our continuing operations. Net loss in the third quarter of 2007 includes an impairment loss of \$564,000 within our discontinued operations. Net

loss in the fourth quarter of 2007 includes an impairment loss of \$3,967,000 within our discontinued operations and \$1,836,000 within our continuing operations.

---

**NOTE 20**

**SUBSEQUENT EVENT**

*Revolving Credit and Term Loan Agreement*

On March 5, 2009, we entered into another Amendment with PNC Bank to our Agreement. This Amendment increased our borrowing availability by approximately an additional \$2,200,000. In addition, pursuant to the Amendment, monthly interest due on our revolving line of credit was amended from prime plus 1/2% to prime plus 2.0% and monthly interest due on our Term Loan was amended from prime plus 1.0% to prime plus 2.5%. The Company also has the option to pay monthly interest due on the revolving line of credit by using the London Interbank Offer Rate ("LIBOR"), with the minimum floor base LIBOR rate of 2.5%, plus 3.0% and to pay monthly interest due on the Term Loan using the minimum floor base LIBOR rate of 2.5%, plus 3.5%. In addition, pursuant to the Amendment, the fixed charge coverage ratio was amended to reduce the availability monthly by \$48,000. The Amendment also allowed us to retain funds received from the sale of our PFO property. All other terms and conditions to the credit facility remain principally unchanged. As a condition of this Amendment, we agreed to pay PNC a fee of \$25,000. Funds made available under this Amendment were used to secure the additional financial assurance coverage needed by our DSSI subsidiary to operate under the PCB permit issued by the EPA on November 26, 2008 (see below "Insurance" for information regarding this financial assurance coverage).

*Insurance*

On November 26, 2008, the U.S. EPA Region 4 issued a permit to our DSSI facility to commercially store and dispose of PCBs. DSSI began the permitting process to add TSCA regulated wastes, namely PCBs, containing radioactive constituents to its authorization in 2004 in order to meet the demand for the treatment of government and commercially generated radioactive PCB wastes. In March 2009, we secured financial assurance coverage with AIG which will enable DSSI to receive and process wastes under this permit. We secured this financial assurance coverage requirement by increasing our initial 25-year finite risk insurance policy with AIG from maximum policy coverage of \$35,000,000 to \$39,000,000. Our coverage under this policy increased approximately \$5,421,000 from \$32,515,000 to approximately \$37,936,000 as result of this additional financial assurance coverage requirement for the DSSI permit. Payment for this financial assurance coverage requires a total payment of approximately \$5,219,000, consisting of an upfront payment of \$2,000,000, of which approximately \$1,655,000 will be deposited into a sinking fund account, with the remaining representing fee payable to AIG. In addition, we are required to make three yearly payments of approximately \$1,073,000 starting December 31, 2009, of which \$888,000 will be deposited into a sinking fund account, with the remaining to represent fee payable to AIG. We made our initial \$2,000,000 payment to AIG on March 6, 2009 from funds made available from an Amendment to our loan Agreement entered between us, our subsidiary, and PNC Bank, National Association, on March 5, 2009 (see "Risk Factors" for a discussion as to the potential risks relating to AIG).

*Financial Assurance for PFTS (Divested Industrial Segment Facility)*

In connection with the divestiture of PFTS, the buyer of PFTS's assets is required to replace our financial assurance bond with its own financial assurance mechanism for facility closures. Our financial assurance bond of \$685,000 for PFTS was required to remaining place until the buyer has provided replacement coverage. The respective regulatory authority will not release us from our financial assurance obligations until the buyer complies with the appropriate financial assurance regulations. The buyer of PFTS had submitted its financial assurance documentation, which had been under review by regulatory authority. On March 24, 2009, the respective regulatory authority authorized the release of our financial assurance bond of \$685,000 for PFTS. The buyer of PFTS' assets has provided its own financial assurance bond which was approved by the respective regulatory authority.

## ITEM CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL

### 9. DISCLOSURE

None.

## ITEM CONTROLS AND PROCEDURES

### 9A.

#### *Evaluation of disclosure, controls, and procedures.*

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic reports filed with the Securities and Exchange Commission (“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 our management. Based on their most recent evaluation, which was completed as of the end of the period covered by this Annual Report on Form 10-K, we have evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15 and 15d-15 of the Securities Exchange Act of 1934, as amended). In designing and evaluating our disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and are subject to certain limitations, including the exercise of judgment by individuals, the difficulty in identifying unlikely future events, and the difficulty in eliminating misconduct completely. Based upon that evaluation, we have concluded with the participation of our Chief Executive Officer and Chief Financial Officer that our disclosure controls and procedures were not effective as of December 31, 2008 because of material weaknesses to internal controls over financial reporting (“ICFR”) as set forth below.

#### *Management's Report on Internal Control over Financial Reporting*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) of the Securities Exchange Act of 1934. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements or fraudulent acts. A control system, no matter how well designed, can provide only reasonable assurance with respect to financial statement preparation and presentation.

Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit the preparation of the consolidated financial statements in accordance with generally accepted accounting principles in the United States of America, and that receipts and expenditures of the Company are being made only in accordance with appropriate authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements or fraudulent acts. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management, with the participation of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on

this evaluation, we concluded, with the participation of our Chief Executive Officer and Chief Financial Officer that the Company did not maintain effective internal control over financial reporting as of December 31, 2008 for the reasons described below.

BDO Seidman, LLP, an independent registered public accounting firm, audited the effectiveness of the Company's internal control over financial reporting, and based on that audit, issued their report which is included herein.

A significant deficiency is a control deficiency, or combination of control deficiencies that is less than material yet important enough to merit attention by those responsible for oversight of the company's financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis.

As of December 31, 2008, the following material weaknesses were identified:

- The monitoring of pricing, invoicing, and the corresponding inventory for transportation and disposal process controls at facilities within the Company's Industrial Segment were ineffective and were not being applied consistently. This weakness could result in sales being priced and invoiced at amounts, which were not approved by the customer or the appropriate level of management, and inaccurate corresponding transportation and disposal expense.
- The design and operation of payroll, pricing and invoicing controls for our subcontract awarded to our East Tennessee Materials & Energy Corporation ("M&EC") subsidiary by the Department of Energy's ("DOE") general contractor, CH Plateau Remediation Company ("CHPRC") were ineffective and were not being applied consistently. This weakness could result in invoices, expenses, and revenue recognized at amounts that were not validated and approved by the customer and the appropriate level of management.
- The control for the recognition of processed/disposed revenue at our Perma-Fix Northwest Richland, Inc. ("PFNWR") subsidiary was ineffective and not being applied consistently. This weakness could result in a material amount of revenue being recognized in an incorrect financial reporting period.

The ICFR material weaknesses identified above were partly due to the following:

- As a result of our decision in September 2008 to retain our remaining Industrial Segment operations, we were unable to correct this deficiency before the end of 2008. Certain system upgrades, as well as the time to implement these upgrades, are necessary.
- The new CHPRC subcontract was implemented in October 2008. The administrative requirements of this subcontract were ongoing throughout the fourth quarter of 2008 and the Company was unable to document, implement, and test controls before the end of 2008.
- We acquired PFNWR in 2007 and have not yet fully implemented these controls.

We are in the process of developing formal remediation plans for the Audit Committee's review and approval.

## Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders  
Perma-Fix Environmental Services, Inc.  
Atlanta, Georgia

We have audited Perma-Fix Environmental Services, Inc. and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2008, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying "Item 9A, Management's Report on Internal Control Over Financial Reporting". Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or a combination of control deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weaknesses have been identified and included in management's assessment:

- Deficiencies in the design and operation of the quote to invoice controls at PFNWR primarily caused by a lack of precision, reconciliation, monitoring, and oversight in its spreadsheet based waste tracking system. This deficiency resulted in audit adjustments to the Company's 2008 annual consolidated financial statements.
- Deficiencies exist in the design and operation of the payroll controls and quote to invoice controls for the cost-plus CHPRC contract.

[Table of Contents](#)

- Deficiencies in the monitoring and execution of certain pricing and invoicing process controls at facilities within the Company's Industrial Segment were identified and others were not being applied consistently.
- Deficiencies exist in controls at certain facilities within the Industrial Segment over tracking material for transportation and disposal and the monitoring, oversight, and review of related accrual and revenue calculations.

These material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2008 consolidated financial statements, and this report does not affect our report dated March 30, 2009 on those consolidated financial statements.

In our opinion, Perma-Fix Environmental Services, Inc. and subsidiaries did not maintain, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on the COSO criteria.

We do not express an opinion or any other form of assurance on management's statements referring to any corrective actions taken by the Company after the date of management's assessment.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2008, and our report dated March 30, 2009 expressed an unqualified opinion thereon.

/s/ BDO Seidman, LLP

Atlanta, Georgia  
March 30, 2009

## ITEM OTHER INFORMATION

### 9B.

None.

## PART III

## ITEM DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

### 10.

#### DIRECTORS

The following table sets forth, as of the date hereof, information concerning our Directors:

<u>NAME</u>	<u>AGE</u>	<u>POSITION</u>
Dr. Louis F. Centofanti	65	Chairman of the Board, President and Chief Executive Officer
Mr. Jon Colin	53	Director
Mr. Robert L. Ferguson	76	Director
Mr. Jack Lahav	60	Director
Mr. Joe R. Reeder	61	Director
Mr. Larry M. Shelton	55	Director
Dr. Charles E. Young	77	Director
Mr. Mark A. Zwecker	58	Director

Each director is elected to serve until the next annual meeting of stockholders.

#### **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. Jon Colin**

Mr. Colin has served as a Director since December 1996. Mr. Colin is currently President and Chief Executive Officer of LifeStar Response Corporation, a position he has held since April 2002. 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 is also a Director at LifeStar Response Corporation, Bamnet Inc, and Environmental Quality Management, Inc. Mr. Colin has a B.S. in Accounting from the University of Maryland.

#### **Mr. Robert L. Ferguson**

Mr. Ferguson has served as a Director since August 2007. Mr. Ferguson was nominated to serve as a Director and subsequently elected as a board member in connection with the acquisition by the Company of our PFNWR facility (formerly Nuvotec and its wholly owned subsidiary, PEcoS) in 2007 (See "Certain Relationships and Related Party Transactions and Director Independence – Mr. Robert L. Ferguson"). Mr. Ferguson currently serves as President of Columbia Nuclear, LLC and as a member of the Board of Directors of Vivid Learning System, a publicly traded company. Mr. Ferguson served as Chief Executive Officer and Chairman of the Board of Directors of Nuvotec and PEcoS from December 1998 until its

acquisition by us in June 2007. Mr. Ferguson has over 45 years of management and technical experience in the government and private sectors. He served as Chairman of the Board of Technical Resources International, Inc. from 1995 to 1998, Chairman of the Board for UNC Nuclear Industries, Inc. from 1983 to 1985, and CEO for Washington Public Power Supply System from 1980 to 1983. His government experience from 1961 to 1980 includes various roles for the Atomic Energy Commission, the Energy Research and Development Administration, and the U.S. Department of Energy, including his last assignment as Deputy Assistant Secretary of Nuclear Reactor Programs. Mr. Ferguson also served on the Board of British Nuclear Fuels Inc. He was a founder of Columbia Trust Bank, where he served as a director prior to its acquisition by American West Bank. Mr. Ferguson received his B.S. in Physics from Gonzaga University and attended the US Army Ordnance Guided Missile School, the Oak Ridge School of Reactor Technology, and the Federal Executive Institute.

**Mr. Jack Lahav**

Jack Lahav has served as a Director since September 2001. Mr. Lahav is a private investor, specializing in launching and growing businesses. Mr. Lahav devotes much of his time to charitable activities, serving as president, as well as, board member of several charities. Previously, Mr. Lahav founded Remarkable Products Inc. and served as its president from 1980 to 1993. Mr. Lahav was also co-founder of Lamar Signal Processing, Inc., a digital signal processing company; president of Advanced Technologies, Inc., a robotics company and director of Vocaltech Communications, Inc. Mr. Lahav served as Chairman of Quigo Technologies from 2001 to 2004 and currently serves as Chairman of Phoenix Audio Technologies and Doclix Inc, two privately held companies.

**Honorable Joe R. Reeder**

Mr. Reeder has served as a Director since April 2003. From April 1999 to January 2008, he served as Shareholder in Charge of the Mid-Atlantic Region for Greenberg Traurig LLP, one of the nation's largest law firms, with 29 offices and over 1750 attorneys, worldwide, where he continues his practice. His clientele includes sovereign nations, international corporations, and law firms throughout the U.S. As the 14th Undersecretary of the U.S. Army (1993-97), Mr. Reeder also served for three years as Chairman of the Panama Canal Commission's Board of Directors where he oversaw a multibillion-dollar infrastructure program. He sits on the Board of Governor's of the National Defense Industry Association (NDIA) (and chairs NDIA's Ethics Committee), the Armed Services YMCA, the USO, and many other corporate and charitable organizations, and is a frequent television commentator on legal and national security issues. A graduate of West Point who served in the 82d Airborne Division following Ranger School, Mr. Reeder also has a J.D. from the University of Texas and an L.L.M. from Georgetown University.

**Mr. Larry M. Shelton**

Mr. Shelton has served as a Director since July 2006. Mr. Shelton is currently Chief Financial Officer of S K Hart Management, LC, an investment holding company. He has held this position since 1999. Mr. Shelton was Chief Financial Officer of Envirocare of Utah, Inc., a waste management company from 1995 until 1999. Mr. Shelton serves on the Board of Directors of Subsurface Technologies, Inc., and Pony Express Land Development, Inc. Mr. Shelton has a B.A. in accounting from the University of Oklahoma.

**Dr. Charles E. Young**

Dr. Charles E. Young has served as a Director since July 2003. Dr. Young has assumed the position of Chief Executive Officer of the Los Angeles Museum of Contemporary Art in January 2009. Dr. Young was president of the University of Florida, a position he held from November 1999 to January 2004. Dr. Young also served as chancellor of the University of California at Los Angeles (UCLA) for 29 years until his retirement in 1997. Dr. Young was formerly the chairman of the Association of American Universities and served on numerous commissions including the American Council on Education, the National Association of State Universities and Land-Grant Colleges, and the Business-Higher Education Forum. Dr. Young serves on the Board of Directors of I-MARK, Inc., a software and professional services company and AAFL Enterprises, a sports development Company. He previously served on the Board of Directors of Intel Corp., Nicholas-Applegate Growth Equity Fund, Inc., Fiberspace, Inc., and Student Advantage, Inc. Dr. Young

has a Ph.D. and M.A. in political science from UCLA and a B.A. from the University of California at Riverside.

**Mr. Mark A. Zwecker**

Mark Zwecker has served as a Director since the Company's inception in January 1991. Mr. Zwecker assumed the position of Director of Finance in 2006 for Communications Security and Compliance Technologies, Inc., a software company developing security products for the mobile workforce, and also serves as an advisor to Plum Combustion, Inc., an engineering and manufacturing company developing high performance combustion technology. Mr. Zwecker served as president of ACI Technology, LLC, from 1997 until 2006, and was vice president of finance and administration for American Combustion, Inc., 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.

**AUDIT COMMITTEE**

We have a separately designated standing Audit Committee of our Board of Directors. The members of the Audit Committee are: Mark A. Zwecker, Jon Colin, and Larry M. Shelton.

Our Board of Directors has determined that each of our Audit Committee members is an “audit committee financial expert” as defined by Item 407(d)(5)(ii) of Regulation S-K of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The Board has further determined that each director, other than Dr. Centofanti and Mr. Ferguson, is “independent” within the meaning of the applicable NASDAQ listing standards.

Dr. Centofanti is not deemed to be an “independent director” because of his employment as a senior executive of the Company. The Board of Directors also does not consider Mr. Ferguson to be “independent” because (a) he served as the Chief Executive Officer and Chairman of the Board of Directors of Nuvotec and its wholly owned subsidiary Pacific EcoSolutions, Inc. (PEcoS), (n/k/a Perma-Fix Northwest, Inc. and Perma-Fix Northwest Richland, Inc., respectively), our acquired subsidiary in June 2007, (b) as a former shareholder of Nuvotec who is “accredited” under the rules of Regulation D under the Act, the Company paid Mr. Ferguson a total of \$224,560 cash and issued to him 192,783 shares of our Common Stock in July 2007, (c) he is entitled to receive certain contingent consideration under the terms of the acquisition, which he has not received any consideration as of the date of this report, (d) Mr. Ferguson guaranteed \$4,000,000 of bank debt and a \$1,750,000 line of credit assumed by us in the acquisition, which the \$1,750,000 line of credit was released when we replaced the financial assurance of PEcoS deposited with the State of Washington with our financial assurance and which the \$4,000,000 of bank debt was paid off by the Perma-Fix in December 2008, and (e) Mr. Ferguson, as a former shareholder of Nuvotec, is entitled to his proportionate share of a \$2,500,000 note payable by the Company to the former shareholders of Nuvotec. The foregoing consideration includes the amounts and shares paid and payable to entities controlled by Mr. Ferguson. See “Certain Relationships and Related Transactions and Director Independence Mr. Robert L. Ferguson” for a discussion of certain transactions with Mr. Ferguson.

**CORPORATE GOVERNANCE AND NOMINATING COMMITTEE**

We have a separately-designated standing Corporate Governance and Nominating Committee (the “Nominating Committee”). Members of the Nominating Committee during 2008 were Dr. Charles E. Young (Chairperson), Jack Lahav, Joe Reeder, and Larry Shelton. All members of the Corporate Governance and Nominating Committee are “independent” as that term is defined by the current NASDAQ listing standards.

## EXECUTIVE OFFICERS

See Item 4A – “Executive Officers of the Registrant” in Part I of this report for information concerning our executive officers, as of the date hereof.

There are no family relationships between any of the directors or executive officers.

### Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act, and the regulations promulgated thereunder require our executive officers and directors and beneficial owners of more than 10% of our Common Stock to file reports of ownership and changes of ownership of our Common Stock with the Securities and Exchange Commission, and to furnish us with copies of all such reports. Based solely on a review of the copies of such reports furnished to us and written information provided to us, we believe that during 2008 none of our executive officers, directors, or beneficial owners of more than 10% of our Common Stock failed to timely file reports under Section 16(a).

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 as agent 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, individually or as a group, 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 (a) to file, and has not filed, reports under Section 16(a) of the Exchange Act or (b) 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 our Preferred Stock that were convertible into a maximum of 1,282,798 shares of our Common Stock. If either Capital Bank or a group of Capital Bank’s investors became a beneficial owner of more than 10% of our Common Stock on February 9, 1996, or at any time thereafter, and thereby required to file reports under Section 16(a) of the Exchange Act, then Capital Bank has failed to file a Form 3 or any Forms 4 or 5 since February 9, 1996. (See “Item 12 - Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matter – Security Ownership of Certain Beneficial Owners” for a discussion of Capital Bank’s current record ownership of our securities).

### Code of Ethics

Our Code of Ethics applies to all our executive officers and is available on our website at [www.perma-fix.com](http://www.perma-fix.com). If any amendments are made to the Code of Ethics or any grants of waivers are made to any provision of the Code of Ethics to any of our executive officers, we will promptly disclose the amendment or waiver and nature of such amendment of waiver on our website.

## ITEM EXECUTIVE COMPENSATION

### 11.

#### Compensation Discussion and Analysis

Our long-term success depends on our ability to efficiently operate our facilities, evaluate strategic acquisitions within our Nuclear Segment, and to continue to research and develop innovative technologies in the treatment of nuclear waste, mixed waste and industrial waste. To achieve these goals, it is important

that we be able to attract, motivate, and retain highly talented individuals who are committed to our values and goals.

The Compensation and Stock Option Committee (for purposes of this analysis, the “Committee”) of the Board has responsibility for establishing, implementing and continually monitoring adherence with our compensation philosophy. The Committee ensures that the total compensation paid to the named executive officers is fair, reasonable and competitive. Generally, the types of compensation and benefits provided to members of the named executive officers are similar to those provided to other executive officers at similar sized companies and industries.

### **Compensation Philosophy and Objectives**

The Committee bases its executive compensation program on our performance objectives. The Committee evaluates both executive performance and compensation to ensure that we maintain our ability to attract superior employees in key positions and to remain competitive relative to the compensation paid to similarly situated executives of our peer companies. The Committee believes executive compensation packages provided to our executives, including the named executive officers, should include both cash and equity-based compensation that provide rewards for performance. The Committee bases its executive compensation program on the following philosophy:

- Compensation should be based on the level of job responsibility, executive performance, and company performance.
- Executive officers’ pay should be more closely linked to company performance than that of other employees because the executive officers have a greater ability to affect our results.
- Compensation should be competitive with compensation offered by other companies that compete with us for talented individuals.
- Compensation should reward performance.
- Compensation should motivate executives to achieve our strategic and operational goals.

### **Role of Executive Officers in Compensation Decisions**

The Committee makes all compensation decisions for the named executive officers and equity awards to all of our officers. Decisions regarding the non-equity compensation of other officers are made by the Chief Executive Officer.

The Chief Executive Officer annually reviews the performance of each of the named executive officers (other than the Chief Executive Officer whose performance is reviewed by the Committee). Based on such reviews, the Chief Executive Officer presents a recommendation to the Committee, which may include salary adjustments, bonus and equity based awards, and annual award. The Committee considers such recommendation in light of the compensation philosophy and objectives described above and the process described below. Based on its analysis, the Committee exercises its discretion in accepting or modifying all such recommendations. The Chief Executive Officer is not present during the voting or deliberations of the Committee with respect to the Chief Executive Officer’s compensation.

### **The Committee’s Processes**

The Compensation Committee has established certain processes designed to achieve our executive compensation objectives. These processes include the following:

- *Company Performance Assessment.* The Committee assesses our performance in order to establish compensation ranges and, as described below, to establish specific performance measures that determine incentive compensation under the Company’s Executive Management Incentive Plan.

For this purpose, the Committee considers numerous measures of performance of both us and industries with which we compete.

- *Individual Performance Assessment.* Because the Committee believes that an individual's performance should effect an individual's compensation, the Committee evaluates each named executive officer's performance. With respect to the named executive officers, other than the Chief Executive Officer, the Committee considers the recommendations of the Chief Executive Officer. With respect to all named executive officers, the Committee exercises its judgment based on its interactions with the executive officer, such officer's contribution to our performance and other leadership achievements.
- *Peer Group Assessment.* The Committee benchmarks our compensation program with a group of companies against which the Committee believes we compete for talented individuals (the "Peer Group"). The composition of the Peer Group is periodically reviewed and updated by the Committee. The companies currently comprising the Peer Group are Clean Harbors, Inc., American Ecology Corporation, and EnergySolutions, Inc., each of which is a waste disposal/management company. The Committee considers the Peer Group's executive compensation programs as a whole and the compensation of individual officers in the Peer Group, if job responsibilities are meaningfully similar. The Committee also considers individual factors such as experience level of the individual and market conditions. The Committee believes that the Peer Group comparison helps insure that our executive compensation program is competitive with other companies in the industry.

### **2008 Executive Compensation Components**

For the fiscal year ended December 31, 2008, the principal components of compensation for executive officers were:

- base salary;
- performance-based incentive compensation;
- long term incentive compensation;
- retirement and other benefits; and
- perquisites and other personal benefits.

Based on the Summary Compensation Table on page 121, salary accounted for approximately 73.3% of the total compensation of the executive officers while non-equity incentive, option award, and other compensation accounted for approximately 26.7% of the total compensation of the executive officers.

### **Base Salary**

The named executive officers, other officers, and other employees of the Company receive a base salary during the fiscal year. Base salary ranges for executive officers are determined for each executive based on his or her position and responsibility by using market data and comparisons to the Peer Group.

During its review of base salaries for executives, the Committee primarily considers:

- market data and Peer Group comparisons;
- internal review of the executive's compensation, both individually and relative to other officers; and
- individual performance of the executive.

Salary levels are typically considered annually as part of the performance review process as well as upon a promotion or other change in job responsibility. Merit based salary increases for executives are based on the Committee's assessment of the individual's performance.

### **Performance-Based Incentive Compensation**

The Committee has the latitude to design cash and equity-based incentive compensation programs to promote high performance and achievement of our corporate objectives by Directors and the named executives, encourage the growth of stockholder value and enable employees to participate in our long-term growth and profitability. The Committee may grant stock options and/or performance bonuses. In granting these awards, the Committee may establish any conditions or restrictions it deems appropriate. In addition, the Chief Executive Officer has discretionary authority to grant stock options to certain high-performing executives.

All awards of stock options are made at or above the market price at the time of the award. Stock options may be awarded to newly hired or promoted executives at the discretion of the Committee, following the hiring or promotion. Grants of stock options to newly hired executive officers who are eligible to receive them are made at the next regularly scheduled Committee meeting following their hire date.

### **Executive Management Incentive Plan**

The Company maintains an Executive Management Incentive Plan (the “MIP”), which is an annual cash incentive program. The MIP provides guidelines for the calculation of annual cash incentive based compensation, subject to Committee oversight and modification. In 2008, the Committee approved individual MIP plan for our Chief Executive Officer, Chief Financial Officer, and Chief Operating Officer. Each MIP provided cash compensation based on achievement of performance thresholds, with the amount of such compensation established as a percentage of based salary. The potential target performance compensation ranges from 25% to 44% of the 2008 base salary for the Chief Financial Officer and 50% to 87% of the base salary for both the Chief Operating Officer and Chief Executive Officer.

The performance compensation is based upon achievement of corporate financial, safety, and environmental compliance objectives during fiscal year 2008. Of the total potential performance compensation, 55% is based on net income goals, 15% is based on revenue goals, 15% is based on the number of health and safety claim incidents that occur during fiscal year 2008, and the remaining 15% is based on the number of permit or license violations that occur during the fiscal year. The revenue and net income components are based on our financial performance as compared to our Board approved 2008 budget.

Performance compensation earned under each MIP by the Chief Executive Officer, Chief Operating Officer, and Chief Financial Officer are reduced by 15% if unbilled trade receivable balances older than December 31, 2006 is not reduced by \$3,000,000 or more from the unbilled balance as of December 31, 2007 to December 31, 2008. The minimum performance compensation becomes payable upon achieving between 85% to 100% of corporate performance objectives, with the maximum performance compensation becoming payable upon achieving 161% of such objectives. Generally, the Committee sets the revenue and net income components of the performance compensation objectives using our annually approved budget for the upcoming fiscal year. In making the annual determination of the minimum and maximum performance levels, the Committee may consider the specific circumstances facing the Company during the coming year. The Committee generally sets the minimum and maximum levels such that the relative difficulty of achieving these levels is consistent from year to year. In 2006, each named executive officer achieved above the minimum performance compensation level but below the maximum performance compensation level. None of the named executive officers met the minimum performance compensation level in 2007 or 2008.

The annual MIP compensation is calculated and prepaid on a quarterly basis. The following table sets forth the MIP compensation earned in fiscal year 2008 under the MIP:

Name	MIP	MIP	MIP	MIP	Total
	Compensation 1st Qtr 2008	Compensation 2nd Qtr 2008	Compensation 3rd Qtr 2008	Compensation 4th Qtr 2008	
Dr. Louis Centofanti	\$ 22,359	\$ —	\$ —	\$ —	\$ 22,359
Larry McNamara	\$ 19,874	\$ —	\$ —	\$ —	\$ 19,874
Steven T. Baughman <sup>(1)</sup>	\$ 9,937	\$ —	\$ —	\$ —	\$ 9,937

<sup>(1)</sup> Resigned as Chief Financial Officer, effective October 31, 2008.

If at the conclusion of any calendar quarter, the MIP compensation prepayment due to the Chief Executive Officer, Chief Operating Officer, or Chief Financial Officer is less than the amount prepaid in the previous quarters during 2008 to such individual and the overpayment exceeds \$25,000, the MIP participant will reimburse the Company for the amount of the overpayment through payroll deductions in accordance with the Company's normal payroll practices. Because the overpayment in 2008 was less than \$25,000, the overpayment was retained by the executive in accordance with the terms of the MIP.

If the MIP participant's employment with the Company is voluntarily or involuntarily terminated prior to a regularly scheduled MIP compensation payment period, no MIP payment will be payable for and after such period. The Committee retains the right to modify, change or terminate each MIP at any time and for any reason.

### **Long-Term Incentive Compensation**

#### **Employee Stock Option Plan**

The 2004 Stock Option Plan (the "2004 Option Plan") encourages participants to focus on long-term performance and provides an opportunity for executive officers and certain designated key employees to increase their stake in us. Stock options succeed by delivering value to the executive only when the value of our stock increases. The Option Plan authorizes the grant of non-qualified stock options and incentive stock options for the purchase of Common Stock.

The Option Plan assists the Company to:

- enhance the link between the creation of stockholder value and long-term executive incentive compensation;
- provide an opportunity for increased equity ownership by executives; and
- maintain competitive levels of total compensation.

Stock option award levels are determined based on market data, vary among participants based on their positions with us and are granted generally at the Committee's regularly scheduled August meeting. Newly hired or promoted executive officers who are eligible to receive options are generally awarded such options at the next regularly scheduled Committee meeting following their hire or promotion date.

Options are awarded with an exercise price equal to or not less than the closing price of the Company's Common Stock on the date of the grant as reported on the NASDAQ. In certain limited circumstances, the Committee may grant options to an executive at an exercise price in excess of the closing price of the Company's Common Stock on the grant date. The Committee will not grant options with an exercise price that is less than the closing price of the Company's Common Stock on the grant date.

On August 5, 2008, the Committee, with the approval of our Board of Directors authorized the grant of incentive stock options ("ISO") to certain executive officers, officers and employees of the Company which allows for the purchase of up to 918,000 shares of Common Stock under the Company's 2004 Stock Option Plan (see "Grant of Plan-Based Award" for options granted to our named executive officers from the August 5, 2008 grant). The options have a six year term with a staggered vesting period of three years at 33.3% increment per year. No options were granted to any named executives in 2007 due to timing

constraints resulting from our acquisition of PFNWR and divestiture efforts of our Industrial Segment facilities. The stock options granted prior to 2006 generally have a ten year term with annual vesting of 20% over a five year period. In anticipation of the adoption of SFAS 123R, on July 28, 2005, the Committee accelerated the vesting of all then outstanding and unvested options. The options granted in 2006 by the Committee are for a six year term with vesting period of three years at 33.3% increment per year. Vesting ceases upon termination of employment and exercise right of the vested option amount ceases upon three months from termination of employment except in the case of death or retirement (subject to a six month limitation), or disability (subject to a one year limitation). Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option.

In the event of a change of control (as defined in the “1993 Non-Qualified Stock Option Plan” and “2004 Stock Option Plan”) 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.

The August 5, 2008, ISO grant as mentioned above, included 150,000, 150,000, 40,000 and 90,000 options made to our Chief Executive Officer, Chief Operating Officer, Interim Chief Financial Officer (who was named as our Chief Financial Officer by our Board of Director on February 26, 2009), and previous Chief Financial Officer, respectively. The 90,000 ISO grant to our previous Chief Financial Officer was forfeited upon his resignation, effective October 31, 2008.

#### *Accounting for Stock-Based Compensation*

On January 1, 2006, we adopted Financial Accounting Standards Board (“FASB”) Statement No. 123 (revised) (“SFAS 123R”), *Share-Based Payment*, a revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation*, superseding APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and its related implementation guidance. This Statement establishes accounting standards for entity exchanges of equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity's equity instruments or that may be settled by the issuance of those equity instruments. SFAS 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values.

We adopted SFAS 123R utilizing the modified prospective method in which compensation cost is recognized beginning with the effective date based on SFAS 123R requirements for all (a) share-based payments granted after the effective date and (b) awards granted to employees and directors prior to the effective date of SFAS 123R that remain unvested on the effective date.

Prior to our adoption of SFAS 123R, on July 28, 2005, the Compensation and Stock Option Committee of the Board of Directors approved the acceleration of vesting for all the outstanding and unvested options to purchase Common Stock awarded to employees as of the approval date. The Board of Directors approved the accelerated vesting of these options based on the belief that it was in the best interest of our stockholders to reduce future compensation expense that would otherwise be required in the statement of operations upon adoption of SFAS 123R, effective beginning January 1, 2006. See impact of FASB Statement 123(R) on our operating results in “Note 3 – Stock Based Compensation” to “Notes to Consolidated Financial Statements”.

#### **Retirement and Other Benefits**

##### **401(k) Plan**

We 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 full-time employees who have attained the age of 18 are eligible to participate in the 401(k) Plan. Eligibility is immediate upon employment but enrollment is only allowed during two yearly open periods of January 1 and July 1. Participating employees may make annual

pretax contributions to their accounts up to 100% 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 matched 25% of our employees' contributions in 2008. We contributed \$401,000 in matching funds during 2008, with approximately \$20,625 for our named executive officers during 2008. Effective March 1, 2009, the Company suspended its matching contribution in an effort to reduce costs in light of the recent economic environment. The Company will evaluate the reversal of this suspension as the economic environment improves (See the Summary Compensation Table on page 121 for information about our contributions to the named executive officers).

#### **Perquisites and Other Personal Benefits**

The Company provides executive officers with limited perquisites and other personal benefits that the Company and the Committee believe are reasonable and consistent with its overall compensation program to better enable the Company to attract and retain superior employees for key positions. The Committee periodically reviews the levels of perquisites and other personal benefits provided to executive officers. The executive officers are provided an auto allowance.

#### **Proposed Employment Agreements**

On March 1, 2007, the Board of Directors authorized us to enter into employment agreements with our named executives, subject to finalization of certain of its material terms, including, but not limited to, the formula for paying year-end incentive bonuses. As of the date of this report, the terms of the employment agreements have not been finalized, and none of our named executives has entered into any employment agreement with us. However, we anticipate that employment agreements will be finalized during the second quarter of 2009 for each of our Chief Executive Officer, Chief Financial Officer, and Chief Operating Officer, subject to the review of our Audit Committee and approval of the Board of Directors.

It is anticipated that such proposed employment agreements, if completed, would be effective for three years, unless earlier terminated by us with or without cause or by the executive officer for "good reason" or any other reason. If the executive officer's employment is terminated due to death, disability or for cause, it is anticipated that we would pay to the executive officer or to his estate a lump sum equal to the sum of any unpaid base salary through the date of termination and any benefits due to the executive officer under any employee benefit plan, excluding any severance program or policy (the "Accrued Amounts").

If the executive officer terminates his employment for good reason or is terminated without cause, it is anticipated that the employment agreements will provide that we would be required to pay the executive officer a sum equal to the total Accrued Amounts and one year of full base salary. If the executive terminates his employment for a reason other than for good reason, it is anticipated that the Company would pay to the executive the amount equal to the Accrued Amounts. The employment agreements would provide, when finalized, that if there is a Change in Control (to be defined in the agreements), that all outstanding stock options to purchase common stock held by the executive officer will immediately become exercisable in full.

#### **Compensation Committee Report**

The Committee of the Company has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management and, based on such review and discussions, the Committee recommended to the Board that the Compensation Discussion and Analysis be included in this Form 10-K.

#### **THE COMPENSATION AND STOCK OPTION COMMITTEE**

Jack Lahav, Chairman

Jon Colin

Joe Reeder

Dr. Charles E. Young

**Summary Compensation Table**

The following table summarizes the total compensation paid or earned by each of the executive officers for the fiscal years ended December 31, 2008, 2007, and 2006. Currently, we do not have any employment agreements with any of the named executive officers, but see the discussion under “Compensation and Discussion Analysis – Proposed Employment Agreements”.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary</u> (\$)	<u>Bonus</u> (\$) <sup>(3)</sup>	<u>Option Awards</u> (\$) <sup>(4)</sup>	<u>Non-Equity Incentive Plan Compensation</u> (\$) <sup>(5)</sup>	<u>All other Compensation</u> (\$) <sup>(7)</sup>	<u>Total Compensation</u> (\$)
Dr. Louis Centofanti Chairman of the Board, President and Chief Executive Officer	2008	251,410	—	52,556	22,359 <sup>(6)</sup>	12,875	339,200
	2007	241,560	—	28,918	17,550	12,875	300,903
	2006	232,269	—	24,098	143,324	13,601	413,292
Ben Naccarato <sup>(1)</sup> Vice President and Chief Financial Officer	2008	176,136	—	7,749	—	3,875	187,760
	2007	166,610	25,000	1,446	—	3,125	196,181
	2006	150,192	13,315	1,205	—	9,277	173,989
Steven Baughman <sup>(2)</sup> Vice President and Chief Financial Officer	2008	196,573	—	10,811	9,937 <sup>(6)</sup>	11,375	228,697
	2007	205,200	—	29,230	7,800	12,875	255,105
	2006	123,077	—	18,419	63,709	9,000	214,205
Larry McNamara Chief Operating Officer	2008	214,720	—	95,933	19,874 <sup>(6)</sup>	12,875	343,403
	2007	206,769	—	72,295	15,000	12,875	306,939
	2006	193,558	—	60,246	122,500	12,750	389,054
Robert Schreiber, Jr. President of SYA	2008	184,588	88,386 <sup>(8)</sup>	11,169	—	12,676	296,819
	2007	197,000	35,204	7,230	—	18,114	257,548
	2006	158,292	5,915	6,025	—	14,502	184,734

(1) Named as Chief Financial Officer and Secretary of the Board of Directors by the Company’s Board of Directors on February 26, 2009. Mr. Naccarato was named as Interim Chief Financial Officer and Secretary of the Board of Directors effective November 1, 2008 by the Company’s Board of Directors on October 24, 2008.

(2) Resigned as Chief Financial Officer, Vice President, and Secretary of the Board of Director effective October 31, 2008.

(3) No bonus was paid to a named executive officer, except as part of a non-equity incentive plan.

(4) This amount reflects the expense to the Company for financial statement reporting purposes for the fiscal year indicated, in accordance with FAS 123(R) of options granted under the 2004 Option Plan. There was no expense for options granted prior to 2006, which were fully vested prior to 2006, and are not included in these amounts. Assumptions used in the calculation of this amount are included in “Note 3 – Share Based Compensation” to “Notes to Consolidated Financial Statement”. No options were granted to any named executives in 2007.

(5) Represents performance compensation earned under the Company’s MIP. The MIP is described under the heading “Executive Management Incentive Plan” in this section.

(6) Represents 2008 performance compensation earned in 2008 under the Company’s MIP.



[Table of Contents](#)

- (7) The amount shown includes a monthly automobile allowance of \$750 or the use of a company car, and where applicable, our 401(k) matching contribution.

Name	401(k) match	Auto Allowance or Company Car	Total
Dr. Louis Centofanti	\$ 3,875	\$ 9,000	\$ 12,875
Ben Naccarato	\$ 3,875	\$ —	\$ 3,875
Steven Baughman	\$ 3,875	\$ 7,500	\$ 11,375
Larry McNamara	\$ 3,875	\$ 9,000	\$ 12,875
Robert Schreiber, Jr.	\$ 5,125	\$ 7,551	\$ 12,676

- (8) Amount includes \$87,886 in bonus earned for 2008, which we anticipate paying by the second quarter of 2009.

The compensation plan under which the awards in the following table were made are generally described in the Compensation Discussion and Analysis beginning on page 114 and include the Company's MIP, which is a non-equity incentive plan, and the Company's 2004 Stock Option Plan, which provides for grant of stock options to our employees.

**Grant of Plan-Based Awards Table**

Estimated Future Payouts Under Non-Equity Incentive Plan Awards

Name	Grant Date	Threshold \$	Target \$ <sup>(1)</sup>	Maximum \$ <sup>(1)</sup>	All other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards (\$/Sh)	Grant Date Fair Value of Option Awards (\$)(3)
Dr. Louis Centofanti	8/5/2008	—	—	—	150,000	2.28	175,500
	N/A	—	126,547	221,455	—	—	—
Ben Naccarato	8/5/2008	—	—	—	40,000	2.28	46,800
	N/A	—	—	—	—	—	—
Steven Baughman	8/5/2008	—	—	—	90,000 <sup>(2)</sup>	2.28	105,300
	N/A	—	54,080	94,639	—	—	—
Larry McNamara	8/5/2008	—	—	—	150,000	2.28	175,500
	N/A	—	108,160	189,278	—	—	—
Robert Schreiber, Jr.	8/5/2008	—	—	—	25,000	2.28	29,250
	N/A	—	—	—	—	—	—

- (1) The amounts shown in column titled "Target" reflects the minimum payment level under the Company's Executive Management Incentive Plan which is paid with the achievement of 85% to 100% of the target amount. The amount shown in column titled "Maximum" reflects the maximum payment level of reaching 161% of the target amount. These amounts are based on the individual's current salary and position.

- (2) Resigned as Chief Financial Officer effective October 31, 2008. The options granted were forfeited by Mr. Baughman upon his resignation.

- (3) Calculated using the fair value of \$1.17 per share as determined on the date of grant in accordance with FAS 123(R) times the number of options granted.

**Outstanding Equity Awards at Fiscal Year**

The following table sets forth unexercised options held by the named executive officers as of the fiscal year-end.

**Outstanding Equity Awards at December 31, 2008**

Name	Option Awards					Option Exercise Price (\$)	Option Expiration Date
	Number of Securities underlying Unexercised Options (#) Exercisable	Number of Securities underlying Unexercised Options (#) <sup>(1)</sup> Unexercisable	Number of Securities underlying Unexercised Options (#) <sup>(1)</sup> Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)		
Dr. Louis Centofanti	70,000	—	—	—	1.25	4/10/2010	
	100,000	—	—	—	1.75	4/3/2011	
	100,000	—	—	—	2.19	2/27/2013	
	66,667	33,333 <sup>(2)</sup>	—	—	1.86	3/2/2012	
	—	150,000 <sup>(3)</sup>	—	—	2.28	8/5/2014	
Ben Naccarato	20,000	—	—	—	1.44	10/28/2014	
	3,333	1,667 <sup>(2)</sup>	—	—	1.86	3/2/2012	
	—	40,000 <sup>(3)</sup>	—	—	2.28	8/5/2014	
Larry McNamara	50,000	—	—	—	1.25	4/10/2010	
	120,000	—	—	—	1.75	4/3/2011	
	100,000	—	—	—	2.19	2/27/2013	
	166,667	83,333 <sup>(2)</sup>	—	—	1.86	3/2/2012	
	—	150,000 <sup>(3)</sup>	—	—	2.28	8/5/2014	
Robert Schreiber, Jr.	15,000	—	—	—	1.25	4/10/2010	
	50,000	—	—	—	1.75	4/3/2011	
	50,000	—	—	—	2.19	2/27/2013	
	16,667	8,333 <sup>(2)</sup>	—	—	1.86	3/2/2012	
	—	25,000 <sup>(3)</sup>	—	—	2.28	8/5/2014	

<sup>(1)</sup> In the event of a change in control (as defined in the Option Plan) of the Company, each outstanding option and award shall immediately become exercisable in full notwithstanding the vesting or exercise provisions contained in the stock option agreement.

<sup>(2)</sup> Incentive stock option granted on March 2, 2006 under the Company's Option Plan. The option is for a six year term and vests over a three year period at one third increments per year.

<sup>(3)</sup> Incentive stock option granted on August 5, 2008 under the Company's Option Plan. The option is for a six year term and vests over a three year period, at one third increments per year.

The following table sets forth the number of options exercised by the named executive officers in 2008:

**Option Exercises and Stock Vested Table**

<u>Name</u>	<u>Option Awards</u>	<u>Value</u>
	<u>Number of Shares Acquired on Exercises (#)</u>	<u>Realized On Exercise (\$) (1)</u>
Dr. Louis F. Centofanti	5,000	5,500
Steven Baughman (2)	33,334	19,667
Larry Mcnamara	—	—
Robert Schreiber, Jr.	15,000	17,550

(1) Based on the difference between the closing price of our Common Stock reported on the National Association of Securities Dealers Automated Quotation (“NASDAQ”) Capital Market on the exercise date and the exercise price of the option.

(2) Resigned as Chief Financial Officer effective October 31, 2008.

**Compensation of Directors**

Directors who are employees receive no additional compensation for serving on the Board of Directors or its committees. In 2008, we provided the following annual compensation to directors who are not employees:

- on the date of our 2008 Annual Meeting, each of our continuing non-employee directors was awarded options to purchase 12,000 shares of our Common Stock. The grant date fair value of each option award received by our non-employee directors was \$1.79 per share, based on the date of grant, pursuant to SFAS 123R;
- a monthly director fee of \$1,750, with the Audit Committee Chairman receiving an additional monthly fee of \$2,250, of which the director may elect to have 65% or 100% payable in Common Stock under the 2003 Outside Director Plan, with the remaining payable in cash. Effective October 1, 2008, we increased the monthly director fee to \$2,167, with the Audit Committee Chairman receiving an additional monthly fee of \$1,833; and
- a fee of \$1,000 for each board meeting attendance and a \$500 fee for each telephonic conference call attendance, of which the the director may elect to have 65% or 100% payable in Common Stock under the 2003 Outside Director Plan, with the remaining payable in cash.

The table below summarizes the director compensation expenses recognized by the Company for the director option and stock (resulting from fees earned) awards. The terms of the 2003 Outside Directors Plan are further described below under “2003 Outside Directors Plan”.

**Director Compensation Table**

Name	Fees Earned or Paid In Cash (\$) <sup>(1)</sup>	Stock Awards (\$) <sup>(2)</sup>	Option Awards (\$) <sup>(3)</sup>	Non-Equity Incentive Plan Compensation (\$)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Mark Zwecker	18,725	46,364	17,142	—	—	—	82,231
Jon Colin	—	37,666	17,142	—	—	—	54,808
Robert L. Ferguson	9,188	22,749	17,142	—	—	—	49,079
Jack Lahav	—	36,332	17,142	—	—	—	53,474
Joe R. Reeder	—	35,667	17,142	—	—	—	52,809
Charles E. Young	9,538	23,617	17,142	—	—	—	50,297
Larry M. Shelton	9,888	24,483	17,142	—	—	—	51,513

(1) Under the 2003 Outside Directors Plan, each director elects to receive 65% or 100% of the director’s fees in shares of our Common Stock. The amounts set forth below represent the portion of the director’s fees paid in cash and excludes the value of the director’s fee elected to be paid in Common Stock under the 2003 Outside Director Plan, which value is included under “Stock Awards”.

(2) The number of shares of Common Stock comprising stock awards granted under the 2003 Outside Directors Plan is calculated based on 75% of the closing market value of the Common Stock as reported on the NASDAQ on the business day immediately preceding the date that the quarterly fee is due. Such shares are fully vested on the date of grant. The value of the stock award is based on the market value of our Common Stock at each quarter end times the number of shares as determined in the manner noted.

(3) Options granted under the Company’s 2003 Outside Director Plan resulting from reelection of the Board of Directors on August 5, 2008. Options are for a 10 year period with an exercise price of \$2.34 per share and are fully vested in six months from grant date. The value of the option award is calculated based on the fair value of the option per share (\$1.79) on the date of grant pursuant to SFAS 123R. Total option expense for the award is approximately \$150,000. In 2008, the option expense recognized for financial statement purposes totaled approximately \$119,994. The remaining \$30,006 option expense will be recognized by February 2008, upon vesting of the stock option, pursuant to SFAS 123R. See “Note 3” of “Notes to Consolidated Financial Statements”.

**2003 Outside Directors Plan**

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 our 2003 Outside Directors Stock Plan (“2003 Directors Plan”), each outside director is granted a 10 year option to purchase up to 30,000 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 12,000 shares of Common Stock, with the exercise price being the fair market value of the Common Stock preceding the option grant date. No option granted under the 2003 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. Options to purchase 510,000 shares of Common Stock have been granted and are outstanding under the 2003 Directors Plan.

In 2008, we increased our monthly payment of fees to our outside directors from \$1,750 to \$2,167, effective October 1, 2008. The monthly additional compensation for our Audit Committee Chairman was reduced from \$2,250 to \$1,833 to better align the compensation to the position responsibilities. The Company periodically reviews compensation paid to its outside directors against compensation paid by its Peer Group (see Companies comprising the Peer Group in “Item 11 – Executive Compensation – The Committee’s Process – Peer Group Assessment”) to its outside directors to insure that our outside directors are adequately compensated. Each board member continues to be paid \$1,000 for each board meeting attendance as well as \$500 for each telephonic conference call. As a member of the Board of Directors, 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

[Table of Contents](#)

preceding the date that the quarterly fee is due. The balance of each director's fee, if any, is payable in cash. In 2008, the fees earned by our outside directors totaled \$274,000. Reimbursements of expenses for attending meetings of the Board are paid in cash at the time of the applicable Board meeting. 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."

As of the date of this report, we have issued 581,889 shares of our Common Stock in payment of director fees under the 2003 Directors Plan, covering the period October 1, 2002, through December 31, 2008.

In the event of a change of control (as defined in the 2003 Outside Directors Stock Plan), 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.

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

During 2008, the Compensation and Stock Option Committee for our Board of Directors was composed of Jack Lahav, Jon Colin, Joe Reeder, and Dr. Charles E. Young. None of the members of the Compensation and Stock Option Committee has been an officer or employee of the Company or has had any relationship with the Company requiring disclosure under the SEC regulations.

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

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

The table below sets forth information as to the shares of Common Stock beneficially owned as of March 9, 2009, by each person known by us to be the beneficial owners of more than 5% of any class of our voting securities.

<b>Name of Beneficial Owner</b>	<b>Title Of Class</b>	<b>Amount and Nature of Ownership</b>	<b>Percent Of Class<sup>(1)</sup></b>
Rutabaga Capital Management LLC/MA <sup>(2)</sup>	Common	4,950,178	9.17%
Heartland Advisors, Inc. Management <sup>(3)</sup>	Common	3,846,758	7.13%
Conus Partners, Inc. <sup>(4)</sup>	Common	3,398,665	6.30%

<sup>(1)</sup> The number of shares and the percentage of outstanding Common Stock beneficially owned by a person are based upon 53,985,119 shares of Common Stock issued and outstanding on March 9, 2009, and the number of shares of Common Stock which such person has the right to acquire beneficial ownership of within 60 days. Beneficial ownership by our stockholders has been determined in accordance with the rules promulgated under Section 13(d) of the Exchange Act.

<sup>(2)</sup> This information is based on the Schedule 13G/A, filed with the Securities and Exchange Commission ("SEC") on February 5, 2009, which provides that Rutabaga Capital Management LLC/MA, an investment advisor, has sole voting power over 1,772,000 shares and shared voting power over 3,178,178 shares and sole dispositive power over all of these shares. The address of Rutabaga Capital Management LLC/MA is 64 Broad Street, Boston, MA 02109.

<sup>(3)</sup> This information is based on the Schedule 13G/A, filed with the SEC on February 11, 2009, which provides that Heartland Advisors, Inc., an investment advisor, shares voting power over 3,646,935 of such shares and share dispositive power over all of the shares, and no sole voting or sole dispositive power over any of the shares. The address of Heartland Advisors, Inc. is 789 North Water Street, Suite 500, Milwaukee, WI 53202.

<sup>(4)</sup> This information is based on the Schedule 13F-HR/A filed with the SEC on February 18, 2009, which provides that Conus Partner, Inc., a hedge fund management institution, shares voting and dispositive power over such shares. The address of Conus Partner, Inc. is 49 West 38<sup>th</sup> Street, New York, New York 10018.

Capital Bank represented to us that:

- As of February 25, 2009, Capital Bank holds of record as a nominee for, and as an agent of, certain accredited investors, 3,762,332 shares of our Common Stock.;
- All of the Capital Bank's investors are accredited investors;
- None of Capital Bank's investors beneficially own more than 4.9% of our Common Stock and to its best knowledge, none of Capital Bank's investors act together as a group or otherwise act in concert for the purpose of voting on matters subject to the vote of our stockholders or for purpose of dispositive or investment of such 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.
- Capital Bank believes that it is not required to file reports under Section 16(a) of the Exchange Act 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.
- Capital Bank is not the beneficial owner, as such term is defined in Rule 13d-3 of the Exchange Act, of the shares of Common Stock registered in Capital Bank's name because (a) Capital Bank holds the Common Stock as a nominee only and (b) Capital Bank has neither voting nor investment power over such shares.

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 5% of our voting securities. If Capital Bank is deemed the beneficial owner of such shares, the following table sets forth information as to the shares of voting securities that Capital Bank may be considered to beneficially own on February 25, 2009.

<b>Name of Record Owner</b>	<b>Title Of Class</b>	<b>Amount and Nature of Ownership</b>	<b>Percent Of Class <sup>(1)</sup></b>
Capital Bank Grawe Gruppe <sup>(2)</sup>	Common	3,762,332 <sup>(2)</sup>	6.97%

<sup>(1)</sup> This calculation is based upon 53,985,119 shares of Common Stock issued and outstanding on March 9, 2009 plus the number of shares of Common Stock which Capital Bank, as agent for certain accredited investors has the right to acquire within 60 days, which is none.

<sup>(2)</sup> This amount is the number of shares that Capital Bank has represented to us that it holds of record as nominee for, and as an agent of, certain of its accredited investors. As of the date of this report, Capital Bank has no warrants or options to acquire, as agent for certain investors, additional shares of our Common Stocks. Although Capital Bank is the record holder of the shares of Common Stock described in this note, Capital Bank has advised us 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 us 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 our Common Stock holds more than 4.9% of our issued and outstanding Common Stock and (b) has not nominated, and has not sought to nominate, and does not intend to nominate in the future, any person to serve as a member of our Board of Directors, we do not believe that Capital Bank is our affiliate. Capital Bank's address is Burgring 16, A-8010 Graz, Austria.

## Security Ownership of Management

The following table sets forth information as to the shares of voting securities beneficially owned as of March 9, 2009, by each of our Directors and named executive officers and by all of our directors and executive officers as a group. Beneficial ownership 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.

Name of Beneficial Owner <sup>(2)</sup>	Number of Shares Of Common Stock Beneficially Owned	Percentage of Common Stock <sup>(1)</sup>
Dr. Louis F. Centofanti <sup>(3)</sup>	1,289,934 <sup>(3)</sup>	2.37%
Jon Colin <sup>(4)</sup>	215,663 <sup>(4)</sup>	*
Robert L. Ferguson <sup>(5)</sup>	316,450 <sup>(5)</sup>	*
Jack Lahav <sup>(6)</sup>	832,699 <sup>(6)</sup>	1.54%
Joe Reeder <sup>(7)</sup>	942,831 <sup>(7)</sup>	1.74%
Larry M. Shelton <sup>(8)</sup>	83,767 <sup>(8)</sup>	*
Dr. Charles E. Young <sup>(9)</sup>	128,978 <sup>(9)</sup>	*
Mark A. Zwecker <sup>(10)</sup>	385,252 <sup>(10)</sup>	*
Steven Baughman <sup>(11)</sup>	366,675 <sup>(11)</sup>	*
Larry McNamara <sup>(12)</sup>	520,000 <sup>(12)</sup>	*
Robert Schreiber, Jr. <sup>(13)</sup>	244,369 <sup>(13)</sup>	*
Ben Naccarato <sup>(14)</sup>	25,000 <sup>(14)</sup>	*
Directors and Executive Officers as a Group (11 persons)	4,984,943 <sup>(15)</sup>	8.97%

\*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 each person, for the purposes hereof, is c/o Perma-Fix Environmental Services, Inc., 8302 Dunwoody Place, Suite 250, Atlanta, Georgia 30350.

<sup>(3)</sup> These shares include (i) 605,934 shares held of record by Dr. Centofanti; (ii) options to purchase 370,000 shares which are immediately exercisable; and 314,000 shares held by Dr. Centofanti's wife. 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. Colin has sole voting and investment power over these shares which include: (i) 123,663 shares held of record by Mr. Colin, and (ii) options to purchase 92,000 shares of Common Stock, which are immediately exercisable.

<sup>(5)</sup> Mr. Ferguson has sole voting and investment power over these shares which include: (i) 223,386 shares of Common Stock held of record by Mr. Ferguson, (ii) 27,046 shares held in Mr. Ferguson's individual retirement account, (iii) 24,018 shares held by Ferguson Financial Group LLC (“FFG LLC”), of which Mr. Ferguson is the manager; and (iv) options to purchase 42,000 shares, which are immediately exercisable.

<sup>(6)</sup> Mr. Lahav has sole voting and investment power over these shares which include: (i) 740,699 shares of Common Stock held of record by Mr. Lahav; (ii) options to purchase 92,000 shares, which are immediately exercisable.

<sup>(7)</sup> Mr. Reeder has sole voting and investment power over these shares which include: (i) 855,831 shares of Common Stock held of record by Mr. Reeder, and (ii) options to purchase 87,000 shares, which are immediately exercisable.

<sup>(8)</sup> Mr. Shelton has sole voting and investment power over these shares which include: (i) 29,767 shares of Common Stock held of record by Mr. Shelton, and (ii) options to purchase 54,000 shares, which are immediately exercisable.

<sup>(9)</sup> Dr. Young has sole voting and investment power over these shares which include: (i) 38,978 shares held of record by Dr. Young; and (ii) options to purchase 90,000 shares, which are immediately exercisable.

<sup>(10)</sup> Mr. Zwecker has sole voting and investment power over these shares which include: (i) 293,252 shares of Common Stock held of record by Mr. Zwecker; and (ii) options to purchase 92,000 shares, which are immediately exercisable.

<sup>(11)</sup> Mr. Baughman has sole voting and investment power over these shares.

<sup>(12)</sup> Mr. McNamara has sole voting and investment power over these shares which include: options to purchase 520,000 shares, which are immediately exercisable.

<sup>(13)</sup> Mr. Schreiber has joint voting and investment power, with his spouse, over 104,369 shares of Common Stock beneficially held and sole voting and investment power over options to purchase 140,000 shares, which are immediately exercisable.

<sup>(14)</sup> Mr. Naccarato has sole voting and investment power over these shares which include: options to purchase 25,000 shares, which are immediately exercisable.

<sup>(15)</sup> Shares do not reflect shares held of record by Mr. Baughman as Mr. Baughman resigned as Chief Financial Officer, Vice President, and Secretary of the Board of Directors effective October 31, 2008.

### Equity Compensation Plans

The following table sets forth information as of December 31, 2008, with respect to our equity compensation plans.

Plan Category	Equity Compensation Plan		
	Number of securities to be issued upon exercise of outstanding options warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans			
Approved by stockholders	3,417,347	\$2.03	1,104,669
Equity compensation plans not			
Approved by stockholders	—	—	—
<b>Total</b>	<b>3,417,347</b>	<b>\$2.03</b>	<b>1,104,669</b>

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

#### 13.

#### Lawrence Properties LLC

During February 2006, our Board of Directors approved and we entered into a lease agreement, whereby we lease property from Lawrence Properties LLC, a company jointly owned by the president of Schreiber, Yonley and Associates, Robert Schreiber, Jr. and his spouse. Mr. Schreiber is a member of our executive management team. The lease is for a term of five years from June 1, 2006. We pay monthly rent expense of \$10,000, which we believe is lower than costs charged by unrelated third party landlords. Additional rent will be assessed for any increases over the initial lease commencement year for property taxes or assessments and property and casualty insurance premiums.

**Mr. David Centofanti**

Mr. David Centofanti serves as our Director of Information Services. For such services, he received total compensation in 2008 of approximately \$162,000. Mr. David Centofanti is the son of our Chief Executive Officer and Chairman of our board, Dr. Louis F. Centofanti. We believe the compensation received by Mr. Centofanti for his technical expertise which he provides to the Company is competitive and comparable to compensation we would have to pay to an unaffiliated third party with the same technical expertise.

**Mr. Robert L. Ferguson**

On June 13, 2007, we acquired Nuvotec and Nuvotec's wholly owned subsidiary, PEcoS (our PFNWR facility), pursuant to the terms of the Merger Agreement, between us, Nuvotec, PEcoS, and our wholly owned subsidiary. At the time of the acquisition, Robert L. Ferguson was the Chairman, Chief Executive Officer, and individually or through entities controlled by him, the owner of approximately 21.29% of Nuvotec's outstanding common stock. In connection with the acquisition, Mr. Ferguson was nominated to serve as a Director and subsequently elected as a Director at our Annual Meeting of Stockholders held in August 2007. Mr. Ferguson was reelected to serve as a Director at our August 2008 Annual Meeting of Stockholders.

As consideration for the acquisition, Mr. Ferguson: (a) received a total of \$224,560 cash and 192,783 shares of Perma-Fix Common Stock in July 2007 as a former shareholder of Nuvotec who is "accredited" under the rules of Regulation D under the Act, (b) is entitled to receive certain contingent consideration under the terms of the acquisition as described below, (c) guaranteed \$4,000,000 of bank debt, which was paid off by Perma-Fix in December 2008, and a \$1,750,000 line of credit assumed by us in the acquisition, which the \$1,750,000 line of credit was released when we replaced the financial assurance of PEcoS deposited with the State of Washington with our financial assurance, and (d) as a former shareholder of Nuvotec, is due his proportionate share of a \$2,500,000 note payable by the Company to the former shareholders of Nuvotec. The foregoing consideration includes the amounts and shares paid and payable to entities controlled by Mr. Ferguson.

The EPA alleged that prior to the date that we acquired the PEcoS facility in June 2007, the PEcoS facility was in violation of certain regulatory provisions relating to the facility's handling of certain hazardous waste and PCB waste. During May 2008, the EPA advised the facility as to these alleged violations that a total penalty of \$317,500 is appropriate to settle the alleged violations. On September 26, 2008, PFNWR entered into a consent agreement with the EPA to resolve the allegations and to pay a penalty amount of \$304,500. Under the consent agreement, PFNWR neither admits nor denies the specific EPA allegations. Under the agreements relating to our acquisition of Nuvotec and PEcoS, we are required, if certain revenue targets are met, to pay to the former shareholders of Nuvotec an earn-out amount not to exceed \$4,400,000 over a four year period ending June 30, 2011, with the first \$1,000,000 of the earn-out amount to be placed into an escrow account to satisfy certain indemnification obligations to us of Nuvotec, PEcoS, and the former shareholders of Nuvotec, which includes Mr. Robert Ferguson. We may claim reimbursement of the penalty, plus out of pocket expenses, paid or to be paid by us in connection with this matter from the escrow account. As of the date of this report, we have not been required to pay any earn-out to the former shareholders of Nuvotec or deposit any amount into the escrow account pursuant to the agreement. Irrespective of the fact no amounts have been deposited into the escrow account, the former shareholders of Nuvotec agreed to pay and have paid \$152,250 of the \$304,500 penalty in satisfaction of their obligation under the indemnity provision in connection with the settlement with the EPA. Under the agreement between the Company and the former shareholders of Nuvotec, the \$152,250 penalty paid by the former shareholders of Nuvotec can be recouped by the Nuvotec shareholder by adding it to the potential \$4,400,000 earn-out payment. The \$152,250 can only be recouped if the \$4,400,000 has been entirely earned. The \$304,500 was paid to the EPA on November 18, 2008.

The Company's Audit Committee acts under its Audit Committee Charter and reviews all related party transactions involving our directors and executives.

Director Independence

See “Item 10 of Part III – Directors, Executive Officers and Corporate Governance” regarding the independence of our Directors.

**ITEM**

**14. PRINCIPAL ACCOUNTING FEES AND SERVICES**

**Audit Fees**

The aggregate fees and expenses billed by BDO Seidman, LLP (“BDO”) for professional services rendered for the audit of the Company's annual financial statements for the fiscal years ended December 31, 2008 and 2007, for the reviews of the financial statements included in the Company's Quarterly Reports on Form 10-Q for those fiscal years, and for review of documents filed with the Securities and Exchange Commission for those fiscal years were approximately \$548,000 and \$557,000, respectively. Audit fees for 2008 and 2007 include approximately \$179,000 and \$175,000, respectively, in fees related to the audit of internal control over financial reporting.

**Audit-Related Fees**

BDO audited the Company's 401(K) Plan during 2008 and billed \$15,000. BDO was not engaged to provide audit-related services to the Company for the fiscal year ended December 31, 2007.

**Tax Services**

BDO was not engaged to provide tax services to the Company for the fiscal years ended December 31, 2008 and 2007.

**All Other Fees**

BDO was engaged to provide services for other corporate related matters for the fiscal year ended December 31, 2008, and 2007, resulting in fees totaling approximately \$40,000 and \$12,000, respectively.

The Audit Committee of the Company's Board of Directors has considered whether BDO's provision of the services described above for the fiscal years ended December 31, 2008 and 2007, is compatible with maintaining its independence.

*Engagement of the Independent Auditor*

The Audit Committee is responsible for approving all engagements with BDO and any members of the BDO Alliance network of firms to perform audit or non-audit services for us, prior to engaging these firms to provide those services. All of the services under the headings Audit Fees, Audit Related Fees, Tax Services, and All Other Fees were approved by the Audit Committee pursuant to paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X of the Exchange Act. The Audit Committee's pre-approval policy provides as follows:

- The Audit Committee will review and pre-approve on an annual basis any known audit, audit-related, tax and all other services, along with acceptable cost levels, to be performed by BDO and any members of the BDO Alliance network of firms. The Audit Committee may revise the pre-approved services during the period based on subsequent determinations. Pre-approved services typically include: Audits, quarterly reviews, regulatory filing requirements, consultation on new accounting and disclosure standards, employee benefit plan audits, reviews and reporting on management's internal controls and specified tax matters.
- Any proposed service that is not pre-approved on the annual basis requires a specific pre-approval by the Audit Committee, including cost level approval.
- The Audit Committee may delegate pre-approval authority to one or more of the Audit Committee members. The delegated member must report to the Audit Committee, at the next Audit Committee meeting, any pre-approval decisions made.

**PART IV**

**ITEM EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

**15.**

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.

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 30, 2009  
Dr. Louis F. Centofanti  
Chairman of the Board  
Chief Executive Officer

By /s/ Ben Naccarato Date March 30, 2009  
Ben Naccarato  
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/ Dr. Louis F. Centofanti Date March 30, 2009  
Dr. Louis F. Centofanti, Director

By /s/ Jon Colin Date March 30, 2009  
Jon Colin, Director

By /s/ Robert L. Ferguson Date March 30, 2009  
Robert L. Ferguson, Director

By /s/ Jack Lahav Date March 30, 2009  
Jack Lahav, Director

By /s/ Joe R. Reeder Date March 30, 2009  
Joe R. Reeder, Director

By /s/ Larry M. Shelton Date March 30, 2009  
Larry M. Shelton, Director

By /s/ Charles E. Young Date March 30, 2009  
Charles E. Young, Director

By /s/ Mark A. Zwecker Date March 30, 2009  
Mark A. Zwecker, Director

## SCHEDULE II

## PERMA-FIX ENVIRONMENTAL SERVICES, INC.

VALUATION AND QUALIFYING ACCOUNTS  
For the years ended December 31, 2008, 2007, and 2006  
(Dollars in thousands)

Description	Balance at Beginning of Year	Additions Charged to Costs, Expenses and Other	Deductions	Balance at End of Year
<b>Year ended December 31, 2008:</b>				
Allowance for doubtful accounts- continuing operations	\$ 203	\$ 187	\$ 57	\$ 333
Allowance for doubtful accounts- discontinued operations	\$ 204	\$ (28)	\$ 176	\$ —
<b>Year ended December 31, 2007:</b>				
Allowance for doubtful accounts- continuing operations	\$ 250	\$ 165	\$ 212	\$ 203
Allowance for doubtful accounts- discontinued operations	\$ 165	\$ 41	\$ 2	\$ 204
<b>Year ended December 31, 2006:</b>				
Allowance for doubtful accounts- continuing operations	\$ 366	\$ (33)	\$ 83	\$ 250
Allowance for doubtful accounts- discontinued operations	\$ 236	\$ 97	\$ 168	\$ 165

EXHIBIT INDEX

<b>Exhibit No.</b>	<b>Description</b>
2.1	Agreement and Plan of Merger dated April 27, 2007, by and among Perma-Fix Environmental Services, Inc., Nuvotec USA, Inc., Pacific EcoSolutions, Inc. and PESI Transitory, Inc., which is incorporated by reference from Exhibit 2.1 to the Company's Form 8-K, filed May 3, 2007. The Company will furnish supplementally a copy of any omitted exhibits or schedule to the Commission upon request.
2.2	First Amendment to Agreement and Plan of Merger, dated June 13, 2007, by and among Perma-Fix Environmental Services, Inc., Nuvotec USA, Inc., Pacific EcoSolutions, Inc., and PESI Transitory, Inc., which is incorporated by reference from Exhibit 2.2 to the Company's Form 8-K, filed June 19, 2007. The Company will furnish supplementally a copy of any omitted exhibits or schedule to the Commission upon request.
2.3	Asset Purchase Agreement by and among Triumvirate Environmental Services, Inc., Triumvirate Environmental (Baltimore), LLC, Perma-Fix Environmental Services, Inc., and Perma-Fix of Maryland, Inc. dated January 18, 2008, which is incorporated by reference from Exhibit 2.3 to the Company's Form 10-K for year ended December 31, 2007, filed with the SEC on April 1, 2008. Schedules and exhibits to the Agreement are listed in the Agreement, and the Company will furnish supplementally a copy of any omitted exhibits or schedule to the Commission upon request.
2.4	Asset Purchase Agreement by and among Perma-Fix of Dayton, Inc., Perma-Fix Environmental Services, Inc., and OGM, Ltd., dated March 14, 2008, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K, filed March 20, 2008. The Company will furnish supplementally a copy of any omitted exhibits or schedule to the Commission upon request.
2.4	Asset Purchase Agreement by and among Perma-Fix of Treatment Services, Inc., Perma-Fix Environmental Services, Inc., and A Clean Environmental Services, Inc., dated May 14, 2008, as incorporated by reference from Exhibit 99.1 to the Company's Form 8-K, filed May 20, 2008. The Company will furnish supplementally a copy of any omitted exhibits or schedule to the Commission upon request.
3(i)	Restated Certificate of Incorporation, as amended.
3(ii)	Bylaws of Perma-Fix Environmental Services, Inc., as amended on October 30, 2007, as incorporated by reference from Exhibit 3(ii) to the Company's Form 10-Q for the quarter ended September 30, 2007.
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	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.
4.5	Amendment No. 2 to Revolving Credit, Term Loan and Security Agreement, dated as of May 23, 2003, between the Company and PNC Bank, as incorporated by reference from Exhibit 4.4 to the Company's Form 10-Q for the quarter ended June 30, 2003, and filed on August 14, 2003.
4.6	Amendment No. 3 to Revolving Credit, Term Loan, and Security Agreement, dated as of October 31, 2003, between the Company and PNC Bank, as incorporated by reference from Exhibit 4.5 to the Company's Form 10-Q for the quarter ended September 30, 2003, and filed on November 10, 2003.

[Table of Contents](#)

- 4.7 Amendment No. 4 to Revolving Credit, Term Loan, and Security Agreement, dated as of March 25, 2005, between the Company and PNC Bank as incorporated by reference from Exhibit 4.12 to the Company's Form 10-K for the year ended December 31, 2004.
- 4.8 Letter from PNC Bank regarding intent to waive technical default on the Loan and Security Agreement with PNC Bank due to resignation of Chief Financial Officer.
- 4.9 Amendment No. 6 to Revolving Credit, Term Loan, and Security Agreement, dated as of June 12, 2007, between the Company and PNC Bank as incorporated by reference from Exhibit 4.1 to the Company's Form 10-Q for the quarter ended June 30, 2007.
- 4.10 Amendment No. 7 to Revolving Credit, Term Loan, and Security Agreement, dated as of July 18, 2007, between the Company and PNC Bank as incorporated by reference from Exhibit 4.2 to the Company's Form 10-Q for the quarter ended June 30, 2007.
- 4.11 Amendment No. 8 to Revolving Credit, Term Loan, and Security Agreement, dated as of November 2, 2007, between the Company and PNC Bank as incorporated by reference from Exhibit 4.1 to the Company's Form 10-Q for the quarter ended September 30, 2007.
- 4.12 Amendment No. 9 to Revolving Credit, Term Loan, and Security Agreement, dated as of December 18, 2007, between the Company and PNC Bank, as incorporated by reference from Exhibit 4.14 to the Company's Form 10-K for the year ended December 31, 2007.
- 4.13 Amendment No. 10 to Revolving Credit, Term Loan, and Security Agreement, dated as of March 26, 2008, between the Company and PNC Bank, as incorporated by reference from Exhibit 4.15 to the Company's Form 10-K for the year ended December 31, 2007.
- 4.14 Amendment No. 11 to Revolving Credit, Term Loan, and Security Agreement, dated as of July 25, 2008, between the Company and PNC Bank, as incorporated by reference from Exhibit 4.1 to the Company's Form 10-Q for the quarter ended June 30, 2008 filed on August 11, 2008.
- 4.15 Amendment No. 12 to Revolving Credit, Term Loan, and Security Agreement, dated as of July 25, 2008, between the Company and PNC Bank, as incorporated by reference from Exhibit 4.2 to the Company's Form 10-Q for the quarter ended June 30, 2008 filed on August 11, 2008.
- 4.16 Amendment No. 13 to Revolving Credit, Term Loan, and Security Agreement, dated as of March 5, 2009, between the Company and PNC Bank, as incorporated by reference from Exhibit 99.1 to the Company's Form 8-K filed on March 11, 2009.
- 4.17 Rights Agreement dated as of May 2, 2008 between the Company and Continental Stock Transfer & Trust Company, as Rights Agent, as incorporated by reference from Exhibit 4.1 to the Company's Form 8-K filed on May 8, 2008.
- 4.18 Letter Agreement dated September 29, 2008, between the Company and Continental Stock Transfer & Trust Company, as incorporated by reference from Exhibit 4.3 to the Company's Form 8-A/A filed on October 2, 2008.
- 10.1 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.
- 10.2 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.
- 10.3 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.
- 10.4 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.
- 10.5 1993 Non-qualified Stock Option Plan as incorporated by reference from the Company's Proxy Statement, dated October 12, 1993.
- 10.6 401(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.
- 10.7 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.

Table of Contents

- 10.8 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.
- 10.9 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.
- 10.10 First Amendment to East Tennessee Material & Energy Corporation Promissory Note, dated December 29, 2008, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on December 30, 2008.
- 10.11 2003 Outside Directors' Stock Plan of the Company as incorporated by reference from Exhibit B to the Company's 2003 Proxy Statement.
- 10.12 First Amendment to 2003 Outside Directors Stock Plan, as incorporated by reference from Appendix "A" to the Company's 2008 Proxy Statement dated July 3, 2008.
- 10.13 2004 Stock Option Plan of the Company as incorporated by reference from Exhibit B to the Company's 2004 Proxy Statement.
- 10.14 Basic agreement between East Tennessee Materials and Energy Corporation and Bechtel Jacobs Company, LLC No. BA-99446F, dated September 20, 2005, as incorporated by reference from Exhibit 10.1 to our Form 10-Q for the quarter ended September 30, 2005. Attachments to this extended agreement will be provided to the Commission upon request.
- 10.15 Basic agreement between East Tennessee Materials and Energy Corporation and Bechtel Jacobs Company, LLC No. BA-99447F, dated September 20, 2005, as incorporated by reference from Exhibit 10.2 to our Form 10-Q for the quarter ended September 30, 2005. Attachments to this extended agreement will be provided to the Commission upon request.
- 10.16 Settlement Agreement, dated December 19, 2007, by and between Barbara Fisher ("Fisher") and Perma-Fix of Dayton, Inc, as incorporated by reference from Exhibit 10.28 to the Company's Form 10-K for the year ended December 31, 2007 filed with the SEC on April 1, 2008.
- 10.17 Consent Decree, dated December 12, 2007, between United States of America and Perma-Fix of Dayton, Inc., as incorporated by reference from Exhibit 10.29 to the Company's Form 10-K for the year ended December 31, 2007 filed with the SEC on April 1, 2008.
- 10.18 Shared Resource Agreement (Subcontract) between an environmental engineering firm and East Material & Energy Corp. Inc. dated May 27, 2008, as incorporated by reference from Exhibit 10.1 to the company's Form 10-Q for the quarter ended June 30, 2008 filed on August 11, 2008.
- 10.19 Consent Agreement dated September 26, 2008 between Perma-Fix Northwest Richland, Inc. and the U.S. Environmental Protection Agency, as incorporated by reference from Exhibit 10.1 to the Company's Form 10-Q for the quarter ended September 30, 2008 filed on November 10, 2008.
- 10.20 Second Amendment to Agreement and Plan of Merger, dated November 18, 2008 by and among Perma-Fix Northwest, Inc., Perma-Fix Northwest Richland, Inc., Perma-Fix Environmental Services, Inc., and Robert L. Ferguson, an individual, and William N. Lampson, an individual, as Representatives, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed with the SEC on November 21, 2008.
- 10.21 2008 Incentive Compensation Plan for Vice President, Chief Financial Officer, effective January 1, 2008, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on August 11, 2008.
- 10.22 2008 Incentive Compensation Plan for Chief Operating Officer, effective January 1, 2008, as incorporated by reference from Exhibit 10.2 to the Company's Form 8-K filed on August 11, 2008.
- 10.23 2008 Incentive Compensation Plan for Chief Executive Officer, effective January 1, 2008, as incorporated by reference from Exhibit 10.3 to the Company's Form 8-K filed on August 11, 2008.
- 21.1 List of Subsidiaries
- 23.1 Consent of BDO Seidman, LLP

[Table of Contents](#)

- 31.1 Certification by Dr. Louis F. Centofanti, Chief Executive Officer of the Company pursuant to Rule 13a-14(a) or 15d-14(a).
- 31.2 Certification by Ben Naccarato, Chief Financial Officer of the Company pursuant to Rule 13a-14(a) or 15d-14(a).
- 32.1 Certification by Dr. Louis F. Centofanti, Chief Executive Officer of the Company furnished pursuant to 18 U.S.C. Section 1350.
- 32.2 Certification by Ben Naccarato, Chief Financial Officer of the Company furnished pursuant to 18 U.S.C. Section 1350.



# Delaware

PAGE 1

## The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THAT "PERMA-FIX ENVIRONMENTAL SERVICES, INC." IS DULY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL CORPORATE EXISTENCE NOT HAVING BEEN CANCELLED OR DISSOLVED SO FAR AS THE RECORDS OF THIS OFFICE SHOW AND IS DULY AUTHORIZED TO TRANSACT BUSINESS.

THE FOLLOWING DOCUMENTS HAVE BEEN FILED:

CERTIFICATE OF INCORPORATION, FILED THE NINETEENTH DAY OF DECEMBER, A.D. 1990, AT 9 O'CLOCK A.M.

RESTATED CERTIFICATE, FILED THE TWENTY-SIXTH DAY OF NOVEMBER, A.D. 1991, AT 10 O'CLOCK A.M.

CERTIFICATE OF AMENDMENT, CHANGING ITS NAME FROM "NATIONAL ENVIRONMENTAL INDUSTRIES, LTD." TO "PERMA-FIX ENVIRONMENTAL SERVICES, INC.", FILED THE SEVENTEENTH DAY OF DECEMBER, A.D. 1991, AT 4:30 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, FILED THE FOURTH DAY OF SEPTEMBER, A.D. 1992, AT 11:30 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE SIXTH DAY OF FEBRUARY, A.D. 1996, AT 4 O'CLOCK P.M.

2249849 8310

090228186

You may verify this certificate online  
at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)



  
Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 7162972

DATE: 03-03-09

# Delaware

PAGE 2

*The First State*

CERTIFICATE OF DESIGNATION, FILED THE TWENTIETH DAY OF  
FEBRUARY, A.D. 1996, AT 10:45 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE NINETEENTH DAY OF  
JULY, A.D. 1996, AT 12:30 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE SIXTEENTH DAY OF  
DECEMBER, A.D. 1996, AT 4:30 O'CLOCK P.M.

CERTIFICATE OF AMENDMENT, FILED THE SIXTH DAY OF JANUARY,  
A.D. 1997, AT 4:30 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE ELEVENTH DAY OF JUNE,  
A.D. 1997, AT 11 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE FOURTEENTH DAY OF  
JULY, A.D. 1997, AT 11:15 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE THIRTEENTH DAY OF  
NOVEMBER, A.D. 1997, AT 1:30 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE THIRTEENTH DAY OF  
NOVEMBER, A.D. 1997, AT 1:31 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE TWENTY-SIXTH DAY OF  
NOVEMBER, A.D. 1997, AT 10 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE TENTH DAY OF JULY,  
A.D. 1998, AT 12 O'CLOCK P.M.

2249849 8310

090228186



You may verify this certificate online  
at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

  
Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 7162972

DATE: 03-03-09

# Delaware

PAGE 3

*The First State*

CERTIFICATE OF DESIGNATION, FILED THE SIXTEENTH DAY OF JULY,  
A.D. 1998, AT 1:30 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE SIXTEENTH DAY OF JULY,  
A.D. 1998, AT 1:31 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE SIXTEENTH DAY OF JULY,  
A.D. 1998, AT 1:32 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE FIFTEENTH DAY OF JULY,  
A.D. 1999, AT 12:30 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE FIFTEENTH DAY OF JULY,  
A.D. 1999, AT 12:31 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE FIFTEENTH DAY OF JULY,  
A.D. 1999, AT 12:32 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE FIFTEENTH DAY OF JULY,  
A.D. 1999, AT 12:33 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE TENTH DAY OF AUGUST,  
A.D. 1999, AT 12:30 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE TENTH DAY OF AUGUST,  
A.D. 1999, AT 12:31 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE TENTH DAY OF AUGUST,  
A.D. 1999, AT 12:32 O'CLOCK P.M.

2249849 8310

090228186

You may verify this certificate online  
at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)



  
Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 7162972

DATE: 03-03-09

# Delaware

PAGE 4

*The First State*

CERTIFICATE OF DESIGNATION, FILED THE TENTH DAY OF AUGUST,  
A.D. 1999, AT 12:33 O'CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE FOURTEENTH DAY OF  
JUNE, A.D. 2001, AT 10 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE FOURTEENTH DAY OF  
JUNE, A.D. 2001, AT 10:01 O'CLOCK A.M.

CERTIFICATE OF AMENDMENT, FILED THE TWENTIETH DAY OF JUNE,  
A.D. 2002, AT 10 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE SIXTH DAY OF MAY, A.D.  
2008, AT 6:44 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID  
CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE  
AFORESAID CORPORATION, "PERMA-FIX ENVIRONMENTAL SERVICES, INC."

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL REPORTS HAVE  
BEEN FILED TO DATE.

AND I DO HEREBY FURTHER CERTIFY THAT THE FRANCHISE TAXES  
HAVE BEEN PAID TO DATE.

2249849 8310

090228186

You may verify this certificate online  
at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)



  
Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 7162972

DATE: 03-03-09

CERTIFICATE OF INCORPORATION

OF

NATIONAL ENVIRONMENTAL INDUSTRIES, LTD.

I, the undersigned, in order to form a corporation for the purposes hereinafter stated, under and pursuant to the provisions of the General Corporation Law of the State of Delaware, do hereby certify as follows:

FIRST: The name of the corporation is National Environmental Industries, Ltd. (hereinafter referred to as the "Corporation").

SECOND: The registered office of the Corporation is to be located at 32 Loockerman Square, Suite L-100, City of Dover, County of Kent, State of Delaware 19901. The name of its registered agent at that address is The Prentice-Hall Corporation System, Inc.

THIRD: The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware.

FOURTH: (1) The Corporation shall be authorized to issue 3,000 shares, all of which shall have no par value, all of which shall be of the same class and all of which are to be designated "Common Stock".

(2) Except as otherwise required by statute, the holders of the Common Stock of the Corporation shall possess the exclusive right to vote for the election of directors and for all other corporate purposes.

(3) Except as otherwise required by statute, the designations, and the powers, preferences and rights, and the qualifications or restrictions thereof, of any class or classes of stock or any series of any class of stock of the Corporation may be determined from time to time by resolution or resolutions of the Board of Directors.

FIFTH: The name and address of the incorporator are as follows:

<u>Name</u>	<u>Address</u>
Robert Scarboro	C/o Phillips, Nizer, Benjamin, Krim & Ballon 40 West 57th Street New York, New York 10019

SIXTH: The following provisions are inserted for the management of the business and for the conduct of the affairs of the Corporation, and for further definition, limitation and regulation of the powers of the Corporation and of its directors and stockholders:

(1) The number of directors of the Corporation shall be such as from time to time shall be fixed by, or in the manner provided in, the by-laws of the Corporation. Election of directors need not be by ballot unless the by-laws of the Corporation so provide.

(2) In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware, the Board of Directors shall have power without the assent or vote of the stockholders:

(a) To make, alter, amend, change, add to or repeal the by-laws of the Corporation in any manner not inconsistent with the laws of the State of Delaware or this Certificate of Incorporation, subject to the power of the stockholders of the Corporation having voting power to alter, amend or repeal the by-laws made by the Board of Directors of the Corporation; to fix and vary the amount to be reserved for any proper purpose; to authorize and cause to be executed mortgages and liens upon all or any part of the property of the Corporation, to determine the use and disposition of any surplus or net profits; and to fix the times for the declaration and payment of dividends; and

(b) To determine from time to time whether, and to what extent, and at what times and places, and under what conditions the accounts and books of the Corporation (other than the stock ledger), or any of them, shall be open to the inspection of the stockholders.

(3) In addition to the powers and authorities hereinbefore or by statute expressly conferred upon it, the Board of Directors of the Corporation is hereby empowered to exercise all such powers and do such acts and things as may be

exercised or done by the Corporation; subject, nevertheless, to the provisions of the laws of the State of Delaware, of this Certificate of Incorporation, and to the by-laws of the Corporation in effect from time to time.

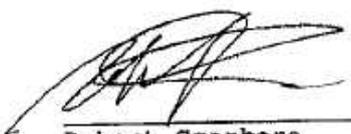
SEVENTH: The corporation may, to the full extent permitted by Section 145 of the General Corporation Law of the State of Delaware, as amended from time to time, indemnify all persons whom it may indemnify pursuant thereto.

EIGHTH: Whenever a compromise or arrangement is proposed between the Corporation and its creditors or any class of them and/or between the Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware, may, on the application in a summary way of the Corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for the Corporation under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for the Corporation under the provisions of Section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths (3/4) in value of the creditors or

class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of the Corporation as consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of the Corporation, as the case may be, and also on the Corporation.

NINTH: The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation in the manner now or hereafter prescribed by law, and all rights and powers conferred herein on stockholders, directors and officers are subject to this reserved power.

IN WITNESS WHEREOF, I, Robert Scarboro, the sole incorporator of National Environmental Industries, Ltd., have hereunto signed my name and affirm that the statements made herein are true under the penalties of perjury, this 17th day of December, 1990.



---

Robert Scarboro  
c/o Phillips, Nizer, Benjamin,  
Krim & Ballon  
40 West 57th Street  
New York, New York 10019

**RESTATED CERTIFICATE OF INCORPORATION**  
**OF**  
**NATIONAL ENVIRONMENTAL INDUSTRIES, LTD.**

1. The present name of the corporation (hereinafter called the "Corporation") is National Environmental Industries, Ltd., and the date of filing the original certificate of incorporation of the Corporation with the Secretary of State of the State of Delaware is December 19, 1990.

2. The certificate of incorporation of the corporation is hereby amended by striking out Articles FOURTH through NINTH thereof and by substituting in lieu thereof new Articles FOURTH through NINTH as set forth in the Restated Certificate of Incorporation hereinafter provided for.

3. The provisions of the certificate of incorporation as heretofore amended and/or supplemented, and as herein amended, are hereby restated and integrated into the single instrument which is hereinafter set forth, and which is entitled Restated Certificate of Incorporation of National Environmental Industries, Ltd. without any further amendment other than the amendment certified herein and without any discrepancy between the provisions of the certificate of incorporation as heretofore amended and

---

supplemented and the provisions of the said single instrument hereinafter set forth.

4. The amendment and restatement of the certificate of incorporation herein certified have been duly adopted by the stockholders in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware. Prompt written notice of the adoption of the amendment and of the restatement of the certificate of incorporation herein certified has been given to those stockholders who have not consented in writing thereto, as provided in Section 228 of the General Corporation Law of the State of Delaware.

5. The certificate of incorporation of the Corporation, as amended and restated herein, shall at the effective time of this Restated Certificate of Incorporation, read as follows:

"Restated Certificate of Incorporation  
of  
National Environmental Industries, Ltd.

FIRST: The name of the Corporation is National Environmental Industries, Ltd.

SECOND: The address of the Corporation's registered office in the State of Delaware is 32 Loockerman Square, Suite L-100, City of Dover, County of Dover. The name of its registered agent at such address is The Prentice-Hall Corporation System, Inc.

THIRD: The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the laws of the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares of capital stock which the Corporation shall have authority to issue is Twenty-Two Million (22,000,000) shares, of which Twenty Million (20,000,000) shares shall be Common Stock, par value \$.001 per share, and Two Million (2,000,000) shares shall be Preferred Stock, \$.001 par value per share.

The Preferred Stock may be issued from time to time in one or more series. The Board of Directors is hereby expressly authorized to provide, by resolution or resolutions duly adopted by it prior to issuance, for the creation of each such series and to fix the designation and the powers, preferences, rights, qualifications, limitations and restrictions relating to the shares of each such series. The authority of the Board of Directors with respect to each such series of Preferred Stock shall include, but not be limited to, determining the following:

(a) the designation of such series, the number of shares to constitute such series and the stated value if different from the par value thereof;

(b) whether the shares of such series shall have voting rights, in addition to any voting rights

provided by law, and, if so, the terms of such voting rights, which may be general or limited;

(c) the dividends, if any, payable on such series, whether any such dividends shall be cumulative, and, if so, from what dates, the conditions and dates upon which such dividends shall be payable, and the preference or relation which such dividends shall bear to the dividends payable on any shares of stock of any other class or any other series of Preferred Stock;

(d) whether the shares of such series shall be subject to redemption by the Corporation, and, if so, the times, prices and other conditions of such redemption;

(e) the amount or amounts payable upon shares of such series upon, and the rights of the holders of such series in, the voluntary or involuntary liquidation, dissolution or winding up, or upon any distribution of the assets, of the Corporation;

(f) whether the shares of such series shall be subject to the operation of a retirement or sinking fund and, if so, the extent to and manner in which any such retirement or sinking fund shall be applied to the purchase or redemption of the shares of such series for retirement or other corporate purposes and the terms and provisions relating to the operation thereof;

(g) whether the shares of such series shall be convertible into, or exchangeable for, shares of stock of any other class or any other series of Preferred Stock or any other securities and, if so, the price or prices or the rate or rates of conversion or exchange and the method, if any, of adjusting the same, and any other terms and conditions of conversion or exchange;

(h) the limitations and restrictions, if any, to be effective while any shares of such series are outstanding upon the payment of dividends or the making of other distributions on, and upon the purchase, redemption or other acquisition by the Corporation of, the Common Stock or shares of stock of any other class or any other series of Preferred Stock;

(i) the conditions or restrictions, if any, upon the creation of indebtedness of the Corporation or upon the issue of any additional stock, including additional shares of such series or of any other series of Preferred Stock or of any other class; and

(j) any other powers, preferences and relative, participating, optional and other special rights, and any qualifications, limitations and restrictions, thereof.

The powers, preferences and relative, participating, optional and other special rights of each series of Preferred Stock, and the qualifications,

limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding. All shares of any one series of Preferred Stock shall be identical in all respects with all other shares of such series, except that shares of any one series issued at different times may differ as to the dates from which dividends thereof shall be cumulative.

FIFTH: Unless required by law or determined by the chairman of the meeting to be advisable, the vote by stockholders on any matter, including the election of directors, need not be by written ballot.

SIXTH: The Corporation reserves the right to increase or decrease its authorized capital stock, or any class or series thereof, and to reclassify the same, and to amend, alter, change or repeal any provision contained in the Certificate of Incorporation under which the Corporation is organized or in any amendment thereto, in the manner now or hereafter prescribed by law, and all rights conferred upon stockholders in said Certificate of Incorporation or any amendment thereto are granted subject to the aforementioned reservation.

SEVENTH: The Board of Directors shall have the power at any time, and from time to time, to adopt, amend and repeal any and all By-Laws of the Corporation.

EIGHTH: All persons who the Corporation is empowered to indemnify pursuant to the provisions of Section

145 of the General Corporation Law of the State of Delaware (or any similar provision or provisions of applicable law at the time in effect), shall be indemnified by the Corporation to the full extent permitted thereby. The foregoing right of indemnification shall not be deemed to be exclusive of any other rights to which those seeking indemnification may be entitled under any by-law, agreement, vote of stockholders or disinterested directors, or otherwise. No repeal or amendment of this Article EIGHTH shall adversely affect any rights of any person pursuant to this Article EIGHTH which existed at the time of such repeal or amendment with respect to acts or omissions occurring prior to such repeal or amendment.

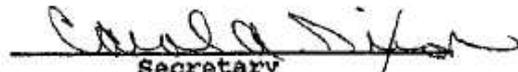
NINTH: No director of the Corporation shall be personally liable to the Corporation or its stockholders for any monetary damages for breaches of fiduciary duty as a director, provided that this provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders; (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) under Section 174 of the General Corporation Law of the State of Delaware; or (iv) for any transaction from which the director derived an improper personal benefit. No repeal or amendment of this Article NINTH shall adversely affect any rights of any person

pursuant to this Article NINTH which existed at the time of such repeal or amendment with respect to acts or omissions occurring prior to such repeal or amendment."

IN WITNESS WHEREOF, we have signed this Certificate this 22 day of November, 1991.

  
\_\_\_\_\_  
President

ATTEST:

  
\_\_\_\_\_  
Secretary

**CERTIFICATE OF AMENDMENT  
TO THE  
RESTATED CERTIFICATE OF INCORPORATION  
OF  
NATIONAL ENVIRONMENTAL INDUSTRIES, LTD.**

It is hereby certified that:

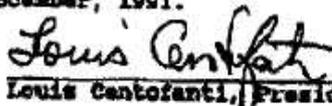
1. The name of the corporation (hereinafter called the "Corporation") is National Environmental Industries, Ltd.

2. The Restated Certificate of Incorporation of the Corporation is hereby amended by striking out Article FIRST thereof and by substituting in lieu of said Article FIRST the following new Article:

"FIRST: The name of the Corporation is Parma-Fix Environmental Services, Inc."

3. The amendment of the certificate of Incorporation herein certified has been duly adopted in accordance with the provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware. Prompt written notice of the adoption of the amendment herein certified has been given to those stockholders who have not consented in writing thereto, as provided in Section 228 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, we have signed this Certificate this 16<sup>th</sup> day of December, 1991.

  
Louis Cantofanti, President

Attest:  
  
Mark Swecker, Secretary

**CERTIFICATE OF AMENDMENT  
TO  
RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Corporation"), does hereby certify:

That the amendment set forth below to the Corporation's Restated Certificate of Incorporation, as amended was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware and written notice thereof has been given as provided in Section 228 thereof:

I) The first paragraph of Article FOURTH of the Corporation's Restated Certificate of Incorporation, as amended is hereby deleted and replaced in its entirety by the following:

**Fourth:** The total number of shares of capital stock that the Corporation shall have authority to issue is 22,000,000, shares of which 20,000,000 shares of the par value of \$.001 per share shall be designated Common Stock ("Common Stock"), and 2,000,000 shares of the par value of \$.001 per share shall be designated Preferred Stock.

As of September 4, 1992 (the "Effective Time"), each share of Common Stock issued and outstanding immediately prior to the Effective Time shall automatically be changed and converted, without any action on the part of the holder thereof, into 1/3.0236956 of a share of Common Stock and, in connection with fractional interests in shares of Common Stock of the Corporation, each holder whose aggregate holdings of shares of Common Stock prior to the Effective Time amounted to less than 3.0236956, or to a number not evenly

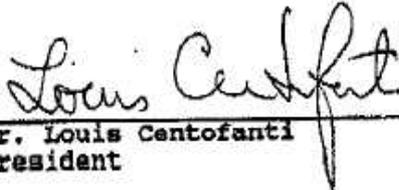
---

divisible by 3.0236956 shares of Common Stock shall be entitled to receive for such fractional interest, and at such time, any such fractional interest in shares of Common Stock of the Corporation shall be converted into the right to receive, upon surrender of the stock certificates formerly representing shares of Common Stock of the Corporation, one whole share of Common Stock.

IN WITNESS whereof, Perma-Fix Environmental Services, Inc. has caused this Certificate to be signed and attested to by its duly authorized officers as of this first day of September, 1992.

Perma-Fix Environmental Services, Inc.

By:

  
\_\_\_\_\_  
Dr. Louis Centofanti  
President

ATTEST:

By:

  
\_\_\_\_\_  
Secretary



**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE SERIES I CLASS A  
PREFERRED STOCK**

**WHEREAS,**

- A. The Corporation's share capital includes Preferred Stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series with the directors of the Corporation (the "Board") being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences, and relative, participating, optional or other special rights, privileges, restrictions and conditions attaching to the shares of each such series; and
- B. It is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series I Class A Preferred Stock, par value \$.001.

**NOW, THEREFORE, BE IT RESOLVED, THAT:**

The Series I Class A Preferred Stock, par value \$.001 (the "Series I Class A Preferred Stock") of the Corporation shall consist of 1,100 shares and no more and shall be designated as the Series I Class A Preferred Stock and in addition to the preferences, rights, privileges, restrictions and conditions attaching to all the Series I Class A Preferred Stock as a series, the rights, privileges, restrictions and conditions attaching to the Series I Class A Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 Except as otherwise provided herein, in the Certificate of Incorporation (the "Articles") or the General Corporation Law of the State of Delaware (the "GCL"), each holder of Series I Class A Preferred Stock, by virtue of his ownership thereof, shall be entitled to cast that number of votes per share thereof on each matter submitted to the Corporation's shareholders for voting which equals the number of votes which could be cast by such holder of the number of shares of the Corporation's Common Stock, par value \$.001 per share (the "Common Shares") into which such shares of Series I Class A Preferred Stock would be converted into pursuant to Part 5 hereof immediately prior to the record date of such vote. The outstanding Series I Class A Preferred Stock and the Common Shares of the Corporation shall vote together as a single class, except as otherwise expressly required by the GCL or Part 7 hereof. The Series I Class A Preferred Stock shall not have cumulative voting rights.

---

1.2 The Series I Class A Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

## **Part 2 - Liquidation Rights.**

2.1 If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any Series I Class A Preferred Stock shall be outstanding, the holders of the then outstanding Series I Class A Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Common Shares equal to \$1,000 consideration per outstanding share of Series I Class A Preferred Stock, together with an amount equal to all unpaid dividends accrued thereon, if any, to the date of payment of such distribution, whether or not declared by the Board; ~~provided, however,~~ that the merger of the Corporation with any corporation or corporations in which the Corporation is not the survivor, or the sale or transfer by the Corporation of all or substantially all of its property, or any reduction by at least seventy percent (70%) of the then issued and outstanding Common Shares of the Corporation, shall be deemed to be a liquidation of the Corporation within the meaning of any of the provisions of this Part 2.

2.2 Subject to the provisions of Part 6 hereof, all amounts to be paid as preferential distributions to the holders of Series I Class A Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of Common Shares, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

## **Part 3 - Dividends.**

3.1 Holders of record of Series I Class A Preferred Stock, out of funds legally available therefor and to the extent permitted by law, shall be entitled to receive dividends on their Series I Class A Preferred Stock, which dividends shall accrue at the rate per share of five percent (5%) per annum of consideration paid for each share of Series I Class A Preferred Stock (\$50.00 per share per year for each full year) commencing on the date of the issuance thereof, payable, at the option of the Corporation, (i) in cash, or (ii) by the issuance of that number of whole Common Shares computed by dividing the amount of the dividend by the market price applicable to such dividend.

3.2 For the purposes of this Part 3 and Part 4 hereof, "market price" means the average of the daily closing prices of Common Shares for a period of five (5) consecutive trading days ending on the date on which any dividend becomes payable or of any notice of redemption as the case may be. The closing price for each trading day shall be (i) for any period during which the Common Shares shall be listed for trading on a national securities exchange, the last reported bid price per share of Common Shares as reported by the primary stock exchange, or the Nasdaq Stock Market, if the Common Shares are quoted on the Nasdaq Stock Market, or (ii) if last sales price information is not available, the average closing bid price of Common Shares as reported

by the Nasdaq Stock Market, or if not so listed or reported, then as reported by National Quotation Bureau, Incorporated, or (iii) in the event neither clause (i) nor (ii) is applicable, the average of the closing bid and asked prices as furnished by any member of the National Association of Securities Dealers, Inc., selected from time to time by the Corporation for that purpose.

3.3 Dividends on Series I Class A Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared and set aside for payment on the Common Shares until full cumulative dividends on all outstanding Series I Class A Preferred Stock shall have been paid or declared and set aside for payment.

3.4 Dividends shall be payable in arrears, at the rate of \$12.50 per share for each full calendar quarter on each February 28, May 31, August 31, and November 30 of each calendar year, to the holders of record of the Series I Class A Preferred Stock as they appear in the securities register of the Corporation on such record dates not more than sixty (60) nor less than ten (10) days preceding the payment date thereof, as shall be fixed by the Board; provided, however, that the initial dividend for the Series I Class A Preferred Stock shall accrue for the period commencing on the date of the issuance thereof to and including December 31, 1995.

3.5 If, in any quarter, insufficient funds are available to pay such dividends as are then due and payable with respect to the Series I Class A Preferred Stock and all other classes and series of the capital stock of the Corporation ranking in parity therewith (or such payment is otherwise prohibited by provisions of the GCL, such funds as are legally available to pay such dividends shall be paid or Common Shares will be issued as stock dividends to the holders of Series I Class A Preferred Stock and to the holders of any other series of Class A Preferred Stock then outstanding as provided in Part 6 hereof, in accordance with the rights of each such holder, and the balance of accrued but undeclared and/or unpaid dividends, if any, shall be declared and paid on the next succeeding dividend date to the extent that funds are then legally available for such purpose.

#### **Part 4 - Redemption.**

4.1 At any time, and from time to time, on and after one hundred twenty (120) days from the date of the issuance of any Series I Class A Preferred Stock, if the average of the closing bid prices for the Common Shares for five (5) consecutive trading days shall be in excess of \$1.50, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, the then outstanding Series I Class A Preferred Stock at a price per share of U. S. \$1,000 each (the "Redemption Price") (such price to be adjusted proportionately in the event of any change of the Series I Class A Shares into a different number of Shares).

4.2 Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series I Class A Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series I Class A Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such Shares.

(ii) the number of Series I Class A Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated of a share certificate or share certificates representing the number of Series I Class A Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series I Class A Preferred Stock to be redeemed as provided in this Part 4, and the number of shares to be converted into Common Shares as provided in Part 5 hereof.

4.3 Upon receipt of the Redemption Notice, any Eligible Holder (as defined in Section 5.2 hereof) shall have the option, at its sole election, to specify what portion of its Series I Class A Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 4 or converted into Common Shares in the manner provided in Part 5 hereof, except that, notwithstanding any provision of such Part 5 to the contrary, any Eligible Holder shall have the right to convert into Common Shares that number of Series I Class A Preferred Stock called for redemption in the Redemption Notice.

4.4 On or before the Redemption Date in respect of any Series I Class A Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series I Class A Shares which are not being redeemed to be registered in the names of the persons whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

4.5 On the Redemption Date in respect of any Series I Class A Shares or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series I Class A Shares in respect of which the Corporation has received notice from the Eligible Holder thereof of its election to convert Series I Class A Shares in to Common Shares), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed share shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called

for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

#### **Part 5 - Conversion.**

5.1 For the purposes of conversion of the Series I Class A Preferred Stock shall be valued at \$1,000 per share ("Value"), and, if converted, the Series I Class A Preferred Stock shall be converted into such number of Common Shares (the "Conversion Shares") as is obtained by dividing the aggregate Value of the shares of Series I Class A Preferred Stock being so converted, together with all accrued but unpaid dividends thereon, by the "Average Stock Price" per share of the Conversion Shares (the "Conversion Price"), subject to adjustment pursuant to the provisions of this Part 5. For purposes of this Part 5, the "Average Stock Price" means the lesser of (x) seventy percent (70%) of the average daily closing bid prices of the Common Shares for the period of five (5) consecutive trading days immediately preceding the date of subscription by the Holder or (y) seventy percent (70%) of the daily average closing bid prices of Common Shares for the period of five (5) consecutive trading days immediately preceding the date of the conversion of the Series I Class A Preferred Stock in respect of which such Average Stock Price is determined. The closing price for each trading day shall be determined as provided in the last sentence of Section 3.2.

5.2 Any holder of Series I Class A Preferred Stock (an "Eligible Holder") may at any time commencing forty-five (45) days after the issuance of any Series I Class A Preferred Stock convert up to one hundred percent (100%) of his holdings of Series I Class A Preferred Stock in accordance with this Part 5.

5.3 The conversion right granted by Section 5.2 hereof may be exercised only by an Eligible Holder of Series I Class A Preferred Stock, in whole or in part, by the surrender of the share certificate or share certificates representing the Series I Class A Preferred Stock to be converted at the principal office of the Corporation (or at such other place as the Corporation may designate in a written notice sent to the holder by first class mail, postage prepaid, at its address shown on the books of the Corporation) against delivery of that number of whole Common Shares as shall be computed by dividing (1) the aggregate Value of the Series I Class A Preferred Stock so surrendered for conversion plus any accrued but unpaid dividends thereon, if any, by (2) the Conversion Price in effect at the date of the conversion. At the time of conversion of a share of the Series I Class A Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, issue that number of whole Common Shares which is equal to the product of dividing the amount of such unpaid dividends by the Average Stock Price whether or not declared by the Board. Each Series I Class A Preferred Stock share certificate surrendered for conversion shall be endorsed by its holder. In the event of any exercise of the conversion right of the Series I Class A Preferred Stock granted herein (i) share certificate representing the Common Shares purchased by virtue of such exercise shall be delivered to such holder within three (3) days of notice of conversion, and (ii) unless the Series I Class A Preferred Stock has been fully converted, a new share certificate representing the

Series I Class A Preferred Stock not so converted, if any, shall also be delivered to such holder within three (3) days of notice of conversion. Any Eligible Holder may exercise its right to convert the Series I Class A Preferred Stock by telecopying an executed and completed Notice of Conversion to the Corporation, and within seventy-two (72) hours thereafter, delivering the original Notice of Conversion and the certificate representing the Series I Class A Preferred Stock to the Corporation by express courier. Each date on which a Notice of Conversion is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a conversion date. The Corporation will transmit the Common Shares certificates issuable upon conversion of any Series I Class A Preferred Stock (together with the certificates representing the Series I Class A Preferred Stock not so converted) to the Eligible Holder via express courier within three (3) business days after the conversion date if the Corporation has received the original Notice of Conversion and the Series I Class A Shares certificates being so converted by such date.

5.4 All Common Shares which may be issued upon conversion of Series I Class A Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof. At all times that any Series I Class A Preferred Stock is outstanding, the Corporation shall have authorized, and shall have reserved for the purpose of issuance upon such conversion, a sufficient number of Common Shares to provide for the conversion into Common Shares of all Series I Class A Preferred Stock then outstanding at the then effective Conversion Price. Without limiting the generality of the foregoing, if, at any time, the Conversion Price is decreased, the number of Common Shares authorized and reserved for issuance upon the conversion of the Series I Class A Preferred Stock shall be proportionately increased.

5.5 The number of Common Shares issued upon conversion of Series I Class A Preferred Stock and the Conversion Price shall be subject to adjustment from time to time upon the happening of certain events, as follows:

5.5.1 Change of Designation of the Common Shares or the rights, privileges, restrictions and conditions in respect of the Common Shares or division of the Common Shares into series. In the case of any amendment to the Articles to change the designation of the Common Shares or the rights, privileges, restrictions or conditions in respect of the Common Shares or division of the Common Shares into series the rights of the holders of the Series I Class A Preferred Stock shall be adjusted so as to provide that upon conversion thereof, the holder of the Series I Class A Preferred Stock being converted shall procure, in lieu of each Common Share theretofore issuable upon such conversion, the kind and amount of shares, other securities, money and property receivable upon such designation, change or division by the holder of one Common Share issuable upon such conversion had conversion occurred immediately prior to such designation, change or division. The Series I Class A Preferred Stock shall be deemed thereafter to provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 5. The provisions of this

subsection 5.5.1 shall apply in the same manner to successive reclassifications, changes, consolidations, and mergers.

5.5.2 If the Corporation, at any time while any of the Series I Class A Preferred Stock is outstanding, shall amend the Articles so as to change the Common Shares into a different number of shares, the Conversion Price shall be proportionately reduced, in case of such change increasing the number of Common Shares, as of the effective date of such increase, or if the Corporation shall take a record of holders of its Common Shares for the purpose of such increase, as of such record date, whichever is earlier, or the Conversion Price shall be proportionately increased, in the case of such change decreasing the number of Common Shares, as of the effective date of such decrease or, if the Corporation shall take a record of holders of its Common Stock for the purpose of such decrease, as of such record date, whichever is earlier.

5.5.3 If the Corporation, at any time while any of the Series I Class A Preferred Stock is outstanding, shall pay a dividend payable in Common Shares (except for any dividends of Common Shares payable pursuant to Part 3 hereof), the Conversion Price shall be adjusted, as of the date the Corporation shall take a record of the holders of its Common Shares for the purposes of receiving such dividend (or if no such record is taken, as of the date of payment of such dividend), to that price determined by multiplying the Conversion Price therefor in effect by a fraction (1) the numerator of which shall be the total number of Common Shares outstanding immediately prior to such dividend, and (2) the denominator of which shall be the total number of Common Shares outstanding immediately after such dividend (plus in the event that the Corporation paid cash for fractional shares, the number of additional shares which would have been outstanding had the Corporation issued fractional shares in connection with said dividend).

5.6 Whenever the Conversion Price shall be adjusted pursuant to Section 5.5 hereof, the Corporation shall make a certificate signed by its President, or a Vice President and by its Treasurer, Assistant Treasurer, Secretary or Assistant Secretary, setting forth, in reasonable detail, the event requiring the adjustment, the amount of the adjustment, the method by which such adjustment was calculated (including a description of the basis on which the Board of Directors made any determination hereunder), and the Conversion Price after giving effect to such adjustment, and shall cause copies of such certificates to be mailed (by first class mail, postage prepaid) to each holder of the Series I Class A Preferred Stock at its address shown on the books of the Corporation. The Corporation shall make such certificate and mail it to each such holder promptly after each adjustment.

5.7 No fractional Common Shares shall be issued in connection with any conversion of Series I Class A Preferred Stock, but in lieu of such fractional shares, the Corporation shall make a cash payment therefor equal in amount to the product of the applicable fraction multiplied by the Conversion Price then in effect.

5.8 No Series I Class A Preferred Stock which has been converted into Common Shares shall be reissued by the Corporation; provided, however, that each such share shall be restored to the status of authorized but unissued Preferred Stock without designation as to series and may thereafter be issued as a series of Preferred Stock not designated as Series I Class A Preferred Stock.

**Part 6 - Parity with Other Shares of Class A Preferred Shares.**

6.1 If any cumulative dividends or accounts payable or return of capital in respect of Series I Class A Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate ratably in respect of accumulated dividends and return of capital.

**Part 7 - Amendment.**

7.1 In addition to any requirement for a series vote pursuant to the GCL in respect of any amendment to the Corporation's Certificate of Incorporation that adversely affects the rights, privileges, restrictions and conditions of the Series I Class A Preferred Stock, the rights, privileges, restrictions and conditions attaching to the Series I Class A Preferred Stock may be amended by an amendment to the Corporation's Certificate of Incorporation so as to affect such adversely only if the Corporation has obtained the affirmative vote at a duly called and held series meeting of the holders of the Series I Class A Preferred Stock or written consent by the holders of a majority of the Series I Class A Preferred Stock then outstanding. Notwithstanding the above, the number of authorized shares of such class or classes of stock may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting as a single class, irrespective of this Section 7.1.

**CERTIFICATE OF DESIGNATIONS  
OF SERIES 2 CLASS B CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 2 Class B Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 2 Class B Convertible Preferred Stock as set forth in the attached resolutions.

Dated: February 16, 1996

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By Louis F. Centofanti  
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

Mark A. Zwicker  
Mark A. Zwicker, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.  
(the "Corporation")**

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 2 CLASS B CONVERTIBLE PREFERRED STOCK**

**WHEREAS,**

- A. The Corporation's share capital includes Preferred Stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series with the directors of the Corporation (the "Board") being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences, and relative, participating, optional or other special rights, privileges, restrictions and conditions attaching to the shares of each such series; and
- B. It is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 2 Class B Convertible Preferred Stock, par value \$.001.

**NOW, THEREFORE, BE IT RESOLVED, THAT:**

The Series 2 Class B Convertible Preferred Stock, par value \$.001 (the "Series 2 Class B Preferred Stock") of the Corporation shall consist of 2,500 shares and no more and shall be designated as the Series 2 Class B Preferred Stock and in addition to the preferences, rights, privileges, restrictions and conditions attaching to all the Series 2 Class B Preferred Stock as a series, the rights, privileges, restrictions and conditions attaching to the Series 2 Class B Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 Except as otherwise provided herein, in the Corporation's Certificate of Incorporation (the "Articles") or the General Corporation Law of the State of Delaware (the "GCL"), each holder of Series 2 Class B Preferred Stock, by virtue of his ownership thereof, shall be entitled to cast that number of votes per share thereof on each matter submitted to the Corporation's shareholders for voting which equals the number of votes which could be cast by such holder of the number of shares of the Corporation's Common Stock, par value \$.001 per share (the "Common Shares") into which such shares of Series 2 Class B Preferred Stock would be entitled to be converted into pursuant to Part 5 hereof on the record date of such vote. The outstanding Series 2 Class B Preferred Stock, the Common Shares of the Corporation and any other series of Preferred Stock of the Corporation having voting rights shall vote together as a single class, except as otherwise expressly required by the GCL, or Part 7 hereof. The Series 2 Class B Preferred Stock shall not have cumulative voting rights.

1.2 The Series 2 Class B Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

**Part 2 - Liquidation Rights.**

2.1 If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any Series 2 Class B Preferred Stock shall be outstanding, the holders of the then outstanding Series 2 Class B Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Common Shares equal to \$1,000 consideration per outstanding share of Series 2 Class B Preferred Stock, together with an amount equal to all unpaid dividends accrued thereon, if any, to the date of payment of such distribution, whether or not declared by the Board; provided, however, that the merger of the Corporation with any corporation or corporations in which the Corporation is not the survivor, or the sale or transfer by the Corporation of all or substantially all of its property, or a reduction by at least seventy percent (70%) of the then issued and outstanding Common Shares of the Corporation, shall be deemed to be a liquidation of the Corporation within the meaning of any of the provisions of this Part 2.

2.2 Subject to the provisions of Part 6 hereof, all amounts to be paid as preferential distributions to the holders of Series 2 Class B Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of Common Shares, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 After the payment to the holders of the shares of the Series 2 Class B Preferred Stock of the full preferential amounts provided for in this Part 2, the holders of the Series 2 Class B Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 2 Class B Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 2 Class B Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 2 Class B Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 2 Class B Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

**Part 3 - Dividends.**

- 3.1 Holders of record of Series 2 Class B Preferred Stock, out of funds legally available therefor and to the extent permitted by law, shall be entitled to receive dividends on their Series 2 Class B Preferred Stock, which dividends shall accrue at the rate per share of five percent (5%) per annum of consideration paid for each share of Series 2 Class B Preferred Stock (\$50.00 per share per year for each full year) commencing on the date of the issuance thereof, payable, at the option of the Corporation, (i) in cash, or (ii) by the issuance of that number of whole Common Shares computed by dividing the amount of the dividend by the market price applicable to such dividend.
- 3.2 For the purposes of this Part 3 and Part 4 hereof, "market price" means the average of the daily closing prices of Common Shares for a period of five (5) consecutive trading days ending on the date on which any dividend becomes payable or of any notice of redemption as the case may be. The closing price for each trading day shall be (i) for any period during which the Common Shares shall be listed for trading on a national securities exchange, the last reported bid price per share of Common Shares as reported by the primary stock exchange, or the Nasdaq Stock Market, if the Common Shares are quoted on the Nasdaq Stock Market, or (ii) if last sales price information is not available, the average closing bid price of Common Shares as reported by the Nasdaq Stock Market, or if not so listed or reported, then as reported by National Quotation Bureau, Incorporated, or (iii) in the event neither clause (i) nor (ii) is applicable, the average of the closing bid and asked prices as furnished by any member of the National Association of Securities Dealers, Inc., selected from time to time by the Corporation for that purpose.
- 3.3 Dividends on Series 2 Class B Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared and set aside for payment on the Common Shares until full cumulative dividends on all outstanding Series 2 Class B Preferred Stock shall have been paid or declared and set aside for payment.
- 3.4 Dividends shall be payable in arrears, at the rate of \$12.50 per share for each full calendar quarter on each February 28, May 31, August 31, and November 30 of each calendar year, to the holders of record of the Series 2 Class B Preferred Stock as they appear in the securities register of the Corporation on such record dates not more than sixty (60) nor less than ten (10) days preceding the payment date thereof, as shall be fixed by the Board; provided, however, that the initial dividend for the Series 2 Class B Preferred Stock shall accrue for the period commencing on the date of the issuance thereof.
- 3.5 If, in any quarter, insufficient funds are available to pay such dividends as are then due and payable with respect to the Series 2 Class B Preferred Stock and all other classes and series of the capital stock of the Corporation ranking in parity therewith (or such payment is otherwise prohibited by provisions of the GCL, such funds as are legally available to pay such dividends shall be paid or Common Shares will be issued as stock dividends to the holders of Series 2 Class B Preferred Stock and to the holders of any other series of Class B Preferred Stock then

outstanding as provided in Part 6 hereof, in accordance with the rights of each such holder, and the balance of accrued but undeclared and/or unpaid dividends, if any, shall be declared and paid on the next succeeding dividend date to the extent that funds are then legally available for such purpose.

#### **Part 4 - Redemption.**

4.1 At any time, and from time to time, on and after one hundred twenty (120) days from the date of the issuance of any Series 2 Class B Preferred Stock, if the average of the closing bid prices for the Common Shares for five (5) consecutive trading days shall be in excess of \$1.50 per share, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, the then outstanding Series 2 Class B Preferred Stock at a price per share of U. S. \$1,000 each (the "Redemption Price") (such price to be adjusted proportionately in the event of any change of the Series 2 Class B Preferred Stock into a different number of shares of Series 2 Class B Preferred Stock).

4.2 Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 2 Class B Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 2 Class B Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 2 Class B Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated of a share certificate or share certificates representing the number of Series 2 Class B Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 2 Class B Preferred Stock to be redeemed as provided in this Part 4, and the number of shares to be converted into Common Shares as provided in Part 5 hereof.

4.3 Upon receipt of the Redemption Notice, any Eligible Holder (as defined in Section 5.2 hereof) shall have the option, at its sole election, to specify what portion of its Series 2 Class B Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 4 or converted into Common Shares in the manner provided in Part 5 hereof, except that, notwithstanding any provision of such Part 5 to the contrary, any Eligible Holder shall have the right to convert into Common Shares that number of Series 2 Class B Preferred Stock called for redemption in the Redemption Notice.

4.4 On or before the Redemption Date in respect of any Series 2 Class B Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 4.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 2 Class B

Preferred Stock which are not being redeemed to be registered in the names of the persons whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

4.5 On the Redemption Date in respect of any Series 2 Class B Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 2 Class B Preferred Stock in respect of which the Corporation has received notice from the Eligible Holder thereof of its election to convert Series 2 Class B Preferred Stock in to Common Shares), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed share shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

#### **Part 5 - Conversion.**

5.1 For the purposes of conversion of the Series 2 Class B Preferred Stock shall be valued at \$1,000 per share ("Value"), and, if converted, the Series 2 Class B Preferred Stock shall be converted into such number of Common Shares (the "Conversion Shares") as is obtained by dividing the aggregate Value of the shares of Series 2 Class B Preferred Stock being so converted, together with all accrued but unpaid dividends thereon, by the "Average Stock Price" per share of the Conversion Shares (the "Conversion Price"), subject to adjustment pursuant to the provisions of this Part 5. For purposes of this Part 5, the "Average Stock Price" means the lesser of (x) seventy percent (70%) of the average daily closing bid prices of the Common Shares for a period of five (5) consecutive trading days immediately preceding the date of subscription by the Holder or (y) seventy percent (70%) of the average daily closing bid prices of Common Shares for the period of five (5) consecutive trading days immediately preceding the date of the conversion of the Series 2 Class B Preferred Stock in respect of which such Average Stock Price is determined. The closing price for each trading day shall be determined as provided in the last sentence of Section 3.2.

5.2 Any holder of Series 2 Class B Preferred Stock (an "Eligible Holder") may at any time commencing forty-five (45) days after the issuance of any Series 2 Class B Preferred Stock convert up to one hundred percent (100%) of his holdings of Series 2 Class B Preferred Stock in accordance with this Part 5.

5.3 The conversion right granted by Section 5.2 hereof may be exercised only by an Eligible Holder of Series 2 Class B Preferred Stock, in whole or in part, by the surrender of the share certificate or share certificates representing the Series 2 Class B Preferred Stock to be converted at the principal office of the Corporation (or at such other place as the Corporation may designate in a written notice sent to the holder by first class mail, postage prepaid, at its address shown on the books of the Corporation) against delivery of that number of whole Common Shares as shall be computed by dividing (1) the aggregate Value of the Series 2 Class B Preferred Stock so surrendered for conversion plus any accrued but unpaid dividends thereon, if any, by (2) the Conversion Price in effect at the date of the conversion. At the time of conversion of a share of the Series 2 Class B Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, issue that number of whole Common Shares which is equal to the product of dividing the amount of such unpaid dividends by the Average Stock Price whether or not declared by the Board. Each Series 2 Class B Preferred Stock share certificate surrendered for conversion shall be endorsed by its holder. In the event of any exercise of the conversion right of the Series 2 Class B Preferred Stock granted herein (i) share certificate representing the Common Shares purchased by virtue of such exercise shall be delivered to such holder within three (3) days of notice of conversion, and (ii) unless the Series 2 Class B Preferred Stock has been fully converted, a new share certificate representing the Series 2 Class B Preferred Stock not so converted, if any, shall also be delivered to such holder within three (3) days of notice of conversion. Any Eligible Holder may exercise its right to convert the Series 2 Class B Preferred Stock by telecopying an executed and completed Notice of Conversion to the Corporation, and within seventy-two (72) hours thereafter, delivering the original Notice of Conversion and the certificate representing the Series 2 Class B Preferred Stock to the Corporation by express courier. Each date on which a Notice of Conversion is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a conversion date. The Corporation will transmit the Common Shares certificates issuable upon conversion of any Series 2 Class B Preferred Stock (together with the certificates representing the Series 2 Class B Preferred Stock not so converted) to the Eligible Holder via express courier within three (3) business days after the conversion date if the Corporation has received the original Notice of Conversion and the Series 2 Class B Shares certificates being so converted by such date.

5.4 All Common Shares which may be issued upon conversion of Series 2 Class B Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof. At all times that any Series 2 Class B Preferred Stock is outstanding, the Corporation shall have authorized, and shall have reserved for the purpose of issuance upon such conversion, a sufficient number of Common Shares to provide for the conversion into Common Shares of all Series 2 Class B Preferred Stock then outstanding at the then effective Conversion Price. Without limiting the generality of the foregoing, if, at any time, the Conversion Price is decreased, the number of Common Shares authorized and reserved for issuance upon the conversion of the Series 2 Class B Preferred Stock shall be proportionately increased.

5.5 The number of Common Shares issued upon conversion of Series 2 Class B Preferred Stock and the Conversion Price shall be subject to adjustment from time to time upon the happening of certain events, as follows:

5.5.1 In the case of any amendment to the Articles to change the designation of the Common Shares or the rights, privileges, restrictions or conditions in respect of the Common Shares or division of the Common Shares into series the rights of the holders of the Series 2 Class B Preferred Stock shall be adjusted so as to provide that upon conversion thereof, the holder of the Series 2 Class B Preferred Stock being converted shall procure, in lieu of each Common Share theretofore issuable upon such conversion, the kind and amount of shares, other securities, money and property receivable upon such designation, change or division by the holder of one Common Share issuable upon such conversion had conversion occurred immediately prior to such designation, change or division. The Series 2 Class B Preferred Stock shall be deemed thereafter to provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 5. The provisions of this subsection 5.5.1 shall apply in the same manner to successive reclassifications, changes, consolidations, and mergers.

5.5.2 If the Corporation, at any time while any of the Series 2 Class B Preferred Stock is outstanding, shall amend the Articles so as to change the Common Shares into a different number of shares, the Conversion Price shall be proportionately reduced, in case of such change increasing the number of Common Shares, as of the effective date of such increase, or if the Corporation shall take a record of holders of its Common Shares for the purpose of such increase, as of such record date, whichever is earlier, or the Conversion Price shall be proportionately increased, in the case of such change decreasing the number of Common Shares, as of the effective date of such decrease or, if the Corporation shall take a record of holders of its Common Stock for the purpose of such decrease, as of such record date, whichever is earlier.

5.5.3 If the Corporation, at any time while any of the Series 2 Class B Preferred Stock is outstanding, shall pay a dividend payable in Common Shares (except for any dividends of Common Shares payable pursuant to Part 3 hereof), the Conversion Price shall be adjusted, as of the date the Corporation shall take a record of the holders of its Common Shares for the purposes of receiving such dividend (or if no such record is taken, as of the date of payment of such dividend), to that price determined by multiplying the Conversion Price therefor in effect by a fraction (1) the numerator of which shall be the total number of Common Shares outstanding immediately prior to such dividend, and (2) the denominator of which shall be the total number of Common Shares outstanding immediately after such dividend (plus in the event that the Corporation paid cash for fractional shares, the number of additional shares which would have been outstanding had the Corporation issued fractional shares in connection with said dividend).

5.6 Whenever the Conversion Price shall be adjusted pursuant to Section 5.5 hereof, the Corporation shall make a certificate signed by its President, or a Vice President and by its

Treasurer, Assistant Treasurer, Secretary or Assistant Secretary, setting forth, in reasonable detail, the event requiring the adjustment, the amount of the adjustment, the method by which such adjustment was calculated (including a description of the basis on which the Board of Directors made any determination hereunder), and the Conversion Price after giving effect to such adjustment, and shall cause copies of such certificates to be mailed (by first class mail, postage prepaid) to each holder of the Series 2 Class B Preferred Stock at its address shown on the books of the Corporation. The Corporation shall make such certificate and mail it to each such holder promptly after each adjustment.

5.7 No fractional Common Shares shall be issued in connection with any conversion of Series 2 Class B Preferred Stock, but in lieu of such fractional shares, the Corporation shall make a cash payment therefor equal in amount to the product of the applicable fraction multiplied by the Conversion Price then in effect.

5.8 No Series 2 Class B Preferred Stock which has been converted into Common Shares shall be reissued by the Corporation; provided, however, that each such share shall be restored to the status of authorized but unissued Preferred Stock without designation as to series and may thereafter be issued as a series of Preferred Stock not designated as Series 2 Class B Preferred Stock.

#### Part 6 - Parity with Other Shares of Series 2 Class B Preferred Stock and Priority.

6.1 If any cumulative dividends or accounts payable or return of capital in respect of Series 2 Class B Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate ratably in respect of accumulated dividends and return of capital.

6.2 For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 2 Class B Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 2 Class B Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 2 Class B Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 2 Class B Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over



**CERTIFICATE OF DESIGNATIONS  
OF SERIES 3 CLASS C CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

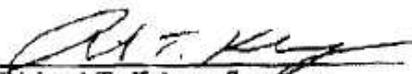
That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 3 Class C Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 3 Class C Convertible Preferred Stock as set forth in the attached resolutions.

Dated: July 17, 1996

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Kelecy, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 3 CLASS C CONVERTIBLE PREFERRED STOCK**

**WHEREAS,**

- A. The Corporation's share capital includes Preferred Stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by the Board of Directors of the Corporation (the "Board") being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences, and relative, participating, optional or other special rights, privileges, restrictions and conditions attaching to the shares of each such series; and
- B. It is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 3 Class C Convertible Preferred Stock, par value \$.001.

**NOW, THEREFORE, BE IT RESOLVED, THAT:**

The Series 3 Class C Convertible Preferred Stock, par value \$.001 (the "Series 3 Class C Preferred Stock") of the Corporation shall consist of 5,500 shares and no more and shall be designated as the Series 3 Class C Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 3 Class C Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided herein, in the Corporation's Certificate of Incorporation (the "Articles") or the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 3 Class C Preferred Stock shall have no voting rights whatsoever. To the extent that under the GCL the vote of the holders of the Series 3 Class C Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 3 Class C Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 3 Class C Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL the holders of the Series 3 Class C Preferred Stock are entitled to vote on a matter with holders of Corporation's Common Stock and/or any other class or series of the Corporation's voting securities, the Series 3 Class C Preferred Stock, the Corporation's Common Stock and all other classes or series of the

---

Corporation's voting securities shall vote together as one class, with each share of Series 3 Class C Preferred Stock entitled to a number of votes equal to the number of shares of the Corporation's Common Stock into which it is then convertible using the record date for the taking of such vote of stockholders as the date as of which the Conversion Price (as defined in Section 4.2 hereof) is calculated and conversion is effected. Holders of the Series 3 Class C Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 **No Preemptive Rights.** The Series 3 Class C Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

## **Part 2 - Liquidation Rights.**

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 3 Class C Preferred Stock shall be outstanding, the holders of the then outstanding Series 3 Class C Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 3 Class C Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 3 Class C Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 3 Class C Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 3 Class C Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 3 Class C Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 3 Class C Preferred Stock upon such dissolution, liquidation or winding up unless proportionate

distributive amounts shall be paid on account of the shares of this Series 3 Class C Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 3 Class C Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

#### **Part 3 - Dividends.**

3.1 The holders of the Series 3 Class C Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), at the Corporation's election, at the rate of six percent (6%) per annum of the Liquidation Value of the Series 3 Class C Preferred Stock. The Liquidation Value of the Series 3 Class C Preferred Stock shall be \$1,000.00 per share (the "Dividend Rate"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1996 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 3 Class C Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 3 Class C Preferred Stock. In the event that the Corporation elects to pay dividends in Common Stock of the Corporation, each holder of the Series 3 Class C Preferred Stock shall receive shares of Common Stock of the Corporation equal to the quotient of (i) the Dividend Rate in effect on the applicable Dividend Declaration Date divided by (ii) the average of the closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"). Dividends on the Series 3 Class C Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 3 Class C Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 3 Class C Preferred Stock shall have rights to convert the shares of Series 3 Class C Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 **Right to Convert.** The Series 3 Class C Preferred Stock shall be convertible into shares of Common Stock, as follows:

- 4.1.1 Up to one thousand eight hundred thirty-three (1,833) shares of Series 3 Class C Preferred Stock may be converted at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after October 1, 1996;

- 4.1.2 Up to one thousand eight hundred thirty-three (1,833) shares of Series 3 Class C Preferred Stock may be converted at the Conversion Price at any time on or after November 1, 1996; and,
- 4.1.3 Up to one thousand eight hundred thirty-four (1,834) shares of Series 3 Class C Preferred Stock may be converted at the Conversion Price on or after December 1, 1996.

**4.2 Conversion Price.** As used herein, the term Conversion Price shall be the product of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by (ii) seventy-five percent (75%). Notwithstanding the foregoing, the Conversion Price shall not be (i) less than a minimum of \$.75 per share ("Minimum Conversion Price") or (ii) more than a maximum of \$1.50 per share ("Maximum Conversion Price"). If, after July 1, 1996, the Corporation sustains a net loss, on a consolidated basis, in each of two (2) consecutive quarters, as determined under generally accepted accounting principles, the Minimum Conversion Price shall be reduced \$.25 a share, but there shall be no change to, or reduction of, the Maximum Conversion Price. For the purpose of determining whether the Corporation has had a net loss in each of two (2) consecutive quarters, at no time shall a quarter that has already been considered in such determination be considered in any subsequent determination (as an example the third quarter of 1996 in which there is a net profit and the fourth quarter of 1996 in which there is a net loss shall be considered as two consecutive quarters, and, as a result, the fourth quarter of 1996 shall not be considered along with the first quarter of 1997 as two (2) consecutive quarters, but the first quarter of 1997 must be considered with the second quarter of 1997 for the purposes of such determination). For the purposes of this Section 4.2, a "quarter" is a three (3) month period ending on March 31, June 30, September 30, and December 31. If any of the outstanding shares of Series 3 Class C Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 3 Class C Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At the time of conversion of shares of the Series 3 Class C Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the product of dividing the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 3 Class C Preferred Stock so converted by the Conversion Price in effect at the date of conversion.

**4.3 Mechanics of Conversion.** Any holder of the Series 3 Class C Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may

be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 3 Class C Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. No Conversion Notice with respect to any shares of Series 3 Class C Preferred Stock can be given prior to the time such shares of Series 3 Class C Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 3 Class C Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 3 Class C Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 3 Class C Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion within five (5) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3, the Corporation shall pay to the holder U.S. \$1,000 for each day that the Corporation is late in delivering such certificate to the holder or its agent.

**4.4 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 3 Class C Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate. If the Corporation shall declare or pay, without consideration, any dividend on the Common Stock payable in any right to acquire Common stock for no consideration, then the Corporation shall be deemed to have made a dividend payable in

Common Stock in an amount of shares equal to the maximum number of shares issuable upon exercise of such rights to acquire Common Stock.

4.5. **Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 3 Class C Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 3 Class C Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 3 Class C Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 3 Class C Preferred Stock immediately before that change.

4.6. **Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 3 Class C Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.7. **Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 3 Class C Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.8. **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 3 Class C Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 3 Class C Preferred Stock in connection with such conversion.

4.9. **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 3 Class C Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 3 Class C Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 3 Class C Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.10 **Fractional Shares.** No fractional share shall be issued upon the conversion of any share or shares of Series 3 Class C Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 3 Class C Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.11 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 3 Class C Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.12 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or permitted to close.

#### **Part 5 - Redemption.**

5.1 **Redemption During First 180 Days.** At any time, and from time to time, during the first one hundred eighty (180) days from the date of issuance of the Series 3 Class C Preferred Stock, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, the then outstanding Series 3 Class C Preferred Stock at a price per share of U. S. \$1,300.00 each ("First Six Months Redemption Price"). The Company may exercise such redemption by giving the holder of the Series 3 Class C Preferred Stock written notice of such redemption at any time during such 180-day period.

5.2 **Other Rights of Redemption by the Corporation.** At any time, and from time to time, after one hundred eighty (180) days from the date of the issuance of any Series 3 Class C Preferred Stock, if the average of the closing bid price of the Common Stock for ten (10) consecutive days shall be in excess of \$2.50 per share, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, the then outstanding Series 3 Class C Preferred Stock at a price per share of U. S. \$1,000 each (the "Redemption Price") (such price to be adjusted proportionately in the event of any change of the Series 3 Class C Preferred Stock into a different number of shares of Series 3 Class C Preferred Stock).

5.3 **Mechanics of Redemption.** Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 3 Class C Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 3 Class C Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 3 Class C Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 3 Class C Preferred Stock to be redeemed

from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 3 Class C Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first one hundred eighty (180) days from the date of issuance of the Series 3 Class C Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

**5.4 Rights of Conversion Upon Redemption.** If the redemption occurs pursuant to Section 5.1 hereof, the Holder of the Series 3 Class C Preferred Stock shall not have the right to convert those outstanding shares of Series 3 Class C Preferred Stock that the Company is redeeming after receipt of the Redemption Notice. If the redemption occurs pursuant to Section 5.2 hereof, then, upon receipt of the Redemption Notice, any holder of Series 3 Class C Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 3 Class C Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, such holder shall have the right to convert into Common Stock that number of Series 3 Class C Preferred Stock called for redemption in the Redemption Notice.

**5.5 Surrender of Certificates.** On or before the Redemption Date in respect of any Series 3 Class C Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 3 Class C Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

**5.6 Payment.** On the Redemption Date in respect of any Series 3 Class C Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate First Six Months Redemption Price or the Redemption Price, whichever is applicable, of all such shares called from redemption (less the aggregate Redemption Price for those Series 3 Class C Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 3 Class C Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the First Six Months Redemption Price or the Redemption Price, whichever is applicable, to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the First Six Months Redemption

Price or the Redemption Price, whichever is applicable, of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the First Six Months Redemption Price or the Redemption Price, whichever is applicable, in respect of their shares only from the Corporation.

**Part 6 - Parity with Other Shares of Series 3 Class C Preferred Stock and Priority.**

**6.1 Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 3 Class C Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

**6.2 Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 3 Class C Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 3 Class C Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 3 Class C Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 3 Class C Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 3 Class C Preferred Stock; and,

6.2.3 Junior to shares of this Series 3 Class C Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 3 Class C Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

**Part 7 - Amendment and Reissue.**

7.1 **Amendment.** If any proposed amendment to the Corporation's Certificate of Incorporation would alter or change the powers, preferences or special rights of the Series 3 Class C Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Certificate of Incorporation at a duly called and held series meeting of the holders of the Series 3 Class C Preferred Stock or written consent by the holders of a majority of the Series 3 Class C Preferred Stock then outstanding. Notwithstanding the above, the number of authorized shares of any class or classes of stock may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of this Section 7.1 or the requirements of Section 242 of the GCL.

7.2 **Authorized.** Any shares of Series 3 Class C Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

**CERTIFICATE OF ELIMINATION  
OF  
SERIES I CLASS A PREFERRED STOCK  
AND  
SERIES 2 CLASS B CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

---

PERMA-FIX ENVIRONMENTAL SERVICES, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (hereinafter called the "Corporation"), hereby certifies the following:

1. That the Certificate of Designations of Series I Class A Preferred Stock of the Corporation (the "Series I Preferred") was filed on February 6, 1996 (the "Series I Certificate of Designations").
  2. That all outstanding shares of the Series I Preferred have been converted into shares of common stock of the Company pursuant to the terms and conditions of the Series I Certificate of Designations.
  3. That no shares of Series I Preferred remain outstanding.
  4. That all shares of the Series I Preferred which have been converted have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.
  5. That on September 19, 1996, the Board of Directors of the Company duly adopted the following resolution:  
  

RESOLVED, that no authorized shares of Series I Class A Preferred Stock remain outstanding and no shares of Series I Class A Preferred Stock will be issued subject to the Certificate of Designation previously filed with respect to the Series I Class A Preferred Stock.
  6. That the Certificate of Designations of the Series 2 Class B Convertible Preferred Stock of the Corporation (the "Series 2 Preferred") was filed on February 20, 1996 (the "Series 2 Certificate of Designations").
  7. That all outstanding shares of the Series 2 Preferred have been converted into shares of common stock of the Company pursuant to the terms and conditions of the Series 2 Certificate of Designations.
-

8. That no shares of Series 2 Preferred remain outstanding.

9. That all shares of the Series 2 Preferred which have been converted have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

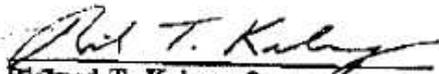
10. That on September 19, 1996, the Board of Directors of the Company duly adopted the following resolution:

RESOLVED, that no authorized shares of Series 2 Class B Convertible Preferred Stock remain outstanding and no shares of Series 2 Class B Convertible Preferred Stock will be issued subject to the Certificate of Designation previously filed with respect to the Series 2 Class B Convertible Preferred Stock.

11. That pursuant to the provisions of § 151(g) of the Delaware General Corporation Law, upon the effective date of the filing of this Certificate, this Certificate will have the effect of eliminating from the Restated Certificate of Incorporation only those matters set forth in the Restated Certificate of Incorporation with respect to the Series I Class A Preferred Stock and the Series 2 Class B Convertible Preferred Stock.

IN WITNESS WHEREOF, this Certificate of Elimination has been executed this 4<sup>th</sup> day of DECEMBER, 1996, by the President of the Company.

ATTEST:

  
Richard T. Kelecy, Secretary

(SEAL)

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By   
Dr. Louis F. Centofanti, President

**CERTIFICATE OF AMENDMENT  
OF  
RESTATED CERTIFICATE OF INCORPORATION  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

---

Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Corporation"), for purposes of amending its Restated Certificate of Incorporation, as amended ("Restated Certificate of Incorporation"), as provided by Section 242 of the Delaware General Corporation Law, does hereby certify:

1. The amendment set forth below to the Corporation's Restated Certificate of Incorporation was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware:

The first paragraph of Article Fourth of the Corporation's Restated Certificate of Incorporation is hereby deleted and replaced in its entirety by the following:

The total number of shares of capital stock that the Corporation shall have authority to issue is 52,000,000, of which 50,000,000 shall be designated as common stock of the par value of \$.001 per share ("Common Stock") and 2,000,000 shall be designated as preferred stock of the par value of \$.001 per share ("Preferred Stock").

2. Only the first paragraph of Article Fourth is amended by this Amendment, and the remainder of Article Fourth shall remain in full force and effect. No other provision, paragraph or article of the Restated Certificate of Incorporation is amended or changed by this Amendment. The Restated Certificate of Incorporation, as expressly amended by paragraph 1 of this Amendment, shall be in full force and effect.

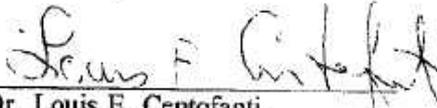
3. At a meeting of the Board of Directors held on the 19th day of September, 1996, a resolution was duly adopted setting forth the foregoing proposed amendment to the first paragraph of Article Fourth of the Restated Certificate of Incorporation, declaring such amendment to be advisable and setting the next Annual Meeting of Stockholders for consideration thereof.

4. Thereafter, pursuant to said resolution of its Board of Directors, the Annual Meeting of Stockholders was duly called and held on December 12, 1996, at which meeting the necessary number of shares as required by statute were voted in favor of such amendment.

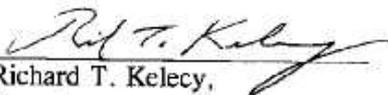
---

IN WITNESS whereof, Perma-Fix Environmental Services, Inc. has caused this Certificate to be signed and attested to by its duly authorized officers as of this 16th day of December, 1996.

Perma-Fix Environmental Services, Inc.,  
a Delaware corporation

By:   
Dr. Louis F. Centofanti  
President and Chief Executive Officer

ATTEST:

  
Richard T. Kelecy,  
Secretary

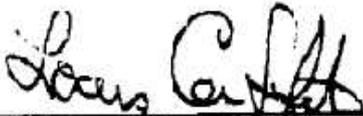
**CERTIFICATE OF DESIGNATIONS  
OF SERIES 4 CLASS D CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 4 Class D Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 4 Class D Convertible Preferred Stock as set forth in the attached resolutions.

Dated: June 9, 1997

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
\_\_\_\_\_  
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
\_\_\_\_\_  
Richard T. Kelecy, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 4 CLASS C CONVERTIBLE PREFERRED STOCK**

**WHEREAS**, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

**WHEREAS**, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 4 Class D Convertible Preferred Stock, par value \$.001 per share ("Series 4 Class D Preferred Stock");

**NOW, THEREFORE, BE IT RESOLVED**, that the Series 4 Class D Convertible Preferred Stock, par value \$.001 (the "Series 4 Class D Preferred Stock") of the Corporation shall consist of two thousand five hundred (2,500) shares and no more and shall be designated as the Series 4 Class D Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 4 Class D Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided in Part 7 hereof or under the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 4 Class D Preferred Stock shall have no voting rights whatsoever. To the extent that under Part 7 hereof or the GCL the vote of the holders of the Series 4 Class D Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 4 Class D Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 4 Class D Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL or Part 7 hereof, the holders of the Series 4 Class D Preferred Stock are entitled to vote on a matter, each share of the Series 4 Class D Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 4 Class D Preferred Stock. Holders of the Series 4 Class D Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written

consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 **No Preemptive Rights.** The Series 4 Class D Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

## **Part 2 - Liquidation Rights.**

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 4 Class D Preferred Stock shall be outstanding, the holders of the then outstanding Series 4 Class D Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 4 Class D Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 4 Class D Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 4 Class D Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 4 Class D Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 4 Class D Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 4 Class D Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 4 Class D Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 4 Class D Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

### **Part 3 - Dividends.**

3.1 The holders of the Series 4 Class D Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 4 Class D Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 4 Class D Preferred Stock shall be \$1,000 per outstanding share of the Series 4 Class D Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1997 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 4 Class D Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 4 Class D Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 4 Class D Preferred Stock. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 4 Class D Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Series 4 Class D Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 4 Class D Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 4 Class D Preferred Stock shall have rights to convert the shares of Series 4 Class D Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 **Right to Convert.** The Series 4 Class D Preferred Stock shall be convertible into shares of Common Stock, as follows:

4.1.1 Up to one thousand two hundred fifty (1,250) shares of Series 4 Class D Preferred Stock may be converted at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after October 5, 1997; and,

4.1.2 Up to an additional one thousand two hundred fifty (1,250) shares of Series 4 Class D Preferred Stock may be converted at the Conversion Price at any time on or after November 5, 1997.

4.2 **Conversion Price.** Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Series 4 Class D Preferred Stock shall be the product of the lesser of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by eighty percent (80%) or (ii) U.S. \$1.6875. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 4 Class D Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 4 Class D Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At the time of conversion of shares of the Series 4 Class D Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 4 Class D Preferred Stock so converted divided by the Stock Dividend Price, as defined in Section 3.1 hereof, in effect at the date of conversion.

4.3 **Mechanics of Conversion.** Any holder of the Series 4 Class D Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 4 Class D Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. No Conversion Notice with respect to any shares of Series 4 Class D Preferred Stock can be given prior to the time such shares of Series 4 Class D Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above, except as provided in Section 4.4. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 4 Class D Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice

to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 4 Class D Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 4 Class D Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion within seven (7) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3 ("Seven (7) Business Day Period"), then, upon the written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 4 Class D Preferred Stock, for payment of the penalty described below in this Section 4.3, which demand must be received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

- 4.4 **Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 4 Class D Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,482,000 shares of Common Stock issuable upon the conversion of the Series 4 Class D Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of

each share of Series 4 Class D Preferred Stock then outstanding shall have the right to convert such share of Series 4 Class D Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 4 Class D Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

- 4.4 **Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 4 Class D Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.
- 4.5. **Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 4 Class D Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 4 Class D Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 4 Class D Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 4 Class D Preferred Stock immediately before that change.
- 4.6 **Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 4 Class D Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.
- 4.7 **Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 4 Class D Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

- 4.8 **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 4 Class D Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 4 Class D Preferred Stock in connection with such conversion.
- 4.9 **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 4 Class D Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 4 Class D Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 4 Class D Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.
- 4.10 **Fractional Shares.** No fractional shares shall be issued upon the conversion of any share or shares of Series 4 Class D Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 4 Class D Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.
- 4.11 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 4 Class D Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.
- 4.12 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

**Part 5 - Redemption.**

- 5.1 **Redemption at Corporation's Option.** Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from the date of the first issuance of the Series 4 Class D Preferred Stock, the Corporation may, at its sole

option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 4 Class D Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four (4) years from the date of the first issuance of Series 4 Class D Preferred Stock - \$1,300 per share, if at any time during such four (4) year period the average of the closing bid price of the Common Stock for ten (10) consecutive trading days shall be in excess of Four U.S. Dollars (\$4.00) per share, and (b) after four (4) years from the date of the first issuance of Series 4 Class D Preferred Stock - \$1,000 per share.

- 5.3 **Mechanics of Redemption.** Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 4 Class D Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 4 Class D Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 4 Class D Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 4 Class D Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 4 Class D Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first one hundred eighty (180) days from the date of issuance of the Series 4 Class D Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.
- 5.4 **Rights of Conversion Upon Redemption.** If the redemption occurs after the first one hundred eighty (180) days after the first issuance of Series 4 Class D Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 4 Class D Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 4 Class D Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, such holder shall have the right to convert into Common Stock that number of Series 4 Class D Preferred Stock called for redemption in the Redemption Notice.
- 5.5 **Surrender of Certificates.** On or before the Redemption Date in respect of any Series 4 Class D Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are

not being redeemed (as described below), the Corporation shall cause the Series 4 Class D Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

- 5.6 **Payment.** On the Redemption Date in respect of any Series 4 Class D Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 4 Class D Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 4 Class D Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

#### **Part 6 - Parity with Other Shares of Series 4 Class D Preferred Stock and Priority.**

- 6.1 **Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 4 Class D Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.
- 6.2 **Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:
- 6.2.1 Prior or senior to the shares of this Series 4 Class D Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 4 Class D Preferred Stock:

- 6.2.2 On a parity with, or equal to, shares of this Series 4 Class D Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 4 Class C Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 4 Class D Preferred Stock; and.
- 6.2.3 Junior to shares of this Series 4 Class D Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 4 Class D Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

#### **Part 7 - Amendment and Reissue.**

- 7.1 **Amendment.** If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 4 Class D Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 4 Class D Preferred Stock or written consent by the holders of a majority of the Series 4 Class D Preferred Stock then outstanding. Notwithstanding the above or the provisions of the GCL, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242 of the GCL.
- 7.2 **Authorized.** Any shares of Series 4 Class D Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

**CERTIFICATE OF DESIGNATIONS  
OF SERIES 5 CLASS E CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 5 Class E Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 5 Class E Convertible Preferred Stock as set forth in the attached resolutions.

Dated: July 3, 1997

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By Loan Centofanti  
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

Richard T. Kelecyc  
Richard T. Kelecyc, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 5 CLASS E CONVERTIBLE PREFERRED STOCK**

**WHEREAS**, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, and qualifications, limitations or restrictions attaching to the shares of each such series;

**WHEREAS**, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 5 Class E Convertible Preferred Stock, par value \$.001 per share ("Series 5 Class E Preferred Stock");

**NOW, THEREFORE, BE IT RESOLVED**, that the Series 5 Class E Convertible Preferred Stock, par value \$.001 (the "Series 5 Class E Preferred Stock") of the Corporation shall consist of three hundred fifty (350) shares and no more and shall be designated as the Series 5 Class E Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 5 Class E Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided in Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 5 Class E Preferred Stock shall have no voting rights whatsoever. To the extent that under Section 242(b)(2) of the GCL the vote of the holders of the Series 5 Class E Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 5 Class E Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 5 Class E Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under Section 242(b)(2) of the GCL the holders of the Series 5 Class E Preferred Stock are entitled to vote on a matter, each share of the Series 5 Class E Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 5 Class E Preferred Stock. Holders of the Series 5 Class E Preferred Stock shall be entitled to notice of

(and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes. If the holders of the Series 5 Class E Preferred Stock are required to vote under Section 242(b)(2) of the GCL as a result of the number of authorized shares of any such class or classes of stock being increased or decreased, the number of authorized shares of any of such class or classes of stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, irrespective of the provisions of Section 242(b)(2) of the GCL.

1.2 **No Preemptive Rights.** The Series 5 Class E Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

#### **Part 2 - Liquidation Rights.**

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 5 Class E Preferred Stock shall be outstanding, the holders of the then outstanding Series 5 Class E Preferred Stock shall be entitled to receive out of the assets of the Corporation available for distribution to shareholders an amount equal to \$1,000 consideration per outstanding share of Series 5 Class E Preferred Stock, and no more, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board of Directors, before any payment shall be made or any assets distributed to the holders of the Corporation's Common Stock.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 5 Class E Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 5 Class E Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 5 Class E Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 5 Class E Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders

are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 5 Class E Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 5 Class E Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 5 Class E Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

### **Part 3 - Dividends.**

3.1 The holders of the Series 5 Class E Preferred Stock are entitled to receive if, when and as declared by the Board of Directors of the Corporation (the "Board") out of funds legally available therefor, cumulative annual dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 5 Class E Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 5 Class E Preferred Stock shall be \$1,000 per outstanding share of the Series 5 Class E Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1997 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 5 Class E Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 5 Class E Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 5 Class E Preferred Stock. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 5 Class E Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Series 5 Class E Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 5 Class E Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 5 Class E Preferred Stock shall have rights to convert the shares of Series 5 Class E Preferred Stock into shares of the Corporation's Common Stock, as follows (the "Conversion Rights"):

- 4.1 **Right to Convert.** The Series 5 Class E Preferred Stock shall be convertible into shares of Common Stock, as follows:
- 4.1.1 Up to one hundred seventy-five (175) shares of Series 5 Class E Preferred Stock may be converted at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after November 3, 1997; and,
- 4.1.2 Up to an additional one hundred seventy-five (175) shares of Series 5 Class E Preferred Stock may be converted at the Conversion Price at any time on or after December 3, 1997.
- 4.2 **Conversion Price.** Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Series 5 Class E Preferred Stock shall be the product of the lesser of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by eighty percent (80%) or (ii) U.S. \$1.6875. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 5 Class E Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 5 Class E Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At the time of conversion of shares of the Series 5 Class E Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 5 Class E Preferred Stock so converted divided by the Stock Dividend Price, as defined in Section 3.1 hereof, in effect at the date of conversion.
- 4.3 **Mechanics of Conversion.** Any holder of the Series 5 Class E Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such

office that it elects to convert the same (the "Conversion Notice"). No Conversion Notice with respect to any shares of Series 5 Class E Preferred Stock can be given prior to the time such shares of Series 5 Class E Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above, except as provided in Section 4.4. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within seven (7) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 5 Class E Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 5 Class E Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 5 Class E Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received.

4.4 **Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 5 Class E Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 200,000 shares of Common Stock issuable upon the conversion of the Series 5 Class E Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 5 Class E Preferred Stock then outstanding shall have the right to convert such share of Series 5 Class E Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 5 Class E Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

- 4.4 **Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 5 Class E Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.
- 4.5 **Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 5 Class E Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 5 Class E Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 5 Class E Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 5 Class E Preferred Stock immediately before that change.
- 4.6 **Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 5 Class E Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.
- 4.7 **Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 5 Class E Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.
- 4.8 **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 5 Class E Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 5 Class E Preferred Stock in connection with such conversion.

- 4.9 **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 5 Class E Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 5 Class E Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 5 Class E Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.
- 4.10 **Fractional Shares.** No fractional shares shall be issued upon the conversion of any share or shares of Series 5 Class E Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 5 Class E Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.
- 4.11 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 5 Class E Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.
- 4.12 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

#### **Part 5 - Redemption.**

- 5.1 **Redemption at Corporation's Option.** Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from the date of the first issuance of the Series 5 Class E Preferred Stock, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 5 Class E Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four (4) years from the date of the first issuance of Series 5 Class E Preferred Stock - \$1,300 per share, if at any time during such four (4) year period the average of the closing bid price of the Common Stock for ten (10) consecutive trading

days shall be in excess of Four U.S. Dollars (\$4.00) per share, and (b) after four (4) years from the date of the first issuance of Series 5 Class E Preferred Stock - \$1,000 per share.

- 5.3 **Mechanics of Redemption.** Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 5 Class E Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 5 Class E Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 5 Class E Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 5 Class E Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 5 Class E Preferred Stock to be redeemed as provided in this Part 5.
- 5.4 **Rights of Conversion Upon Redemption.** If the redemption occurs after the first one hundred eighty (180) days after the first issuance of Series 5 Class E Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 5 Class E Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 5 Class E Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof.
- 5.5 **Surrender of Certificates.** On or before the Redemption Date in respect of any Series 5 Class E Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 5 Class E Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.
- 5.6 **Payment.** On the Redemption Date in respect of any Series 5 Class E Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 5 Class E Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series

5 Class E Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

**Part 6 - Parity with Other Shares of Series 5 Class E Preferred Stock and Priority.**

- 6.1 **Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 5 Class E Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.
- 6.2 **Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:
- 6.2.1 Prior or senior to the shares of this Series 5 Class E Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 5 Class E Preferred Stock;
- 6.2.2 On a parity with, or equal to, shares of this Series 5 Class E Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 5 Class E Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 5 Class E Preferred Stock; and,

- 6.2.3 Junior to shares of this Series S Class E Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series S Class E Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

**Part 7 - Reissue.**

- 7.1 **Authorized.** Any shares of Series S Class E Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

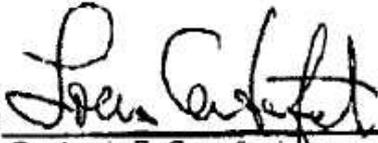
**CERTIFICATE OF DESIGNATIONS  
OF SERIES 6 CLASS F CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

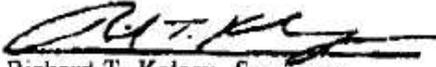
That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 6 Class F Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 6 Class F Convertible Preferred Stock as set forth in the attached resolutions.

Dated: November 12, 1997

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Kelecy, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 6 CLASS F CONVERTIBLE PREFERRED STOCK**

**WHEREAS**, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

**WHEREAS**, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 6 Class F Convertible Preferred Stock, par value \$.001 per share (the "Series 6 Class F Preferred Stock");

**NOW, THEREFORE, BE IT RESOLVED**, that the Series 6 Class F Preferred Stock shall consist of two thousand five hundred (2,500) shares and no more and shall be designated as the Series 6 Class F Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 6 Class F Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided in Part 7 hereof or under the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 6 Class F Preferred Stock shall have no voting rights whatsoever. To the extent that under Part 7 hereof or the GCL the vote of the holders of the Series 6 Class F Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 6 Class F Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 6 Class F Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL or Part 7 hereof, the holders of the Series 6 Class F Preferred Stock are entitled to vote on a matter, each share of the Series 6 Class F Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 6 Class F Preferred Stock. Holders of the Series 6 Class F Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder

meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 **No Preemptive Rights.** The Series 6 Class F Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

## **Part 2 - Liquidation Rights.**

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 6 Class F Preferred Stock shall be outstanding, the holders of the then outstanding Series 6 Class F Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 6 Class F Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 6 Class F Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 6 Class F Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 6 Class F Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 6 Class F Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 6 Class F Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 6 Class F Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 6 Class F Preferred Stock, ratably, in

proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

**Part 3 - Dividends.** The holders of the Series 6 Class F Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 6 Class F Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 6 Class F Preferred Stock shall be \$1,000 per outstanding share of the Series 6 Class F Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1997 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 6 Class F Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 6 Class F Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from September 16, 1997. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 6 Class F Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Series 6 Class F Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 6 Class F Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 6 Class F Preferred Stock shall have rights to convert the shares of Series 6 Class F Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

**4.1 Right to Convert.** The Series 6 Class F Preferred Stock shall be convertible into shares of Common Stock, as follows:

- 4.1.1 Up to one thousand two hundred fifty (1,250) shares of Series 6 Class F Preferred Stock may be converted at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after October 5, 1997; and,
- 4.1.2 Up to an additional one thousand two hundred fifty (1,250) shares of Series 6 Class F Preferred Stock may be converted at the Conversion Price at any time on or after November 5, 1997.

4.2 **Conversion Price.** Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 6 Class F Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock for 20 of any 30 consecutive trading days after March 1, 1998 shall be less than \$2.50 as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, the Conversion Price shall thereafter be the product of the lesser of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by eighty percent (80%) or (ii) \$1.8125. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 6 Class F Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 6 Class F Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 6 Class F Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 6 Class F Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

4.3 **Mechanics of Conversion.** Any holder of the Series 6 Class F Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 6 Class F Preferred Stock are being

held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. No Conversion Notice with respect to any shares of Series 6 Class F Preferred Stock can be given prior to the time such shares of Series 6 Class F Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above, except as provided in Section 4.4. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 6 Class F Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 6 Class F Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 6 Class F Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion within seven (7) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3 ("Seven (7) Business Day Period"), then, upon the written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 6 Class F Preferred Stock, for payment of the penalty described below in this Section 4.3, which demand must be received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

4.4 **Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 6 Class F Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,379,500 shares of Common Stock issuable upon the conversion of the Series 6 Class F Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 6 Class F Preferred Stock then outstanding shall have the right to convert such share of Series 6 Class F Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 6 Class F Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

4.5 **Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 6 Class F Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

4.6 **Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 6 Class F Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 6 Class F Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 6 Class F Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or

classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 6 Class F Preferred Stock immediately before that change.

4.7 **Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 6 Class F Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.8 **Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 6 Class F Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9 **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 6 Class F Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 6 Class F Preferred Stock in connection with such conversion.

4.10 **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 6 Class F Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 6 Class F Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 6 Class F Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.11 **Fractional Shares.** No fractional shares shall be issued upon the conversion of any share or shares of Series 6 Class F Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 6 Class F Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the

conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.12 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 6 Class F Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.13 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

#### **Part 5 - Redemption.**

5.1 **Redemption at Corporation's Option.** Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from June 9, 1997, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 6 Class F Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four years from June 9, 1997 - \$1,300 per share, if at any time during such four year period the average of the closing bid price of the Common Stock for ten consecutive trading days shall be in excess of Four Dollars (\$4.00) per share, and (b) after four years from June 9, 1997 - \$1,000 per share.

5.2 **Mechanics of Redemption.** Thirty days prior to any date stipulated by the Corporation for the redemption of Series 6 Class F Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 6 Class F Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 6 Class F Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 6 Class F Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 6 Class F Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first 180 days from the date of issuance of the Series 6 Class F Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.3 **Rights of Conversion Upon Redemption.** If the redemption occurs after the first 180 days after the first issuance of Series 6 Class F Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 6 Class F Preferred

Stock shall have the option, at its sole election, to specify what portion of its Series 6 Class F Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, such holder shall have the right to convert into Common Stock that number of Series 6 Class F Preferred Stock called for redemption in the Redemption Notice.

**5.4 Surrender of Certificates.** On or before the Redemption Date in respect of any Series 6 Class F Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 6 Class F Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

**5.5 Payment.** On the Redemption Date in respect of any Series 6 Class F Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 6 Class F Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 6 Class F Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

**Part 6 - Parity with Other Shares of Series 6 Class F Preferred Stock and Priority.**

6.1 **Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 6 Class F Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

6.2 **Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 6 Class F Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 6 Class F Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 6 Class F Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 6 Class F Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 6 Class F Preferred Stock; and,

6.2.3 Junior to shares of this Series 6 Class F Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 6 Class F Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

**Part 7 - Amendment and Reissue.**

7.1 **Amendment.** If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 6 Class F Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 6 Class F Preferred Stock or written consent by the holders of a majority of the Series 6 Class F Preferred Stock then outstanding. Notwithstanding the above or the provisions of the GCL, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242 of the GCL.

7.2 **Authorized.** Any shares of Series 6 Class F Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

**CERTIFICATE OF DESIGNATIONS  
OF SERIES 7 CLASS G CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

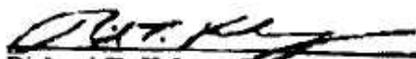
That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 7 Class G Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 7 Class G Convertible Preferred Stock as set forth in the attached resolutions.

Dated: November 12, 1997

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Kelecy, Secretary

PERMA-FIX ENVIRONMENTAL SERVICES, INC.  
(the "Corporation")

RESOLUTION OF THE BOARD OF DIRECTORS

FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 7 CLASS G CONVERTIBLE PREFERRED STOCK

WHEREAS, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

WHEREAS, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 7 Class G Convertible Preferred Stock, par value \$.001 per share (the "Series 7 Class G Preferred Stock");

NOW, THEREFORE, BE IT RESOLVED, that the Series 7 Class G Preferred Stock shall consist of three hundred (350) shares and no more and shall be designated as the Series 7 Class G Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 7 Class G Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided in Part 7 hereof or under the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 7 Class G Preferred Stock shall have no voting rights whatsoever. To the extent that under Part 7 hereof or the GCL the vote of the holders of the Series 7 Class G Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 7 Class G Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 7 Class G Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL or Part 7 hereof, the holders of the Series 7 Class G Preferred Stock are entitled to vote on a matter, each share of the Series 7 Class G Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 7 Class G Preferred Stock. Holders of the Series 7 Class G Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 **No Preemptive Rights.** The Series 7 Class G Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

**Part 2 - Liquidation Rights.**

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 7 Class G Preferred Stock shall be outstanding, the holders of the then outstanding Series 7 Class G Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 7 Class G Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 7 Class G Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 7 Class G Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 7 Class G Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 7 Class G Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 7 Class G Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 7 Class G Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 7 Class G Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

**Part 3 - Dividends.** The holders of the Series 7 Class G Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally

available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 7 Class G Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 7 Class G Preferred Stock shall be \$1,000 per outstanding share of the Series 7 Class G Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1997 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 7 Class G Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 7 Class G Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 7 Class G Preferred Stock. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 7 Class G Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Series 7 Class G Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 7 Class G Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 7 Class G Preferred Stock shall have rights to convert the shares of Series 7 Class G Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

**4.1 Right to Convert.** The Series 7 Class G Preferred Stock shall be convertible into shares of Common Stock, as follows:

- 4.1.1 Up to one hundred seventy-five (175) shares of Series 7 Class G Preferred Stock may be converted at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after November 3, 1997; and,

- 4.1.2 Up to an additional one hundred seventy-five (175) shares of Series 7 Class G Preferred Stock may be converted at the Conversion Price at any time on or after December 3, 1997.

4.2 **Conversion Price.** Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 7 Class G Preferred Stock shall be \$1.8125 except that, in the event the average closing bid price of the Common Stock for 20 of 30 consecutive trading days after March 1, 1998 shall be less than \$2.50, the Conversion Price shall thereafter be the product of the lesser of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by eighty percent (80%) or (ii) \$1.8125. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 7 Class G Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 7 Class G Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 7 Class G Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 7 Class G Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

4.5. **Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 7 Class G Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 7 Class G Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 7 Class G Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 7 Class G Preferred Stock immediately before that change.

4.6 **Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 7 Class G Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.7 **Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 7 Class G Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.8 **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 7 Class G Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 7 Class G Preferred Stock in connection with such conversion.

4.9 **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 7 Class G Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 7 Class G Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 7 Class G Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.10 **Fractional Shares.** No fractional shares shall be issued upon the conversion of any share or shares of Series 7 Class G Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 7 Class G Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.11 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 7 Class G Preferred Stock shall be deemed

given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.12 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

#### **Part 5 - Redemption.**

5.1 **Redemption at Corporation's Option.** Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from July 7, 1997, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 7 Class G Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four years from July 7, 1997 - \$1,300 per share, if at any time during such four year period the average of the closing bid price of the Common Stock for ten consecutive trading days shall be in excess of Four U.S. Dollars (\$4.00) per share, and (b) after four years from July 7, 1997 - \$1,000 per share.

5.3 **Mechanics of Redemption.** Thirty days prior to any date stipulated by the Corporation for the redemption of Series 7 Class G Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 7 Class G Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 7 Class G Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 7 Class G Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 7 Class G Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first 180 days from the date of issuance of the Series 7 Class G Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.4 **Rights of Conversion Upon Redemption.** If the redemption occurs after the first 180 days after the first issuance of Series 7 Class G Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 7 Class G Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 7 Class G Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, such holder shall have the right to

convert into Common Stock that number of Series 7 Class G Preferred Stock called for redemption in the Redemption Notice.

**5.5 Surrender of Certificates.** On or before the Redemption Date in respect of any Series 7 Class G Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 7 Class G Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

**5.6 Payment.** On the Redemption Date in respect of any Series 7 Class G Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 7 Class G Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 7 Class G Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

#### **Part 6 - Parity with Other Shares of Series 7 Class G Preferred Stock and Priority.**

**6.1 Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 7 Class G Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

6.2 **Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

- 6.2.1 Prior or senior to the shares of this Series 7 Class G Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 7 Class G Preferred Stock;
- 6.2.2 On a parity with, or equal to, shares of this Series 7 Class G Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 4 Class C Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 7 Class G Preferred Stock; and,
- 6.2.3 Junior to shares of this Series 7 Class G Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 7 Class G Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

**Part 7 - Amendment and Reissue.**

7.1 **Amendment.** If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 7 Class G Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 7 Class G Preferred Stock or written consent by the holders of a majority of the Series 7 Class G Preferred Stock then outstanding. Notwithstanding the above or the provisions of the GCL, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding)

by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242 of the GCL.

7.2 **Authorized.** Any shares of Series 7 Class G Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

**CERTIFICATE OF ELIMINATION  
OF  
SERIES 4 CLASS D CONVERTIBLE PREFERRED STOCK  
AND  
SERIES 5 CLASS E CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

---

PERMA-FIX ENVIRONMENTAL SERVICES, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (hereinafter called the "Corporation"), hereby certifies the following:

1. That the Certificate of Designations of Series 4 Class D Convertible Preferred Stock of the Corporation (the "Series 4 Preferred") was filed on June 11, 1997 (the "Series 4 Certificate of Designations").
2. That all outstanding shares of the Series 4 Preferred have been delivered to the Company and exchanged upon agreement with the holder thereof pursuant to the terms and conditions of a certain Exchange Agreement between the Company and RBB Bank Aktiengesellschaft, dated effective as of September 16, 1997.
3. That no shares of Series 4 Preferred remain outstanding.
4. That all shares of the Series 4 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.
5. That effective September 16, 1997, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 4 Class D Convertible Preferred Stock, no authorized shares of Series 4 Class D Convertible Preferred Stock will remain outstanding and no shares of Series 4 Class D Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 4 Class D Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of

---

Delaware regarding the Series 4 Class D Convertible Preferred Stock.

6. That the Certificate of Designations of the Series 5 Class E Convertible Preferred Stock of the Corporation (the "Series 5 Preferred") was filed on July 14, 1997 (the "Series 5 Certificate of Designations").

7. That all outstanding shares of the Series 5 Preferred have been delivered to the Company and exchanged upon agreement with the holder thereof pursuant to the terms and conditions of a certain Exchange Agreement between the Company and The Infinity Fund, L.P., dated effective as of September 16, 1997.

8. That no shares of Series 5 Preferred remain outstanding.

9. That all shares of the Series 5 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

10. That effective September 16, 1997, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 5 Class E Convertible Preferred Stock, no authorized shares of Series 5 Class E Convertible Preferred Stock will remain outstanding and no shares of Series 5 Class E Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 5 Class E Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 5 Class E Convertible Preferred Stock.

11. That pursuant to the provisions of § 151(g) of the Delaware General Corporation Law, upon the effective date of the filing of this Certificate, this Certificate will have the effect of eliminating from the Restated Certificate of Incorporation only those matters set forth in the Restated Certificate of Incorporation with respect to the Series 4 Class D Convertible Preferred Stock and the Series 5 Class E Convertible Preferred Stock.

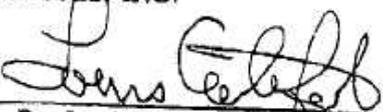
IN WITNESS WHEREOF, this Certificate of Elimination has been executed this 20th day of November, 1997 by the President of the Company.

ATTEST:

  
Richard T. Kelecy, Secretary

(SEAL)

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti, President

DALL:\N-PIPE\CERT\ELIM.S45

**CERTIFICATE OF DESIGNATIONS  
OF RIGHTS AND PREFERENCES OF THE  
SERIES 10 CLASS J CONVERTIBLE PREFERRED STOCK OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

We, being respectively the President and Secretary of Perma-Fix Environmental Services, Inc. a corporation organized and existing under the laws of the State of Delaware (hereinafter the "Corporation"), DO HEREBY CERTIFY:

**FIRST:**

That pursuant to authority expressly granted and vested in the Board of Directors of said Corporation under Section 151 of the Delaware General Corporation Law (the "GCL"), and the provisions of the Corporation's Restated Certificate of Incorporation, said Board of Directors, on June 30th, 1998 (the "Closing Date"), adopted the following resolution setting forth the designations, powers, preferences and rights of its Series 10 Class J Convertible Preferred Stock (the "Certificate of Designations").

**RESOLVED:** That the designations, powers, preferences and rights of the Series 10 Class J Convertible Preferred Stock be, and they hereby are, as set forth below:

**I. Number of Shares of Common Stock of Series 10 Class J Convertible Preferred Stock**

The Corporation hereby authorizes the issuance of 3,000 (three thousand) shares of Series 10 Class J Convertible Preferred Stock par value \$.001 per share (the "Preferred Stock"). This Preferred Stock shall pay an annual dividend based on a 365 day calendar year of 4% of the Liquidation Value (as defined in Section 3 hereof) ("Dividend Rate"), payable semiannually within ten (10) business days after each subsequent June 30th and December 31st (each a "Dividend Declaration Date"), and shall be payable in cash or shares of the Corporation's par value \$.001 per share common stock (Common Stock) at the Corporation's option. The first Dividend Declaration Date shall be December 31st, 1998.

In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on the outstanding shares of Preferred Stock in Common Stock of the Corporation, the Holder of each share of Preferred Stock shall receive that number of shares of Common Stock equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national

securities exchange, the average closing bid price of the Common Stock as quoted on such national exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Preferred Stock shall have been paid or declared and set aside for payment.

## **2. Voting.**

(a) Except as provided under Section 242 of the GCL, holders of Preferred Stock (the "Holders") shall not have the right to vote on any matter. Notwithstanding the provisions of Section 242 of the GCL or Section 4 hereof, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of Section 242 of the GCL.

## **3. Liquidation.**

In the event of a voluntary or involuntary dissolution, liquidation, or winding up of the Corporation, the Holders of Preferred Stock shall be entitled to receive out of the assets of the Corporation legally available for distribution to holders of its capital stock, before any payment or distribution shall be made to holders of shares of Common Stock or any other class of stock ranking junior to the Preferred Stock, an amount per share of Preferred Stock equal to \$1,000 (the "Liquidation Value") plus any accrued and unpaid dividends on the Preferred Stock. If upon such liquidation, dissolution, or winding up of the Corporation, whether voluntary or involuntary, the assets to be distributed among the Holders of Preferred Stock shall be insufficient to permit payment to the Holders of Preferred Stock of the amount distributable as aforesaid, then the entire assets of the Corporation to be so distributed shall be distributed ratably among the Holders of Preferred Stock and shares of such other classes or series ranking on a parity with the shares of this Preferred Stock in proportion to the full distributable amounts for which holders of all such parity shares are entitled upon such distribution, liquidation, or winding up. Upon any such liquidation, dissolution or winding up of the Corporation, after the Holders of Preferred Stock shall have been paid in full the amounts to which they shall be entitled, the remaining net assets of the Corporation may be distributed to the holders of stock ranking on liquidation junior to the Preferred Stock and the Holders of the Preferred Stock shall have no right or claim to any of the remaining assets of the Corporation. Written notice of such liquidation, dissolution or winding up, stating a payment date, the amount of the liquidation payments and the place where said

liquidation payments shall be payable, shall be given by mail, postage prepaid or by telex or facsimile to non-U.S. residents, not less than 10 days prior to the payment date stated therein, to the Holders of record of Preferred Stock, such notice to be addressed to each such Holder at its address as shown by the records of the Corporation. For purposes hereof the shares of Common Stock, shall rank on liquidation junior to the Preferred Stock.

#### **4. Restrictions.**

The Corporation will not amend or modify the terms of its Restated Certificate of Incorporation so as to adversely alter or change the Preferred Stock at any time when shares of Preferred Stock are outstanding, without the approval of the Holders of at least a majority of the then outstanding shares of Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a series, except where the vote or written consent of the Holders of a greater number of shares of Common Stock of the Corporation is required by law or by the Corporation's Certificate of Incorporation, as amended.

#### **5. Optional Conversion.**

The Holders of shares of Preferred Stock shall have the following conversion rights to convert the shares of Preferred Stock into shares of Common Stock of the Corporation:

(a) **Conversion Dates.** The Holder of any share or shares of Preferred Stock may convert cumulatively any of such Preferred Stock at any time subsequent to 180 days after the Closing Date.

(b) **Right to Convert; Conversion Price.** Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Preferred Stock shall be One Dollar and 875/100 (\$1.875); except that after the expiration of one hundred and eighty (180) days after the Closing Date if the average of the closing bid price per share of Common Stock quoted on the NASDAQ (or the closing bid price of the Common Stock as quoted on the national securities exchange if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange) for the five (5) trading days immediately prior to the particular date of each Conversion Notice (as defined below) is less than Two Dollars and 34/100 (\$2.34), then the Conversion Price for that particular conversion shall be eighty percent (80%) of the average of the closing bid price of the Common Stock on the NASDAQ (or if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange then eighty percent (80%) of the average of the closing bid price of the Common Stock on the national securities exchange) for the five (5) trading days immediately prior to the particular date of the Conversion Notice. If any of the outstanding shares of Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Section 5(b), the number of shares of whole Common Stock to be issued to the Holder as a result of such conversion shall be determined

by dividing (a) the aggregate Stated Value of the Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect on the date of that particular Conversion Notice relating to such conversion. At the time of conversion of shares of the Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon on the shares of Preferred so converted to the date of the Conversion Notice relating to such conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of the Conversion Notice relating to such conversion of the shares of Preferred Stock so converted divided by the Stock Dividend Price, in effect at the date of the Conversion Notice relating to such conversion.

(c) **Conversion Notice.** The right of conversion shall be exercised by the Holder thereof by telecopying or faxing an executed and completed written notice signed by an authorized representative of the Holder, ("Conversion Notice") to the Corporation that the Holder elects to convert a specified number of shares of Preferred Stock representing a specified Stated Value thereof into shares of Common Stock and by delivering by express courier the certificate or certificates of Preferred Stock being converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the Holders of the Preferred Stock). The business date indicated on a Conversion Notice which is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a Conversion Date. The Conversion Notice shall include therein the Stated Value of shares of Preferred Stock to be converted, and a calculation (a) of the Stock Dividend Price, (b) the Conversion Price, and (c) the number of Shares of Common Stock to be issued in connection with such conversion. The Corporation shall have the right to review the calculations included in the Conversion Notice, and shall provide notice of any discrepancy or dispute therewith within three (3) business days of the receipt thereof. The Holder shall deliver to the Corporation an original Conversion Notice and the original Preferred to be converted within three (3) business days from the date of the Conversion Notice.

(d) **Issuance of Certificates - Time Conversion Effected.** Promptly, but in no event more than six (6) business days, after the receipt by facsimile of the Conversion Notice referred to in Subparagraph (5)(c); and provided within the six (6) business days the Corporation receives the certificate or certificates for the shares of Preferred Stock to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the Holder, registered in the name of the Holder, a certificate or certificates for the number of whole shares of Common Stock into which such shares of Preferred Stock are converted. Such conversion shall be deemed to have been effected as of the close of business on the date on which the telecopy or facsimile Conversion Notice shall have been received by the Corporation, and the rights of the Holder of such share or shares of Preferred Stock shall cease, at such time, and the Holder or Holders shall be deemed to have become the Holder or Holders of record of the shares of Common Stock represented thereby.

In the event that the shares of Common Stock issuable upon conversion of the Preferred, is not delivered within six (6) business days of the date the Company receives the Conversion Notice, the Company shall pay to the Buyer, by wire transfer, as liquidated damages for such failure and not as a penalty, for each \$100,000 of Preferred sought to be converted, \$500 for each of the first five (5) calendar days and \$1,000 per calendar day thereafter that the shares of Common Stock are not delivered, which liquidated damages shall begin to run from the seventh (7th) business day after the Conversion Date. Any and all payments required pursuant to this paragraph shall be payable only in cash. Notwithstanding the above, liquidated damages shall not exceed \$2,000.00 per day. In addition to the liquidated damages set forth herein, in the event the Company fails to deliver the shares of Common Stock within six (6) business days after the Conversion date, the Company agrees to issue the larger number of shares of Common Stock derived from (i) the original Conversion Notice, or (ii) utilizing the five lowest closing bid prices of the Company's shares of Common Stock beginning on the Conversion Date and ending on the day the shares of Common Stock are delivered. The Company understands that a delay in the issuance of the shares of Common Stock could result in economic loss to the Holder. Nothing contained herein, or in the Preferred shall limit the Holder's rights to pursue actual damages for the Company's failure to issue and deliver shares of Common Stock to the Holder in accordance with the terms of the Certificate of Designations, and this Agreement.

(e) **Fractional Shares of Common Stock.** No fractional shares of Common Stock shall be issued upon conversion of any Preferred Stock into shares of Common Stock. All fractional shares of Common Stock shall be aggregated and then rounded down to the nearest whole share of Common Stock. In case the number of shares of Preferred Stock represented by the certificate or certificates surrendered pursuant to Subparagraph 5(b) exceeds the number of shares of Common Stock converted, the Corporation shall, upon such conversion, execute and deliver to the Holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Preferred Stock represented by the certificate or certificates surrendered which are not to be converted.

(f) **Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering all the shares of Common Stock issuable upon the conversion of the Preferred Stock is declared effective by the U.S. Securities and Exchange Commission ("Commission"), the Corporation or such successor corporation as the case may be, shall make appropriate provision so that the Holder of each share of Preferred Stock then outstanding shall have the right to convert such share of Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject

to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 5.

In the event of a Merger or Sale, where the Corporation is not the surviving Corporation, the Holder shall have the right to redeem all of the outstanding shares of Preferred Stock at 120% of the Liquidation Value of each share of Preferred Stock then outstanding plus all accrued and unpaid dividends (the "Redemption Amount"). The Corporation shall pay this Redemption Amount in cash within ten (10) business days of receipt by the Corporation of notice from the Holder, and receipt by the Corporation of all outstanding shares of Preferred Stock duly endorsed by the Holder to the Corporation.

**(g) Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Preferred Stock are issued and outstanding shall declare or pay, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

**(h) Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of Common Stock of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares of Common Stock provided for in Section 5(g) hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Preferred Stock would otherwise have been entitled to receive, a number of shares of Common Stock of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Preferred Stock immediately before that change.

#### **6. Assignment.**

Subject to all applicable restrictions on transfer, the rights and obligations of the Corporation and the Holder of the Preferred Stock shall be binding upon and benefit the successors, assigns, heirs, administrators, and transferees of the parties.

## 7. Shares of Common Stock to be Reserved.

The Corporation, upon the effective date of this Certificate of Designations, has a sufficient number of shares of Common Stock available to reserve for issuance upon the conversion of all outstanding shares of Preferred Stock, pursuant to the terms and conditions set forth in Section 5, and exercise of the Warrants as defined in Section 11. The Corporation will at all times reserve and keep available out of its authorized shares of Common Stock, solely for the purpose of issuance upon the conversion of Preferred Stock, and exercise of the Warrants, as herein provided, such number of shares of Common Stock as shall then be issuable upon the conversion of all outstanding shares of Preferred Stock, and exercise of the Warrants. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued, fully paid and non assessable. The Corporation will take such action as may be required, if the total number of shares of Common Stock issued and issuable after such action upon conversion of the Preferred Stock, and exercise of the Warrants would exceed the total number of shares of Common Stock then authorized by the Corporation's Certificate of Incorporation, as amended, or would exceed 19.99% of the shares of Common Stock then outstanding if required by law or the Rules and Regulations of NASDAQ or the National Securities Exchange applicable to the Corporation to take such action as a result of exceeding such 19.99%, in order to increase the number of shares of Common Stock to permit the Corporation to issue the number of shares of Common Stock required to effect conversion of the Preferred, and exercise of the Warrants, to a number sufficient to permit conversion of the Preferred Stock, and exercise of the Warrants, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to the Corporation's Restated Certificate of Incorporation, and to obtain shareholders approval in order to effect conversion of the Preferred Stock, and exercise of the Warrants, if required by law or the rules or regulations of the NASDAQ or National Securities Exchange applicable to the Corporation.

**7(a) Shareholder Approval.** In connection with the issuance to the Holder of the shares of Preferred Stock, pursuant to this Certificate of Designations, the Corporation is also issuing (i) certain warrants ("RBB Warrants") to the Holder pursuant to the terms of that certain Private Securities Subscription Agreement dated June 30th, 1998 (the "Agreement"), providing for the purchase of up to 150,000 shares of Common Stock at an exercise price of \$2.50 per share and (ii) certain warrants (collectively, the "Liviakis Warrants") to Liviakis Financial Communication, Inc. ("Liviakis") and Robert B. Prag providing for the purchase of up to an aggregate of 2,500,000 shares of Common Stock at an exercise price of \$1.875 per share pursuant to the terms of that Placement and Consulting Agreement dated June 30th, 1998, between Liviakis and the Corporation.

If (i) the aggregate number of shares of Common Stock issued by the Corporation as a result of any or all of the following: (a) conversion of the Preferred Stock, (b) payment of dividends accrued on the Preferred Stock (c) exercise of the RBB Warrants, and (d) exercise of the Liviakis Warrants exceeds 2,388,347 shares of Common Stock (which equals 19.9% of the outstanding

shares of Common Stock of the Corporation as of the date of this Certificate of Designations) and (ii) the Holder has converted or elects to convert any of the then outstanding shares of Preferred Stock pursuant to the terms of this Section 5 at a Conversion Price less than \$1.875 (\$1.875 the market value per share of Common Stock as quoted on the NASDAQ as of the close of business on June 30th, 1998) pursuant to the terms of Section 5(b) hereof, other than if the Conversion Price is less than \$1.875 solely as a result of the anti-dilution provisions of Section 5(g) and (h) hereof, then, notwithstanding anything in Section 5 to the contrary, the Corporation shall not issue any shares of Common Stock as a result of receipt of a Conversion Notice unless and until the Corporation shall have obtained approval of its shareholders entitled to vote on the transactions in accordance with subparagraphs (25)(H)(i)d, (iv) and (v) of Rule 4310 of the NASDAQ Marketplace Rules ("Shareholder Approval").

If Shareholder Approval is required as set forth in the above paragraph, the Corporation shall take all necessary steps to obtain such Shareholder Approval upon receipt of the Conversion Notice triggering the need for Shareholder Approval ("Current Conversion Notice"). If the Corporation has not received from the Holder a Current Conversion Notice, the Holder, subsequent to January 1st, 1999 may, if the Corporation's shares of Common Stock trade, subsequent to January 1st, 1999, at a five (5) day average closing bid price below Two Dollars and 34/100 (\$2.34), upon written notice to the Corporation, require the Corporation to obtain Shareholder Approval ("Holder's Notice"). The Holder and the Corporation's officers and directors covenant to vote all shares of Common Stock over which they have voting control in favour of Shareholder Approval. If the Corporation does not obtain Shareholder Approval within ninety (90) days of the earlier of the Corporation's receipt of (i) the Current Conversion Notice or (ii) the Holder's Notice, and the Holder has not breached its covenant to vote all shares of Common Stock over which they have voting control in favour of Shareholder Approval, the Corporation shall pay in cash to the Holder liquidated damages, in an amount of 4% per month of the Liquidation Value of each share of Preferred Stock then outstanding, commencing on the 91st day of the Corporation's receipt of the Holder's Current Conversion Notice, and continuing every thirty (30) days pro-rata until such time the Corporation receives Shareholder Approval.

#### **8. No Reissuance of Series 10 Class J Convertible Preferred Stock.**

Shares of Preferred Stock which are converted into shares of Common Stock as provided herein shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred stock hereafter created.

#### **9. Closing of Books.**

The Corporation will at no time close its transfer books against the transfer of any Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Common Stock of Preferred Stock in any manner which interferes with the timely conversion of

such Preferred Stock, except as may otherwise be required to comply with applicable securities laws.

**10. No Preemptive Rights.**

The Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

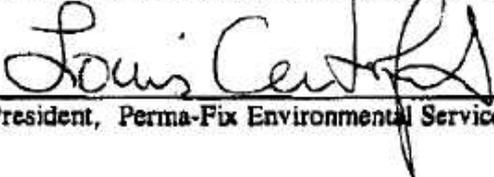
**11. Definition of Shares.**

As used in this Certificate of Designations, the term "shares of Common Stock" shall mean and include the Corporation's authorized common stock, par value \$.001, as constituted on the date of filing of these terms of the Preferred Stock, or in case of any reorganization, reclassification, or stock split of the outstanding shares of Common Stock thereof, the stock, securities or assets provided for hereof. The term "Warrants" as used herein shall have the same meaning as defined in Section 1 of the Private Securities Subscription Agreement, dated June 30th 1998, between the Company and RBB Bank Aktiengesellschaft.

The said determination of the designations, preferences and relative, participating, optional or other rights, and the qualifications, limitations or restrictions thereof, relating to the Preferred Stock was duly made by the Board of Directors pursuant to the provisions of the Corporation's Restated Certificate of Incorporation and in accordance with the provisions of the Delaware General Corporation Law.

**IN WITNESS HEREOF**, this Certificate of Designations has been signed by:

Dr. Louis F. Centofanti, President on this 30th day of June, 1998.

  
President, Perma-Fix Environmental Services, Inc.

Richard T. Kelecy, Secretary on this 30th day of June, 1998

  
Secretary, Perma-Fix Environmental Services, Inc.

**CERTIFICATE OF ELIMINATION  
OF  
SERIES 6 CLASS F CONVERTIBLE PREFERRED STOCK  
AND  
SERIES 7 CLASS G CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

---

PERMA-FIX ENVIRONMENTAL SERVICES, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (hereinafter called the "Corporation"), hereby certifies the following:

1. That the Certificate of Designations of Series 6 Class F Convertible Preferred Stock of the Corporation (the "Series 6 Preferred") was filed with the Delaware Secretary of State on November 13, 1997 (the "Series 6 Certificate of Designations").
2. That all outstanding shares of the Series 6 Preferred have been delivered to the Company and exchanged upon agreement with the holder thereof pursuant to the terms and conditions of a certain Second RBB Exchange Agreement between the Company and RBB Bank Aktiengesellschaft, dated effective as of February 28, 1998.
3. That no shares of Series 6 Preferred remain outstanding.
4. That all shares of the Series 6 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.
5. That effective February 28, 1998, the Board of Directors of the Company duly adopted the following resolutions:

**RESOLVED**, that upon completion of the exchange with the holder of the Series 6 Class F Convertible Preferred Stock, no authorized shares of Series 6 Class F Convertible Preferred Stock will remain outstanding and no shares of Series 6 Class F Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 6 Class F Convertible Preferred Stock.

**FURTHER RESOLVED**, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate

Certificate of Elimination to the Secretary of State of Delaware  
regarding the Series 6 Class F Convertible Preferred Stock.

6. That the Certificate of Designations of the Series 7 Class G Convertible Preferred Stock of the Corporation (the "Series 7 Preferred") was filed on November 13, 1997 (the "Series 7 Certificate of Designations").

7. That all outstanding shares of the Series 7 Preferred have been delivered to the Company and exchanged upon agreement with the holder thereof pursuant to the terms and conditions of a certain Exchange Agreement between the Company and The Infinity Fund, L.P., dated effective as of February 28, 1998.

8. That no shares of Series 7 Preferred remain outstanding.

9. That all shares of the Series 7 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

10. That effective February 28, 1998, the Board of Directors of the Company duly adopted the following resolutions:

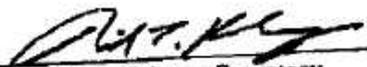
**RESOLVED**, that upon completion of the exchange with the holder of the Series 7 Class G Convertible Preferred Stock, no authorized shares of Series 7 Class G Convertible Preferred Stock will remain outstanding and no shares of Series 7 Class G Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 7 Class G Convertible Preferred Stock.

**FURTHER RESOLVED**, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 7 Class G Convertible Preferred Stock.

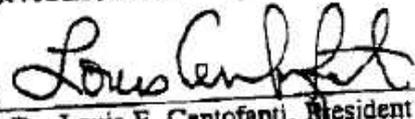
11. That pursuant to the provisions of § 151(g) of the Delaware General Corporation Law, upon the effective date of the filing of this Certificate, this Certificate will have the effect of eliminating from the Restated Certificate of Incorporation only those matters set forth in the Restated Certificate of Incorporation with respect to the Series 6 Class F Convertible Preferred Stock and the Series 7 Class G Convertible Preferred Stock.

IN WITNESS WHEREOF, this Certificate of Elimination has been executed this 30<sup>th</sup> day of April, 1998, by the President of the Company.

ATTEST:

  
Richard T. Kelecy, Secretary

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By   
Dr. Louis F. Centofanti, President

(SEAL)

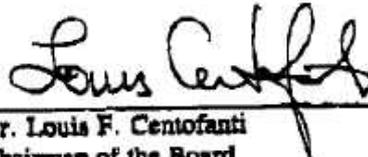
**CERTIFICATE OF DESIGNATIONS  
OF SERIES 8 CLASS H CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 8 Class H Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 8 Class H Convertible Preferred Stock as set forth in the attached resolutions.

Dated: April 30<sup>th</sup>, 1998

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Kalczy, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 8 CLASS H CONVERTIBLE PREFERRED STOCK**

**WHEREAS**, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

**WHEREAS**, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 8 Class H Convertible Preferred Stock, par value \$.001 per share (the "Series 8 Class H Preferred Stock");

**NOW, THEREFORE, BE IT RESOLVED**, that the Series 8 Class H Preferred Stock shall consist of two thousand five hundred (2,500) shares and no more and shall be designated as the Series 8 Class H Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 8 Class H Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided in Part 7 hereof or under Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 8 Class H Preferred Stock shall have no voting rights whatsoever. To the extent that under Section 242(b)(2) of the GCL or Part 7 hereof, the holders of the Series 8 Class H Preferred Stock are entitled to vote on a matter, each share of the Series 8 Class H Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 8 Class H Preferred Stock. Holders of the Series 8 Class H Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 **No Preemptive Rights.** The Series 8 Class H Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

## **Part 2 - Liquidation Rights**

2.1 **Liquidation**. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 8 Class H Preferred Stock shall be outstanding, the holders of the then outstanding Series 8 Class H Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 8 Class H Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 **Payment of Liquidation Preferences**. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 8 Class H Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment**. After the payment to the holders of the shares of the Series 8 Class H Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 8 Class H Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference**. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 8 Class H Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 8 Class H Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 8 Class H Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 8 Class H Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

**Part 3 - Dividends**. The holders of the Series 8 Class H Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum

of the Liquidation Value (as defined below) of each issued and outstanding share of Series 8 Class H Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 8 Class H Preferred Stock shall be \$1,000 per outstanding share of the Series 8 Class H Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing June 30, 1998 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 8 Class H Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 8 Class H Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from March 1, 1998. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 8 Class H Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid and the denominator of which is 365. Dividends on the Series 8 Class H Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 8 Class H Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 8 Class H Preferred Stock shall have rights to convert the shares of Series 8 Class H Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 **Right to Convert.** The Series 8 Class H Preferred Stock shall be convertible into shares of Common Stock at any time.

4.2 **Conversion Price.** Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 8 Class H Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days prior to the particular date of conversion shall be less than \$2.265, the Conversion Price for only such particular conversion shall be the product of the average closing bid

quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below in connection with such conversion multiplied by eighty percent (80%). Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 8 Class H Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 8 Class H Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 8 Class H Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 8 Class H Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

**4.3 Mechanics of Conversion.** Any holder of the Series 8 Class H Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 8 Class H Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 8 Class H Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 8 Class H Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 8 Class H Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the

"Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion of the Series 8 Class H Preferred Stock within seven (7) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3 ("Seven (7) Business Day Period"), then, upon the written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 8 Class H Preferred Stock, for payment of the penalty described below in this Section 4.3, which demand must be received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

4.4 **Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 8 Class H Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,379,311 shares of Common Stock issuable upon the conversion of the Series 8 Class H Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 8 Class H Preferred Stock then outstanding shall have the right to convert such share of Series 8 Class H Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 8 Class H Preferred Stock could have been converted into immediately prior

to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

**4.5 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 8 Class H Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

**4.6 Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 8 Class H Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 8 Class H Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 8 Class H Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 8 Class H Preferred Stock immediately before that change.

**4.7 Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 8 Class H Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

**4.8 Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 8 Class H Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9 **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series B Class H Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series B Class H Preferred Stock in connection with such conversion.

4.10 **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series B Class H Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series B Class H Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series B Class H Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.11 **Fractional Shares.** No fractional shares shall be issued upon the conversion of any share or shares of Series B Class H Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series B Class H Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.12 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series B Class H Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.13 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

#### **Part 5 - Redemption.**

5.1 **Redemption at Corporation's Option.** Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from June 9, 1997, the Corporation may, at its sole option, but shall not be

obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 8 Class H Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four years from June 9, 1997 - \$1,300 per share, if at any time during such four year period the average of the closing bid price of the Common Stock for ten consecutive trading days shall be in excess of Four Dollars (\$4.00) per share, and (b) after four years from June 9, 1997 - \$1,000 per share.

**5.2 Mechanics of Redemption.** Thirty days prior to any date stipulated by the Corporation for the redemption of Series 8 Class H Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 8 Class H Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 8 Class H Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 8 Class H Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 8 Class H Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first 180 days from the date of issuance of the Series 8 Class H Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

**5.3 Rights of Conversion Upon Redemption.** If the redemption occurs after the first 180 days after the first issuance of Series 8 Class H Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 8 Class H Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 8 Class H Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, such holder shall have the right to convert into Common Stock that number of Series 8 Class H Preferred Stock called for redemption in the Redemption Notice.

**5.4 Surrender of Certificates.** On or before the Redemption Date in respect of any Series 8 Class H Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as

described below), the Corporation shall cause the Series 8 Class H Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

**5.5 Payment.** On the Redemption Date in respect of any Series 8 Class H Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 8 Class H Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 8 Class H Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

**Part 6 - Parity with Other Shares of Series 8 Class H Preferred Stock and Priority.**

**6.1 Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 8 Class H Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

**6.2 Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

**6.2.1** Prior or senior to the shares of this Series 8 Class H Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 8 Class H Preferred Stock;

- 6.2.2 On a parity with, or equal to, shares of this Series 8 Class H Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 8 Class H Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 8 Class H Preferred Stock; and,
- 6.2.3 Junior to shares of this Series 8 Class H Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 8 Class H Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

**Part 7 - Amendment and Reissue.**

7.1 **Amendment.** If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 8 Class H Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 8 Class H Preferred Stock or written consent by the holders of a majority of the Series 8 Class H Preferred Stock then outstanding. Notwithstanding the above or the provisions of Section 242(b)(2) of the GCL, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242(b)(2) of the GCL.

7.2 **Authorized.** Any shares of Series 8 Class H Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

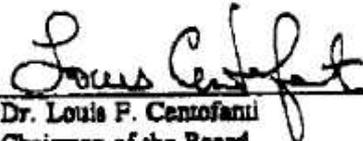
**CERTIFICATE OF DESIGNATIONS  
OF SERIES 9 CLASS I CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

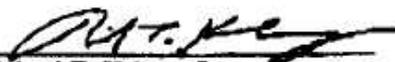
That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 9 Class I Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 9 Class I Convertible Preferred Stock as set forth in the attached resolutions.

Dated: April 30<sup>th</sup>, 1998

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Kelecy, Secretary

STATE OF DELAWARE  
SECRETARY OF STATE  
DIVISION OF CORPORATIONS  
FILED 01:32 PM 07/16/1998  
981277758 - 2249849

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 9 CLASS I CONVERTIBLE PREFERRED STOCK**

**WHEREAS**, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

**WHEREAS**, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 9 Class I Convertible Preferred Stock, par value \$.001 per share (the "Series 9 Class I Preferred Stock");

**NOW, THEREFORE, BE IT RESOLVED**, that the Series 9 Class I Preferred Stock shall consist of three hundred (350) shares and no more and shall be designated as the Series 9 Class I Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 9 Class I Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided in Part 7 hereof or under Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 9 Class I Preferred Stock shall have no voting rights whatsoever. To the extent that under Section 242(b)(2) of the GCL or Part 7 hereof, the holders of the Series 9 Class I Preferred Stock are entitled to vote on a matter, each share of the Series 9 Class I Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 9 Class I Preferred Stock. Holders of the Series 9 Class I Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes. If the holders of the Series 9 Class I Preferred Stock are required to vote under Section 242(b)(2) of the GCL as a result of the number of authorized shares of any such class or classes of stock being increased or decreased, the number of authorized shares of any of such class or classes of stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, irrespective of the provisions of Section 242(b)(2) of the GCL.

1.2 **No Preemptive Rights.** The Series 9 Class I Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

### **Part 2 - Liquidation Rights.**

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 9 Class I Preferred Stock shall be outstanding, the holders of the then outstanding Series 9 Class I Preferred Stock shall be entitled to receive out of the assets of the Corporation available for distribution to shareholders an amount equal to \$1,000 consideration per outstanding share of Series 9 Class I Preferred Stock, and no more, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board of Directors, before any payment shall be made or any assets distributed to the holders of the Corporation's Common Stock.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 9 Class I Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 9 Class I Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 9 Class I Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 9 Class I Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 9 Class I Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 9 Class I Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 9 Class I Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

### **Part 3 - Dividends.**

3.1 The holders of the Series 9 Class I Preferred Stock are entitled to receive if, when and as declared by the Board of Directors of the Corporation (the "Board") out of funds legally available

therefor, cumulative annual dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 9 Class I Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 9 Class I Preferred Stock shall be \$1,000 per outstanding share of the Series 9 Class I Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing June 30, 1998 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 9 Class I Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 9 Class I Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from March 1, 1998. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 9 Class I Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid and the denominator of which is 365. Dividends on the Series 9 Class I Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 9 Class I Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 9 Class I Preferred Stock shall have rights to convert the shares of Series 9 Class I Preferred Stock into shares of the Corporation's Common Stock, as follows (the "Conversion Rights"):

- 4.1 **Right to Convert.** The Series 9 Class I Preferred Stock shall be convertible into shares of Common Stock at any time.
- 4.2 **Conversion Price.** Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 9 Class I Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days prior to the particular date of conversion shall be less than \$2.265, the Conversion Price for only such particular conversion shall be the product of the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below in connection with such conversion multiplied by eighty percent

(80%). Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 9 Class I Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 9 Class I Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 9 Class I Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 9 Class I Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

- 4.3 **Mechanics of Conversion.** Any holder of the Series 9 Class I Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). The Corporation shall, within seven (7) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 9 Class I Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 9 Class I Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 9 Class I Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received.
- 4.4 **Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation

(collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 9 Class I Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 200,000 shares of Common Stock issuable upon the conversion of the Series 9 Class I Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 9 Class I Preferred Stock then outstanding shall have the right to convert such share of Series 9 Class I Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 9 Class I Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

- 4.5 **Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 9 Class I Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.
- 4.6 **Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 9 Class I Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 9 Class I Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 9 Class I Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 9 Class I Preferred Stock immediately before that change.
- 4.7 **Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 9 Class I Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

- 4.8 **Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 9 Class I Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.
- 4.9 **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 9 Class I Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 9 Class I Preferred Stock in connection with such conversion.
- 4.10 **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 9 Class I Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 9 Class I Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 9 Class I Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.
- 4.11 **Fractional Shares.** No fractional shares shall be issued upon the conversion of any share or shares of Series 9 Class I Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 9 Class I Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.
- 4.12 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 9 Class I Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.
- 4.13 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

**Part 5 - Redemption.**

- 5.1 **Redemption at Corporation's Option.** Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from the date of the first issuance of the Series 9 Class I Preferred Stock, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 9 Class I Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four (4) years from the date of the first issuance of Series 9 Class I Preferred Stock - \$1,300 per share, if at any time during such four (4) year period the average of the closing bid price of the Common Stock for ten (10) consecutive trading days shall be in excess of Four U.S. Dollars (\$4.00) per share, and (b) after four (4) years from the date of the first issuance of Series 9 Class I Preferred Stock - \$1,000 per share.
- 5.2 **Mechanics of Redemption.** Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 9 Class I Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 9 Class I Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 9 Class I Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 9 Class I Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 9 Class I Preferred Stock to be redeemed as provided in this Part 5.
- 5.3 **Rights of Conversion Upon Redemption.** If the redemption occurs after the first one hundred eighty (180) days after the first issuance of Series 9 Class I Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 9 Class I Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 9 Class I Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof.
- 5.4 **Surrender of Certificates.** On or before the Redemption Date in respect of any Series 9 Class I Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 9 Class I Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

- 5.5 **Payment.** On the Redemption Date in respect of any Series 9 Class I Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 9 Class I Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 9 Class I Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

**Part 6 - Parity with Other Shares of Series 9 Class I Preferred Stock and Priority.**

- 6.1 **Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 9 Class I Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.
- 6.2 **Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:
- 6.2.1 Prior or senior to the shares of this Series 9 Class I Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 9 Class I Preferred Stock;
- 6.2.2 On a parity with, or equal to, shares of this Series 9 Class I Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 9 Class I Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation

prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 9 Class I Preferred Stock; and,

- 6.2.3 Junior to shares of this Series 9 Class I Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 9 Class I Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

**Part 7 - Reissue.**

- 7.1 **Authorized.** Any shares of Series 9 Class I Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

**CERTIFICATE OF DESIGNATIONS  
OF SERIES 11 CLASS K CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

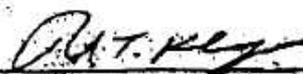
That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 11 Class K Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 11 Class K Convertible Preferred Stock as set forth in the attached resolutions.

Dated: July 15, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Kelec, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 11 CLASS K CONVERTIBLE PREFERRED STOCK**

**WHEREAS,**

- A. The Corporation's share capital includes Preferred Stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by the Board of Directors of the Corporation (the "Board") being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences, and relative, participating, optional or other special rights, privileges, restrictions and conditions attaching to the shares of each such series; and
- B. It is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 11 Class K Convertible Preferred Stock, par value \$.001.

**NOW, THEREFORE, BE IT RESOLVED, THAT:**

The Series 11 Class K Convertible Preferred Stock, par value \$.001 (the "Series 11 Class K Preferred Stock") of the Corporation shall consist of 1,769 shares and no more and shall be designated as the Series 11 Class K Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 11 Class K Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided herein, in the Corporation's Certificate of Incorporation (the "Articles") or the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 11 Class K Preferred Stock shall have no voting rights whatsoever. To the extent that under the GCL the vote of the holders of the Series 11 Class K Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 11 Class K Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 11 Class K Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL the holders of the Series

11 Class K Preferred Stock are entitled to vote on a matter with holders of Corporation's Common Stock and/or any other class or series of the Corporation's voting securities, the Series 11 Class K Preferred Stock, the Corporation's Common Stock and all other classes or series of the Corporation's voting securities shall vote together as one class, with each share of Series 11 Class K Preferred Stock entitled to a number of votes equal to the number of shares of the Corporation's Common Stock into which it is then convertible using the record date for the taking of such vote of stockholders as the date as of which the Conversion Price (as defined in Section 4.2 hereof) is calculated and conversion is effected. Holders of the Series 11 Class K Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 **No Preemptive Rights.** The Series 11 Class K Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

## **Part 2 - Liquidation Rights.**

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 11 Class K Preferred Stock shall be outstanding, the holders of the then outstanding Series 11 Class K Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 11 Class K Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 11 Class K Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 11 Class K Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 11 Class K Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 11 Class K Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are

entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 11 Class K Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 11 Class K Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 11 Class K Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

### **Part 3 - Dividends.**

3.1 The holders of the Series 11 Class K Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), at the Corporation's election, at the rate of six percent (6%) per annum of the Liquidation Value of the Series 11 Class K Preferred Stock. The Liquidation Value of the Series 11 Class K Preferred Stock shall be \$1,000.00 per share (the "Dividend Rate"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1996 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 11 Class K Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 11 Class K Preferred Stock. In the event that the Corporation elects to pay dividends in Common Stock of the Corporation, each holder of the Series 11 Class K Preferred Stock shall receive shares of Common Stock of the Corporation equal to the quotient of (i) the Dividend Rate in effect on the applicable Dividend Declaration Date dividend by (ii) the average of the closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"). Dividends on the Series 11 Class K Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 11 Class K Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 11 Class K Preferred Stock shall have rights to convert the shares of Series 11 Class K Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 **No Right to Convert.** The Series 11 Class K Preferred shall not be convertible into shares of Common Stock until after July 15, 2000.

4.2 **Right to Convert.** The Series 11 Class K Preferred Stock may be convertible into shares of Common Stock at any time on or after July 15, 2000.

4.3 **Conversion Price.** As used herein, the term Conversion Price shall be the product of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by (ii) seventy-five percent (75%), subject to the provisions of this Section 4.3. Notwithstanding the foregoing, the Conversion Price shall not be (i) less than a minimum of \$1.50 per share for a period of twenty-four (24) months from the date of issuance of the Series 11 Class K Preferred Stock, or, after twenty-four (24) months from the date of issuance of the Series 11 Class K Preferred Stock, a minimum of \$.50 per share (as applicable, the "Minimum Conversion Price") or (ii) more than a maximum of \$1.50 per share ("Maximum Conversion Price"). If, after July 1, 1996, the Corporation sustains a net loss, on a consolidated basis, in each of two (2) consecutive quarters, as determined under generally accepted accounting principles, the Minimum Conversion Price shall be reduced \$.25 a share, but there shall be no change to, or reduction of, the Maximum Conversion Price. For the purpose of determining whether the Corporation has had a net loss in each of two (2) consecutive quarters, at no time shall a quarter that has already been considered in such determination be considered in any subsequent determination (as an example the third quarter of 1996 in which there is a net profit and the fourth quarter of 1996 in which there is a net loss shall be considered as two consecutive quarters, and, as a result, the fourth quarter of 1996 shall not be considered along with the first quarter of 1997 as two (2) consecutive quarters, but the first quarter of 1997 must be considered with the second quarter of 1997 for the purposes of such determination). For the purposes of this Section 4.2, a "quarter" is a three (3) month period ending on March 31, June 30, September 30, and December 31. If any of the outstanding shares of Series 11 Class K Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 11 Class K Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At the time of conversion of shares of the Series 11 Class K Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the product of dividing the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 11 Class K Preferred Stock so converted by the Conversion Price in effect at the date of conversion.

4.4 **Mechanics of Conversion.** Any holder of the Series 11 Class K Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the

"Conversion Notice"). In the event that the shares of Series 11 Class K Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. No Conversion Notice with respect to any shares of Series 11 Class K Preferred Stock can be given prior to the time such shares of Series 11 Class K Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 11 Class K Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 11 Class K Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 11 Class K Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion within five (5) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3, the Corporation shall pay to the holder U.S. \$1,000 for each day that the Corporation is late in delivering such certificate to the holder or its agent.

**4.5 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 11 Class K Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate. If the Corporation shall declare or pay, without consideration, any dividend on the Common Stock payable in any right to acquire Common stock for no consideration, then the Corporation shall be deemed to have made a dividend payable in Common

Stock in an amount of shares equal to the maximum number of shares issuable upon exercise of such rights to acquire Common Stock.

4.6. **Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 11 Class K Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 11 Class K Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 11 Class K Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 11 Class K Preferred Stock immediately before that change.

4.7. **Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 11 Class K Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.8. **Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 11 Class K Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9. **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 11 Class K Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 11 Class K Preferred Stock in connection with such conversion.

4.10. **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 11 Class K Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 11 Class K Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 11 Class K Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.11 **Fractional Shares.** No fractional share shall be issued upon the conversion of any share or shares of Series 11 Class K Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 11 Class K Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.12 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 11 Class K Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.13 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or permitted to close.

#### **Part 5 - Redemption.**

5.1 **Redemption at Corporation's Option.** Except as otherwise provided in this Section 5.1, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 11 Class K Preferred Stock at the following cash redemption prices if redeemed during the following periods: (i) within one year from July 15, 1999 - \$1,100 per share, and (ii) after one year from July 15, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

5.2 **Mechanics of Redemption.** Prior to any date stipulated by the Corporation for the redemption of Series 11 Class K Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 11 Class K Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 11 Class K Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 11 Class K Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 11 Class K Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first year from the date of issuance of the Series 11 Class K Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.3 **Mechanics of Redemption.** Prior to any date stipulated by the Corporation for the redemption of Series 11 Class K Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series

11 Class K Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 11 Class K Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 11 Class K Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 11 Class K Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first year from the date of issuance of the Series 11 Class K Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

**5.4 Rights of Conversion Upon Redemption.** If the redemption occurs during the first 12 months after the issuance of the Series 11 Class K Preferred Stock, the holder may not convert any redeemed shares. If the redemption occurs pursuant to Section 5.1 hereof, the Holder of the Series 11 Class K Preferred Stock shall not have the right to convert those outstanding shares of Series 11 Class K Preferred Stock that the Company is redeeming after receipt of the Redemption Notice. If the redemption occurs pursuant to Section 5.2 hereof, then, upon receipt of the Redemption Notice, any holder of Series 11 Class K Preferred Stock shall have the next five business days during which it may exercise the option, at its sole election, to specify what portion of its Series 11 Class K Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, after one year from the date of first issuance of the Series 11 Class K Preferred Stock, such holder shall have the right to convert into Common Stock that number of Series 11 Class K Preferred Stock called for redemption in the Redemption Notice.

**5.5 Surrender of Certificates.** On or before the Redemption Date in respect of any Series 11 Class K Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 11 Class K Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

**5.6 Payment.** On the Redemption Date in respect of any Series 11 Class K Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate First Year Redemption Price or the Redemption Price, whichever is applicable, of all such shares called from redemption (less the aggregate Redemption Price for those Series 11 Class K Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to

convert Series 11 Class K Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the First Year Redemption Price or the Redemption Price, whichever is applicable, to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the First Year Redemption Price or the Redemption Price, whichever is applicable, of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the First Year Redemption Price or the Redemption Price, whichever is applicable, in respect of their shares only from the Corporation.

**Part 6 - Parity with Other Shares of Series 11 Class K Preferred Stock and Priority.**

6.1 **Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 11 Class K Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

6.2 **Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 11 Class K Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 11 Class K Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 11 Class K Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 3 Class C Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 11 Class K Preferred Stock; and,

6.2.3 Junior to shares of this Series 11 Class K Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 11 Class K Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

#### **Part 7 - Amendment and Reissue.**

7.1 **Amendment.** If any proposed amendment to the Corporation's Certificate of Incorporation would alter or change the powers, preferences or special rights of the Series 11 Class K Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Certificate of Incorporation at a duly called and held series meeting of the holders of the Series 11 Class K Preferred Stock or written consent by the holders of a majority of the Series 11 Class K Preferred Stock then outstanding. Notwithstanding the above, the number of authorized shares of any class or classes of stock may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of this Section 7.1 or the requirements of Section 242 of the GCL.

7.2 **Authorized.** Any shares of Series 11 Class K Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

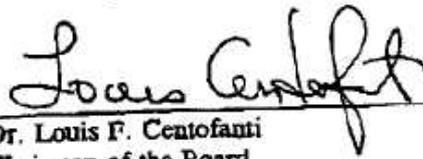
**CERTIFICATE OF DESIGNATIONS  
OF SERIES 12 CLASS L CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

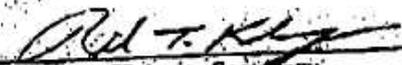
That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 12 Class L Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 12 Class L Convertible Preferred Stock as set forth in the attached resolutions.

Dated: July 15, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Kelecy, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 12 CLASS L CONVERTIBLE PREFERRED STOCK**

**WHEREAS**, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

**WHEREAS**, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 12 Class L Convertible Preferred Stock, par value \$.001 per share (the "Series 12 Class L Preferred Stock");

**NOW, THEREFORE, BE IT RESOLVED**, that the Series 12 Class L Preferred Stock shall consist of nine hundred sixteen (916) shares and no more and shall be designated as the Series 12 Class L Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 12 Class L Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided in Part 7 hereof or under Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 12 Class L Preferred Stock shall have no voting rights whatsoever. To the extent that under Section 242(b)(2) of the GCL or Part 7 hereof, the holders of the Series 12 Class L Preferred Stock are entitled to vote on a matter, each share of the Series 12 Class L Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 12 Class L Preferred Stock. Holders of the Series 12 Class L Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 **No Preemptive Rights.** The Series 12 Class L Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

## **Part 2 - Liquidation Rights.**

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 12 Class L Preferred Stock shall be outstanding, the holders of the then outstanding Series 12 Class L Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 12 Class L Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 12 Class L Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 12 Class L Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 12 Class L Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 12 Class L Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 12 Class L Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 12 Class L Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 12 Class L Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

**Part 3 - Dividends.** The holders of the Series 12 Class L Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum

of the Liquidation Value (as defined below) of each issued and outstanding share of Series 12 Class L Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 12 Class L Preferred Stock shall be \$1,000 per outstanding share of the Series 12 Class L Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing June 30, 1998 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 12 Class L Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 12 Class L Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from March 1, 1998. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 12 Class L Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid and the denominator of which is 365. Dividends on the Series 12 Class L Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 12 Class L Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 12 Class L Preferred Stock shall have rights to convert the shares of Series 12 Class L Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 **No Right to Convert.** The Series 12 Class L Preferred shall not be convertible into shares of Common Stock until after July 15, 2000.

4.2 **Right to Convert.** The Series 12 Class L Preferred Stock may be convertible into shares of Common Stock at any time after July 15, 2000.

4.3 **Conversion Price.** Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 12 Class L Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock as reported on the over-the-counter market, or the closing sale

price if listed on a national securities exchange, for the five (5) trading days prior to the particular date of conversion shall be less than \$2.265, the Conversion Price for only such particular conversion shall be the product of the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below in connection with such conversion multiplied by eighty percent (80%), subject to the provisions of this Section 4.3. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$1.50 per share ("Minimum Conversion Price") for a period of twenty-four (24) months from the date of issuance of the Series 12 Class L Preferred Stock. If any of the outstanding shares of Series 12 Class L Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 12 Class L Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 12 Class L Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 12 Class L Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

4.3 **Mechanics of Conversion.** Any holder of the Series 12 Class L Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 12 Class L Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 12 Class L Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 12 Class L Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been

made only after both the certificate for the shares of Series 12 Class L Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion of the Series 12 Class L Preferred Stock within seven (7) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3 ("Seven (7) Business Day Period"), then, upon the written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 12 Class L Preferred Stock, for payment of the penalty described below in this Section 4.3, which demand must be received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

4.4 Merger or Consolidation. In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 12 Class L Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,379,311 shares of Common Stock issuable upon the conversion of the Series 12 Class L Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 12 Class L Preferred Stock then outstanding shall have the right to convert such share of Series 12 Class L Preferred Stock into the

kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 12 Class L Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

**4.5 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 12 Class L Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

**4.6 Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 12 Class L Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 12 Class L Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 12 Class L Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 12 Class L Preferred Stock immediately before that change.

**4.7 Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 12 Class L Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

**4.8 Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each

holder of Series 12 Class L Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9 **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 12 Class L Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 12 Class L Preferred Stock in connection with such conversion.

4.10 **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 12 Class L Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 12 Class L Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 12 Class L Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.11 **Fractional Shares.** No fractional shares shall be issued upon the conversion of any share or shares of Series 12 Class L Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 12 Class L Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.12 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 12 Class L Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.13 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

## **Part 5 - Redemption**

5.1 **Redemption at Corporation's Option**. Except as otherwise provided in this Section 5.1, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, (i) for a period of 120 days from the date of issuance of the Series 12 Class L Preferred Stock up to an aggregate of 300 shares of the Series 12 Class L Preferred Stock at the cash redemption price of \$1,000 per share, and (ii) the then outstanding Series 12 Class L Preferred Stock at the following cash redemption prices if redeemed during the following periods: (a) within one year from July 15, 1999 - \$1,100 per share, except as otherwise provided in (i) above and (b) after one year from July 15, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,000, \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

5.2 **Mechanics of Redemption**. Prior to any date stipulated by the Corporation for the redemption of Series 12 Class L Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 12 Class L Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 12 Class L Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 12 Class L Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 12 Class L Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first year from the date of issuance of the Series 12 Class L Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.3 **Rights of Conversion Upon Redemption**. If the redemption occurs during the first 12 months after the issuance of the Series 12 Class L Preferred Stock, the holder may not convert any redeemed shares. If the redemption occurs after the first twelve months after the first issuance of Series 12 Class L Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 12 Class L Preferred Stock shall have five business days during which it may exercise the option, at its sole election, to specify what portion of its Series 12 Class L Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, after one year from the date of first issuance of the Series 12 Class L Preferred Stock, such holder shall have the right to convert into Common Stock that number of Series 12 Class L Preferred Stock called for redemption in the Redemption Notice.

5.4 **Surrender of Certificates.** On or before the Redemption Date in respect of any Series 12 Class L Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 12 Class L Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

5.5 **Payment.** On the Redemption Date in respect of any Series 12 Class L Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 12 Class L Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 12 Class L Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

#### **Part 6 - Parity with Other Shares of Series 12 Class L Preferred Stock and Priority.**

6.1 **Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 12 Class L Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

6.2 **Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

- 6.2.1 Prior or senior to the shares of this Series 12 Class L Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 12 Class L Preferred Stock;
- 6.2.2 On a parity with, or equal to, shares of this Series 12 Class L Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 12 Class L Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 12 Class L Preferred Stock; and,
- 6.2.3 Junior to shares of this Series 12 Class L Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 12 Class L Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

#### **Part 7 - Amendment and Reissue.**

7.1 **Amendment.** If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 12 Class L Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 12 Class L Preferred Stock or written consent by the holders of a majority of the Series 12 Class L Preferred Stock then outstanding. Notwithstanding the above or the provisions of Section 242(b)(2) of the GCL, the

number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242(b)(2) of the GCL.

7.2 Authorized. Any shares of Series 12 Class L Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

**CERTIFICATE OF DESIGNATIONS  
OF SERIES 13 CLASS M CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 13 Class M Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 13 Class M Convertible Preferred Stock as set forth in the attached resolutions.

Dated: July 15, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Keleczy, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 13 CLASS M CONVERTIBLE PREFERRED STOCK**

**RE: DESIGNATION OF SERIES 13 CLASS M PREFERRED STOCK.**

**RESOLVED:** That the designations, powers, preferences and rights of the Series 13 Class M Convertible Preferred Stock be, and they hereby are, as set forth below:

**I. Number of Shares of Common Stock of Series 13 Class M Convertible Preferred Stock**

The Corporation hereby authorizes the issuance of up to two thousand two hundred fifty-two (2,252) shares of Series 13 Class M Convertible Preferred Stock par value \$.001 per share (the "Preferred Stock"). This Preferred Stock shall pay an annual dividend based on a 365 day calendar year of 4% of the Liquidation Value (as defined in Section 3 hereof) ("Dividend Rate"), payable semiannually within ten (10) business days after each subsequent June 30th and December 31st (each a "Dividend Declaration Date"), and shall be payable in cash or shares of the Corporation's par value \$.001 per share common stock (Common Stock) at the Corporation's option. The first Dividend Declaration Date shall be December 31st, 1998.

In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on the outstanding shares of Preferred Stock in Common Stock of the Corporation, the Holder of each share of Preferred Stock shall receive that number of shares of Common Stock equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange, the average closing bid price of the Common Stock as quoted on such national exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Preferred Stock shall have been paid or declared and set aside for payment.

## **2. Voting.**

Except as provided under Section 242 of the GCL, holders of Preferred Stock (the "Holders") shall not have the right to vote on any matter. Notwithstanding the provisions of Section 242 of the GCL or Section 4 hereof, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of Section 242 of the GCL.

## **3. Liquidation.**

In the event of a voluntary or involuntary dissolution, liquidation, or winding up of the Corporation, the Holders of Preferred Stock shall be entitled to receive out of the assets of the Corporation legally available for distribution to holders of its capital stock, before any payment or distribution shall be made to holders of shares of Common Stock or any other class of stock ranking junior to the Preferred Stock, an amount per share of Preferred Stock equal to \$1,000 (the "Liquidation Value") plus any accrued and unpaid dividends on the Preferred Stock. If upon such liquidation, dissolution, or winding up of the Corporation, whether voluntary or involuntary, the assets to be distributed among the Holders of Preferred Stock shall be insufficient to permit payment to the Holders of Preferred Stock of the amount distributable as aforesaid, then the entire assets of the Corporation to be so distributed shall be distributed ratably among the Holders of Preferred Stock and shares of such other classes or series ranking on a parity with the shares of this Preferred Stock in proportion to the full distributable amounts for which holders of all such parity shares are entitled upon such distribution, liquidation, or winding up. Upon any such liquidation, dissolution or winding up of the Corporation, after the Holders of Preferred Stock shall have been paid in full the amounts to which they shall be entitled, the remaining net assets of the Corporation may be distributed to the holders of stock ranking on liquidation junior to the Preferred Stock and the Holders of the Preferred Stock shall have no right or claim to any of the remaining assets of the Corporation. Written notice of such liquidation, dissolution or winding up, stating a payment date, the amount of the liquidation payments and the place where said liquidation payments shall be payable, shall be given by mail, postage prepaid or by telex or facsimile to non-U.S. residents, not less than 10 days prior to the payment date stated therein, to the Holders of record of Preferred Stock, such notice to be addressed to each such Holder at its address as shown by the records of the Corporation. For purposes hereof the shares of Common Stock, shall rank on liquidation junior to the Preferred Stock.

## **4. Restrictions.**

The Corporation will not amend or modify the terms of its Restated Certificate of Incorporation so as to adversely alter or change the Preferred Stock at any time when shares of Preferred Stock are outstanding, without the approval of the Holders of at least a majority of the then outstanding shares of Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the

case may be) separately as a series, except where the vote or written consent of the Holders of a greater number of shares of Common Stock of the Corporation is required by law or by the Corporation's Certificate of Incorporation, as amended.

## **5. Optional Conversion.**

The Holders of shares of Preferred Stock shall have the following conversion rights to convert the shares of Preferred Stock into shares of Common Stock of the Corporation:

(a) **No Right to Convert.** The Preferred Stock shall not be convertible into shares of Common Stock until after July 15, 2000.

(b) **Conversion Dates.** The Preferred Stock may be convertible into shares of Common Stock at any time after July 15, 2000.

(c) **Right to Convert; Conversion Price.** Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Preferred Stock shall be One Dollar and 875/100 (\$1.875); except that after the expiration of one hundred and eighty (180) days after the Closing Date if the average of the closing bid price per share of Common Stock quoted on the NASDAQ (or the closing bid price of the Common Stock as quoted on the national securities exchange if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange) for the five (5) trading days immediately prior to the particular date of each Conversion Notice (as defined below) is less than Two Dollars and 34/100 (\$2.34), then the Conversion Price for that particular conversion shall be eighty percent (80%) of the average of the closing bid price of the Common Stock on the NASDAQ (or if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange then eighty percent (80%) of the average of the closing bid price of the Common Stock on the national securities exchange) for the five (5) trading days immediately prior to the particular date of the Conversion Notice. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$1.50 per share ("Minimum Conversion Price") for a period of twenty-four (24) months from the date of issuance of the Preferred Stock.

If any of the outstanding shares of Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Section 5(b), the number of shares of whole Common Stock to be issued to the Holder as a result of such conversion shall be determined by dividing (a) the aggregate Stated Value of the Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect on the date of that particular Conversion Notice relating to such conversion. At the time of conversion of shares of the Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon on the shares of Preferred so converted to the date of the Conversion Notice relating to such conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of the Conversion Notice relating to

such conversion of the shares of Preferred Stock so converted divided by the Stock Dividend Price, in effect at the date of the Conversion Notice relating to such conversion.

(c) **Conversion Notice.** The right of conversion shall be exercised by the Holder thereof by telecopying or faxing an executed and completed written notice signed by an authorized representative of the Holder, ("Conversion Notice") to the Corporation that the Holder elects to convert a specified number of shares of Preferred Stock representing a specified Stated Value thereof into shares of Common Stock and by delivering by express courier the certificate or certificates of Preferred Stock being converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the Holders of the Preferred Stock). The business date indicated on a Conversion Notice which is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a Conversion Date. The Conversion Notice shall include therein the Stated Value of shares of Preferred Stock to be converted, and a calculation (a) of the Stock Dividend Price, (b) the Conversion Price, and (c) the number of Shares of Common Stock to be issued in connection with such conversion. The Corporation shall have the right to review the calculations included in the Conversion Notice, and shall provide notice of any discrepancy or dispute therewith within three (3) business days of the receipt thereof. The Holder shall deliver to the Corporation an original Conversion Notice and the original Preferred to be converted within three (3) business days from the date of the Conversion Notice.

(d) **Issuance of Certificates - Time Conversion Effected.** Promptly, but in no event more than six (6) business days, after the receipt by facsimile of the Conversion Notice referred to in Subparagraph (5)(c); and provided within the six (6) business days the Corporation receives the certificate or certificates for the shares of Preferred Stock to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the Holder, registered in the name of the Holder, a certificate or certificates for the number of whole shares of Common Stock into which such shares of Preferred Stock are converted. Such conversion shall be deemed to have been effected as of the close of business on the date on which the telecopy or facsimile Conversion Notice shall have been received by the Corporation, and the rights of the Holder of such share or shares of Preferred Stock shall cease, at such time, and the Holder or Holders shall be deemed to have become the Holder or Holders of record of the shares of Common Stock represented thereby.

In the event that the shares of Common Stock issuable upon conversion of the Preferred, is not delivered within six (6) business days of the date the Company receives the Conversion Notice, the Company shall pay to the Buyer, by wire transfer, as liquidated damages for such failure and not as a penalty, for each \$100,000 of Preferred sought to be converted, \$500 for each of the first five (5) calendar days and \$1,000 per calendar day thereafter that the shares of Common Stock are not delivered, which liquidated damages shall begin to run from the seventh (7th) business day after the Conversion Date. Any and all payments required pursuant to this paragraph shall be payable only in cash. Notwithstanding the above, liquidated damages shall not exceed \$2,000.00 per day. In addition to the liquidated damages set forth herein, in the event the Company fails to deliver the shares of Common Stock within six (6) business days after the Conversion date, the

Company agrees to issue the larger number of shares of Common Stock derived from (i) the original Conversion Notice, or (ii) utilizing the five lowest closing bid prices of the Company's shares of Common Stock beginning on the Conversion Date and ending on the day the shares of Common Stock are delivered. The Company understands that a delay in the issuance of the shares of Common Stock could result in economic loss to the Holder. Nothing contained herein, or in the Preferred shall limit the Holder's rights to pursue actual damages for the Company's failure to issue and deliver shares of Common Stock to the Holder in accordance with the terms of the Certificate of Designations, and this Agreement.

(e) **Fractional Shares of Common Stock.** No fractional shares of Common Stock shall be issued upon conversion of any Preferred Stock into shares of Common Stock. All fractional shares of Common Stock shall be aggregated and then rounded down to the nearest whole share of Common Stock. In case the number of shares of Preferred Stock represented by the certificate or certificates surrendered pursuant to Subparagraph 5(b) exceeds the number of shares of Common Stock converted, the Corporation shall, upon such conversion, execute and deliver to the Holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Preferred Stock represented by the certificate or certificates surrendered which are not to be converted.

(f) **Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering all the shares of Common Stock issuable upon the conversion of the Preferred Stock is declared effective by the U.S. Securities and Exchange Commission ("Commission"), the Corporation or such successor corporation as the case may be, shall make appropriate provision so that the Holder of each share of Preferred Stock then outstanding shall have the right to convert such share of Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 5.

In the event of a Merger or Sale, where the Corporation is not the surviving Corporation, the Holder shall have the right to redeem all of the outstanding shares of Preferred Stock at 120% of the Liquidation Value of each share of Preferred Stock then outstanding plus all accrued and unpaid dividends (the "Redemption Amount"). The Corporation shall pay this Redemption Amount in cash within ten (10) business days of receipt by the Corporation of notice from the Holder, and receipt by the Corporation of all outstanding shares of Preferred Stock duly endorsed by the Holder to the Corporation.

**(g) Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Preferred Stock are issued and outstanding shall declare or pay, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

**(h) Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of Common Stock of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares of Common Stock provided for in Section 5(g) hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Preferred Stock would otherwise have been entitled to receive, a number of shares of Common Stock of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Preferred Stock immediately before that change.

## **6 Redemption.**

**(a) Redemption at Corporation's Option.** Except as otherwise provided in this Section 6, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time (i) for a period of 120 days from the date of issuance of the Preferred Stock up to an aggregate of 450 shares of Series 13 Class M Preferred Stock at the cash redemption price of \$1,000 per share and (ii) the then outstanding Series 13 Class M Preferred Stock at the following cash redemption prices if redeemed during the following periods: (a) within one year from July 15, 1999 - \$1,100 per share, except as otherwise provided in (i) above, and (b) after one year from July 15, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,000, \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

**(b) Mechanics of Redemption.** Prior to any date stipulated by the Corporation for the redemption of Series 13 Class M Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 13 Class M Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 13 Class M Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 13 Class M Preferred Stock to be redeemed from such holder, and (iv)

instructions as to how to specify to the Corporation the number of Series 13 Class M Preferred Stock to be redeemed as provided in this Part 6 and, if the Redemption Notice is mailed to the Holder after the first year from the date of issuance of the Series 13 Class M Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 5 hereof.

(c) **Rights of Conversion Upon Redemption.** If the redemption occurs during the first 12 months after the issuance of the Preferred Stock, the holder may not convert any redeemed shares. If the redemption occurs after the first year after the first issuance of Series 13 Class M Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 13 Class M Preferred Stock shall have five business days during which it may exercise the option, at its sole election, to specify what portion of its Series 13 Class M Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 6 or converted into Common Stock in the manner provided in Part 5 hereof, except that, notwithstanding any provision of such Part 5 to the contrary, after one year from the date of first issuance of the Preferred Stock, such holder shall have the right to convert into Common Stock that number of Series 13 Class M Preferred Stock called for redemption in the Redemption Notice.

(d) **Surrender of Certificates.** On or before the Redemption Date in respect of any Series 13 Class M Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 13 Class M Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

(e) **Payment.** On the Redemption Date in respect of any Series 13 Class M Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called for redemption (less the aggregate Redemption Price for those Series 13 Class M Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 13 Class M Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former

holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

#### **7. Assignment.**

Subject to all applicable restrictions on transfer, the rights and obligations of the Corporation and the Holder of the Preferred Stock shall be binding upon and benefit the successors, assigns, heirs, administrators, and transferees of the parties.

#### **8. Shares of Common Stock to be Reserved.**

The Corporation, upon the effective date of this Certificate of Designations, has a sufficient number of shares of Common Stock available to reserve for issuance upon the conversion of all outstanding shares of Preferred Stock, pursuant to the terms and conditions set forth in Section 5, and exercise of the Warrants as defined in Section 12. The Corporation will at all times reserve and keep available out of its authorized shares of Common Stock, solely for the purpose of issuance upon the conversion of Preferred Stock, and exercise of the Warrants, as herein provided, such number of shares of Common Stock as shall then be issuable upon the conversion of all outstanding shares of Preferred Stock, and exercise of the Warrants. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued, fully paid and non assessable. The Corporation will take such action as may be required, if the total number of shares of Common Stock issued and issuable after such action upon conversion of the Preferred Stock, and exercise of the Warrants would exceed the total number of shares of Common Stock then authorized by the Corporation's Certificate of Incorporation, as amended, or would exceed 19.99% of the shares of Common Stock then outstanding if required by law or the Rules and Regulations of NASDAQ or the National Securities Exchange applicable to the Corporation to take such action as a result of exceeding such 19.99%, in order to increase the number of shares of Common Stock to permit the Corporation to issue the number of shares of Common Stock required to effect conversion of the Preferred, and exercise of the Warrants, to a number sufficient to permit conversion of the Preferred Stock, and exercise of the Warrants, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to the Corporation's Restated Certificate of Incorporation, and to obtain shareholders approval in order to effect conversion of the Preferred Stock, and exercise of the Warrants, if required by law or the rules or regulations of the NASDAQ or National Securities Exchange applicable to the Corporation.

**8(a) Shareholder Approval.** In connection with the issuance to the Holder of the shares of Preferred Stock, pursuant to this Certificate of Designations, the Corporation is also issuing (i) certain warrants ("RBB Warrants") to the Holder pursuant to the terms of that certain Private Securities Subscription Agreement dated June 30, 1998 (the "Agreement"), providing for the purchase of up to 150,000 shares of Common Stock at an exercise price of \$2.50 per share and (ii) certain warrants (collectively, the "Liviakis Warrants") to Liviakis Financial Communication, Inc. ("Liviakis") and Robert B. Prag providing for the purchase of up to an aggregate of

2,500,000 shares of Common Stock at an exercise price of \$1.875 per share pursuant to the terms of that Liviakis Agreement dated June 30, 1998, between Liviakis and the Corporation.

If (i) the aggregate number of shares of Common Stock issued by the Corporation as a result of any or all of the following: (a) conversion of the Preferred Stock, (b) payment of dividends accrued on the Preferred Stock (c) exercise of the RBB Warrants, and (d) exercise of the Liviakis Warrants exceeds 2,388,347 shares of Common Stock (which equals 19.9% of the outstanding shares of Common Stock of the Corporation as of the date of this Certificate of Designations) and (ii) the Holder has converted or elects to convert any of the then outstanding shares of Preferred Stock pursuant to the terms of Section 5 at a Conversion Price less than \$ 1.875 (\$1.875 being the market value per share of Common Stock as quoted on the NASDAQ as of the close of business on June 30, 1998) pursuant to the terms of Section 5(b) hereof, other than if the Conversion Price is less than \$ 1.875 solely as a result of the anti-dilution provisions of Section 5(g) and (h) hereof, then, notwithstanding anything in Section 5 to the contrary, the Corporation shall not issue any shares of Common Stock as a result of receipt of a Conversion Notice unless and until the Corporation shall have obtained approval of its shareholders entitled to vote on the transactions in accordance with subparagraphs (25)(H)(i)d, (iv) and (v) of Rule 4310 of the NASDAQ Marketplace Rules ("Shareholder Approval").

If Shareholder Approval is required as set forth in the above paragraph, the Corporation shall take all necessary steps to obtain such Shareholder Approval upon receipt of the Conversion Notice triggering the need for Shareholder Approval ("Current Conversion Notice"). If the Corporation has not received from the Holder a Current Conversion Notice, the Holder, subsequent to January 1st, 1999 may, if the Corporation's shares of Common Stock trade, subsequent to January 1st, 1999, at a five (5) day average closing bid price below Two Dollars and 34/100 (\$2.34), upon written notice to the Corporation, require the Corporation to obtain Shareholder Approval ("Holder's Notice"). The Holder and the Corporation's officers and directors covenant to vote all shares of Common Stock over which they have voting control in favor of Shareholder Approval. If the Corporation does not obtain Shareholder Approval within ninety (90) days of the earlier of the Corporation's receipt of (i) the Current Conversion Notice or (ii) the Holder's Notice, and the Holder has not breached its covenant to vote all shares of Common Stock over which they have voting control in favor of Shareholder Approval, the Corporation shall pay in cash to the Holder liquidated damages, in an amount of 4% per month of the Liquidation Value of each share of Preferred Stock then outstanding, commencing on the 91st day of the Corporation's receipt of the Holder's Current Conversion Notice, and continuing every thirty (30) days pro-rata until such time the Corporation receives Shareholder Approval.

#### **9. No Reissuance of Series 13 Class M Convertible Preferred Stock.**

Shares of Preferred Stock which are converted into shares of Common Stock as provided herein shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred stock hereafter created.

**10. Closing of Books.**

The Corporation will at no time close its transfer books against the transfer of any Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Common Stock of Preferred Stock in any manner which interferes with the timely conversion of such Preferred Stock, except as may otherwise be required to comply with applicable securities laws.

**11. No Preemptive Rights.**

The Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

**12. Definition of Shares.**

As used in this Certificate of Designations, the term "shares of Common Stock" shall mean and include the Corporation's authorized common stock, par value \$.001, as constituted on the date of filing of these terms of the Preferred Stock, or in case of any reorganization, reclassification, or stock split of the outstanding shares of Common Stock thereof, the stock, securities or assets provided for hereof. The term "Warrants" as used herein shall have the same meaning as defined in Section 1 of the Private Securities Subscription Agreement, dated June 30, 1998, between the Company and RBB Bank Aktiengesellschaft.

The said determination of the designations, preferences and relative, participating, optional or other rights, and the qualifications, limitations or restrictions thereof, relating to the Preferred Stock was duly made by the Board of Directors pursuant to the provisions of the Corporation's Restated Certificate of Incorporation and in accordance with the provisions of the Delaware General Corporation Law.

G:\SALL\PESIN\B3 Exchange\Cmtda-913rev002.pdf

**CERTIFICATE OF ELIMINATION  
OF  
SERIES 3 CLASS C CONVERTIBLE PREFERRED STOCK  
AND  
SERIES 8 CLASS H CONVERTIBLE PREFERRED STOCK  
AND  
SERIES 10 CLASS J CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

PERMA-FIX ENVIRONMENTAL SERVICES, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (hereinafter called the "Corporation"), hereby certifies the following:

1. That the Certificate of Designations of Series 3 Class C Convertible Preferred Stock, par value \$.001 per share, of the Corporation (the "Series 3 Preferred") was filed with the Delaware Secretary of State on July 19, 1996 (the "Series 3 Certificate of Designations").

2. That all outstanding shares of the Series 3 Preferred have been delivered to the Company and exchanged pursuant to an agreement with the holder thereof in accordance with the terms and conditions of a certain Exchange Agreement between the Company and RBB Bank Aktiengesellschaft, dated as of July 15, 1999.

3. That no shares of Series 3 Preferred remain outstanding.

4. That all shares of the Series 3 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

5. That effective July 15, 1999, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 3 Class C Convertible Preferred Stock, no authorized shares of Series 3 Class C Convertible Preferred Stock will remain outstanding and no shares of Series 3 Class C Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 3 Class C Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an

appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 3 Class C Convertible Preferred Stock.

6. That the Certificate of Designations of the Series 8 Class H Convertible Preferred Stock, par value \$.001 per share, of the Corporation (the "Series 8 Preferred") was filed on July 16, 1998 (the "Series 8 Certificate of Designations").

7. That all outstanding shares of the Series 8 Preferred have been delivered to the Company and exchanged pursuant to an agreement with the holder thereof in accordance with the terms and conditions of a certain Exchange Agreement between the Company and RBB Bank, dated as of July 15, 1999.

8. That no shares of Series 8 Preferred remain outstanding.

9. That all shares of the Series 8 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

10. That effective July 15, 1999, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 8 Class H Convertible Preferred Stock, no authorized shares of Series 8 Class H Convertible Preferred Stock will remain outstanding and no shares of Series 8 Class H Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 8 Class H Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 8 Class H Convertible Preferred Stock.

11. That the Certificate of Designations of the Series 10 Class J Convertible Preferred Stock, par value \$.001 per share, of the Corporation (the "Series 10 Preferred") was filed on July 10, 1998 (the "Series 10 Certificate of Designations").

12. That all outstanding shares of the Series 10 Preferred have been delivered to the Company and exchanged pursuant to an agreement with the holder thereof in accordance to the

terms and conditions of a certain Exchange Agreement between the Company and RBB Bank, dated as of July 15, 1999.

13. That no shares of Series 10 Preferred remain outstanding.

14. That all shares of the Series 10 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

15. That effective July 15, 1999, the Board of Directors of the Company duly adopted the following resolutions:

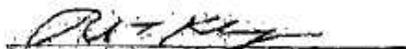
RESOLVED, that upon completion of the exchange with the holder of the Series 10 Class J Convertible Preferred Stock, no authorized shares of Series 10 Class J Convertible Preferred Stock will remain outstanding and no shares of Series 10 Class J Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 10 Class J Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 10 Class J Convertible Preferred Stock.

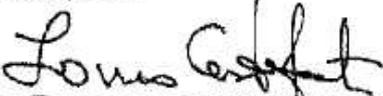
16. That pursuant to the provisions of § 151(g) of the Delaware General Corporation Law, upon the effective date of the filing of this Certificate, this Certificate will have the effect of eliminating from the Restated Certificate of Incorporation only those matters set forth in the Restated Certificate of Incorporation with respect to the Series 3 Class C Convertible Preferred Stock, the Series 8 Class H Convertible Preferred Stock, and the Series 10 Class J Convertible Preferred Stock

IN WITNESS WHEREOF, this Certificate of Elimination has been executed this 15<sup>th</sup> day of July, 1999, by the President of the Company.

ATTEST:

  
Richard T. Kelecy, Secretary  
(SEAL)

PERMA-FLX ENVIRONMENTAL  
SERVICES, INC.

By   
Dr. Louis F. Centofanti, President

G:\BALU\PE\WAB Exchange\CERTEL\JM.S1-L-10.wpd

**CERTIFICATE OF DESIGNATIONS  
OF SERIES 14 CLASS N CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 14 Class N Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 14 Class N Convertible Preferred Stock as set forth in the attached resolutions.

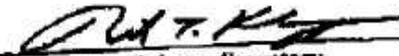
Dated: August 10, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By

  
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Kelecy, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**(the "Corporation")**

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 14 CLASS N CONVERTIBLE PREFERRED STOCK**

**WHEREAS,**

- A. The Corporation's share capital includes Preferred Stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by the Board of Directors of the Corporation (the "Board") being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences, and relative, participating, optional or other special rights, privileges, restrictions and conditions attaching to the shares of each such series; and
- B. It is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 14 Class N Convertible Preferred Stock, par value \$.001.

**NOW, THEREFORE, BE IT RESOLVED, THAT:**

The Series 14 Class N Convertible Preferred Stock, par value \$.001 (the "Series 14 Class N Preferred Stock") of the Corporation shall consist of 1,769 shares and no more and shall be designated as the Series 14 Class N Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 14 Class N Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided herein, in the Corporation's Certificate of Incorporation (the "Articles") or the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 14 Class N Preferred Stock shall have no voting rights whatsoever. To the extent that under the GCL the vote of the holders of the Series 14 Class N Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 14 Class N Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 14 Class N Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL the holders of the Series 14 Class

N Preferred Stock are entitled to vote on a matter with holders of Corporation's Common Stock and/or any other class or series of the Corporation's voting securities, the Series 14 Class N Preferred Stock, the Corporation's Common Stock and all other classes or series of the Corporation's voting securities shall vote together as one class, with each share of Series 14 Class N Preferred Stock entitled to a number of votes equal to the number of shares of the Corporation's Common Stock into which it is then convertible using the record date for the taking of such vote of stockholders as the date as of which the Conversion Price (as defined in Section 4.3 hereof) is calculated and conversion is effected. Holders of the Series 14 Class N Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 **No Preemptive Rights.** The Series 14 Class N Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

#### **Part 2 - Liquidation Rights.**

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 14 Class N Preferred Stock shall be outstanding, the holders of the then outstanding Series 14 Class N Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 14 Class N Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 14 Class N Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 14 Class N Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 14 Class N Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 14 Class N Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are

entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 14 Class N Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 14 Class N Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 14 Class N Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

### **Part 3 - Dividends.**

3.1 The holders of the Series 14 Class N Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), at the Corporation's election, at the rate of six percent (6%) per annum of the Liquidation Value of the Series 14 Class N Preferred Stock. The Liquidation Value of the Series 14 Class N Preferred Stock shall be \$1,000.00 per share (the "Dividend Rate"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1999 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 14 Class N Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from August 3, 1999. In the event that the Corporation elects to pay dividends in Common Stock of the Corporation, each holder of the Series 14 Class N Preferred Stock shall receive shares of Common Stock of the Corporation equal to the quotient of (i) the Dividend Rate in effect on the applicable Dividend Declaration Date divided by (ii) the average of the closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"). Dividends on the Series 14 Class N Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 14 Class N Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 14 Class N Preferred Stock shall have rights to convert the shares of Series 14 Class N Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 **No Right to Convert.** The Series 14 Class N Preferred shall not be convertible into shares of Common Stock until after April 20, 2000.

4.2 **Right to Convert.** The Series 14 Class N Preferred Stock may be convertible into shares of Common Stock at any time on or after April 20, 2000.

4.3 **Conversion Price.** As used herein, the term Conversion Price shall be the product of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.4 below multiplied by (ii) seventy-five percent (75%), subject to the provisions of this Section 4.3. Notwithstanding the foregoing, the Conversion Price shall not be (i) less than a minimum of \$1.50 per share for a period of twenty-four (24) months from April 20, 1999, or, after twenty-four (24) months from April 20, 1999, a minimum of \$.50 per share (as applicable, the "Minimum Conversion Price") or (ii) more than a maximum of \$1.50 per share ("Maximum Conversion Price"). If, after July 1, 1996, the Corporation sustains a net loss, on a consolidated basis, in each of two (2) consecutive quarters, as determined under generally accepted accounting principles, the Minimum Conversion Price shall be reduced \$.25 a share, but there shall be no change to, or reduction of, the Maximum Conversion Price. For the purpose of determining whether the Corporation has had a net loss in each of two (2) consecutive quarters, at no time shall a quarter that has already been considered in such determination be considered in any subsequent determination (as an example the third quarter of 1996 in which there is a net profit and the fourth quarter of 1996 in which there is a net loss shall be considered as two consecutive quarters, and, as a result, the fourth quarter of 1996 shall not be considered along with the first quarter of 1997 as two (2) consecutive quarters, but the first quarter of 1997 must be considered with the second quarter of 1997 for the purposes of such determination). For the purposes of this Section 4.3, a "quarter" is a three (3) month period ending on March 31, June 30, September 30, and December 31. If any of the outstanding shares of Series 14 Class N Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 14 Class N Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At the time of conversion of shares of the Series 14 Class N Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the product of dividing the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 14 Class N Preferred Stock so converted by the Conversion Price in effect at the date of conversion.

4.4 **Mechanics of Conversion.** Any holder of the Series 14 Class N Preferred Stock who wishes to exercise its Conversion Rights pursuant to the terms of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 14 Class N Preferred Stock are being

held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. No Conversion Notice with respect to any shares of Series 14 Class N Preferred Stock can be given prior to the time such shares of Series 14 Class N Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 14 Class N Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 14 Class N Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 14 Class N Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion within five (5) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.4, the Corporation shall pay to the holder U.S. \$1,000 for each day that the Corporation is late in delivering such certificate to the holder or its agent.

**4.5 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 14 Class N Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate. If the Corporation shall declare or pay, without consideration, any dividend on the Common Stock payable in any right to acquire Common stock for no consideration, then the Corporation shall be deemed to have made a dividend payable in Common Stock in an amount of shares equal to the maximum number of shares issuable upon exercise of such rights to acquire Common Stock.

4.6. **Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 14 Class N Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.5 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 14 Class N Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 14 Class N Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 14 Class N Preferred Stock immediately before that change.

4.7. **Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 14 Class N Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.8. **Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 14 Class N Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9. **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 14 Class N Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 14 Class N Preferred Stock in connection with such conversion.

4.10. **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 14 Class N Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 14 Class N Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 14 Class N Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.11. **Fractional Shares.** No fractional share shall be issued upon the conversion of any share or shares of Series 14 Class N Preferred Stock. All shares of Common Stock (including fractions

thereof) issuable upon conversion of more than one share of Series 14 Class N Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

**4.12 Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 14 Class N Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

**4.13 Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or permitted to close.

#### **Part 5 - Redemption.**

**5.1 Redemption at Corporation's Option.** Except as otherwise provided in this Section 5.1, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 14 Class N Preferred Stock at the following cash redemption prices if redeemed during the following periods: (i) within twelve (12) months from April 20, 1999 - \$1,100 per share, and (ii) after twelve (12) months from April 20, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

**5.2 Mechanics of Redemption.** Prior to any date stipulated by the Corporation for the redemption of Series 14 Class N Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 14 Class N Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 14 Class N Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 14 Class N Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 14 Class N Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first twelve (12) months from April 20, 1999, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

**5.3 Mechanics of Redemption.** Prior to any date stipulated by the Corporation for the redemption of Series 14 Class N Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 14 Class N Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 14 Class N Preferred Stock to be redeemed from the holder to

whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 14 Class N Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 14 Class N Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first 12 months from April 20, 1999, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

**5.4 Rights of Conversion Upon Redemption.** If the redemption occurs during the first 12 months after April 20, 1999, the holder may not convert any redeemed shares. If the redemption occurs pursuant to Section 5.1 (i) hereof, the Holder of the Series 14 Class N Preferred Stock shall not have the right to convert those outstanding shares of Series 14 Class N Preferred Stock that the Company is redeeming after receipt of the Redemption Notice. If the redemption occurs pursuant to Section 5.1 (ii) hereof, then, upon receipt of the Redemption Notice, any holder of Series 14 Class N Preferred Stock shall have the next five business days during which it may exercise the option, at its sole election, to specify what portion of its Series 14 Class N Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, after twelve (12) months from April, 20, 1999, such holder shall have the right to convert into Common Stock that number of Series 14 Class N Preferred Stock called for redemption in the Redemption Notice.

**5.5 Surrender of Certificates.** On or before the Redemption Date in respect of any Series 14 Class N Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 14 Class N Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

**5.6 Payment.** On the Redemption Date in respect of any Series 14 Class N Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate First Year Redemption Price or the Redemption Price, whichever is applicable, of all such shares called from redemption (less the aggregate Redemption Price for those Series 14 Class N Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 14 Class N Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall

constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the First Year Redemption Price or the Redemption Price, whichever is applicable, of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the First Year Redemption Price or the Redemption Price, whichever is applicable, in respect of their shares only from the Corporation.

**Part 6 - Parity with Other Shares of Series 14 Class N Preferred Stock and Priority.**

6.1 **Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 14 Class N Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

6.2 **Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 14 Class N Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 14 Class N Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 14 Class N Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 14 Class N Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 14 Class N Preferred Stock; and,

6.2.3 Junior to shares of this Series 14 Class N Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 14 Class N Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation,



**CERTIFICATE OF DESIGNATIONS  
OF SERIES 15 CLASS O CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 15 Class O Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 15 Class O Convertible Preferred Stock as set forth in the attached resolutions.

Dated: August 10, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By Louis Centofanti  
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

Richard T. Kelecy  
Richard T. Kelecy, Secretary

STATE OF DELAWARE  
SECRETARY OF STATE  
DIVISION OF CORPORATIONS  
FILED 12:31 PM 08/10/1999  
991331579 - 2249849

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 15 CLASS O CONVERTIBLE PREFERRED STOCK**

**WHEREAS**, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

**WHEREAS**, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 15 Class O Convertible Preferred Stock, par value \$.001 per share (the "Series 15 Class O Preferred Stock");

**NOW, THEREFORE, BE IT RESOLVED**, that the Series 15 Class O Preferred Stock shall consist of six hundred sixteen (616) shares and no more and shall be designated as the Series 15 Class O Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 15 Class O Preferred Stock shall be as follows:

**Part 1 - Voting and Preemptive Rights.**

1.1 **Voting Rights.** Except as otherwise provided in Part 7 hereof or under Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 15 Class O Preferred Stock shall have no voting rights whatsoever. To the extent that under Section 242(b)(2) of the GCL or Part 7 hereof, the holders of the Series 15 Class O Preferred Stock are entitled to vote on a matter, each share of the Series 15 Class O Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 15 Class O Preferred Stock. Holders of the Series 15 Class O Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 **No Preemptive Rights.** The Series 15 Class O Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

## Part 2 - Liquidation Rights.

2.1 **Liquidation.** If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 15 Class O Preferred Stock shall be outstanding, the holders of the then outstanding Series 15 Class O Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 15 Class O Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 **Payment of Liquidation Preferences.** Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 15 Class O Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 **No Rights After Payment.** After the payment to the holders of the shares of the Series 15 Class O Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 15 Class O Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 **Assets Insufficient to Pay Full Liquidation Preference.** In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 15 Class O Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 15 Class O Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 15 Class O Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 15 Class O Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

**Part 3 - Dividends.** The holders of the Series 15 Class O Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum

of the Liquidation Value (as defined below) of each issued and outstanding share of Series 15 Class O Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 15 Class O Preferred Stock shall be \$1,000 per outstanding share of the Series 15 Class O Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1999 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 15 Class O Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 15 Class O Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from August 3, 1999. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 15 Class O Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid and the denominator of which is 365. Dividends on the Series 15 Class O Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 15 Class O Preferred Stock shall have been paid or declared and set aside for payment.

**Part 4 - Conversion.** The holders of the Series 15 Class O Preferred Stock shall have rights to convert the shares of Series 15 Class O Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

- 4.1 **No Right to Convert.** The Series 15 Class O Preferred shall not be convertible into shares of Common Stock until after April 20, 2000.
- 4.2 **Right to Convert.** The Series 15 Class O Preferred Stock may be convertible into shares of Common Stock at any time after April 20, 2000.
- 4.3 **Conversion Price.** Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 15 Class O Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock as reported on the over-the-counter market, or the closing sale

price if listed on a national securities exchange, for the five (5) trading days prior to the particular date of conversion shall be less than \$2.265, the Conversion Price for only such particular conversion shall be the product of the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.4 below in connection with such conversion multiplied by eighty percent (80%), subject to the provisions of this Section 4.2. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$1.50 per share ("Minimum Conversion Price") for a period of twenty-four (24) months from April 20, 1999. If any of the outstanding shares of Series 15 Class O Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 15 Class O Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 15 Class O Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 15 Class O Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

**4.4 Mechanics of Conversion.** Any holder of the Series 15 Class O Preferred Stock who wishes to exercise its Conversion Rights pursuant to the terms of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 15 Class O Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 15 Class O Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 15 Class O Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 15 Class O Preferred Stock to be

converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion of the Series 15 Class O Preferred Stock within seven (7) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.4 ("Seven (7) Business Day Period"), then, upon the written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 15 Class O Preferred Stock, for payment of the penalty described below in this Section 4.4, which demand must be received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

**4.5 Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 15 Class O Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,379,311 shares of Common Stock issuable upon the conversion of the Series 15 Class O Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.3, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 15 Class O Preferred Stock then outstanding shall have the right to convert such share of Series 15 Class O Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such

Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 15 Class O Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

**4.6 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Series 15 Class O Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

**4.7 Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Series 15 Class O Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.6 hereof), the Conversion Price shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 15 Class O Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 15 Class O Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 15 Class O Preferred Stock immediately before that change.

**4.8 Common Stock Duly Issued.** All Common Stock which may be issued upon conversion of Series 15 Class O Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

**4.9 Notice of Adjustments.** Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 15 Class O Preferred Stock a notice setting forth such adjustment

or readjustment and showing in detail the facts upon which such adjustment is based.

4.10 **Issue Taxes.** The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 15 Class O Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 15 Class O Preferred Stock in connection with such conversion.

4.11 **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 15 Class O Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 15 Class O Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 15 Class O Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.12 **Fractional Shares.** No fractional shares shall be issued upon the conversion of any share or shares of Series 15 Class O Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 15 Class O Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.13 **Notices.** Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 15 Class O Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.14 **Business Day.** As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

## **Part 5 - Redemption.**

5.1 **Redemption at Corporation's Option.** Except as otherwise provided in this Section 5.1, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 15 Class O Preferred Stock at the following cash redemption prices if redeemed during the following periods: (i) within twelve (12) months from April 20, 1999 - \$1,100 per share and (ii) after twelve (12) months from April 20, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

5.2 **Mechanics of Redemption.** Prior to any date stipulated by the Corporation for the redemption of Series 15 Class O Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 15 Class O Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 15 Class O Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 15 Class O Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 15 Class O Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first twelve (12) months from April 20, 1999, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.3 **Rights of Conversion Upon Redemption.** If the redemption occurs during the first twelve (12) months after April 20, 1999, the holder may not convert any redeemed shares. If the redemption occurs after the first twelve (12) months after April 20, 1999, then, upon receipt of the Redemption Notice, any holder of Series 15 Class O Preferred Stock shall have five business days during which it may exercise the option, at its sole election, to specify what portion of its Series 15 Class O Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, after twelve (12) months from April 20, 1999, such holder shall have the right to convert into Common Stock that number of Series 15 Class O Preferred Stock called for redemption in the Redemption Notice.

5.4 **Surrender of Certificates.** On or before the Redemption Date in respect of any Series 15 Class O Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice.

and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 15 Class O Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

**5.5 Payment.** On the Redemption Date in respect of any Series 15 Class O Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 15 Class O Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 15 Class O Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

**Part 6 - Parity with Other Shares of Series 15 Class O Preferred Stock and Priority.**

**6.1 Rateable Participation.** If any cumulative dividends or return of capital in respect of Series 15 Class O Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

**6.2 Ranking.** For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 15 Class O Preferred Stock either as to dividends or upon liquidation, if the holders of

such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 15 Class O Preferred Stock;

- 6.2.2 On a parity with, or equal to, shares of this Series 15 Class O Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 15 Class O Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 15 Class O Preferred Stock; and,
- 6.2.3 Junior to shares of this Series 15 Class O Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 15 Class O Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

#### **Part 7 - Amendment and Reissue.**

7.1 **Amendment.** If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 15 Class O Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 15 Class O Preferred Stock or written consent by the holders of a majority of the Series 15 Class O Preferred Stock then outstanding. Notwithstanding the above or the provisions of Section 242(b)(2) of the GCL, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242(b)(2) of the GCL.

7.2 **Authorized.** Any shares of Series 15 Class O Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

H:\P251\A80 Exchange\7-99-3\Circles-815-1.rpt

**CERTIFICATE OF DESIGNATIONS  
OF SERIES 16 CLASS P CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 16 Class P Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 16 Class P Convertible Preferred Stock as set forth in the attached resolutions.

Dated: August 10, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Keleczy, Secretary

STATE OF DELAWARE  
SECRETARY OF STATE  
DIVISION OF CORPORATIONS  
FILED 12:32 PM 08/10/1999  
991331580 - 2249849

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 16 CLASS P CONVERTIBLE PREFERRED STOCK**

**RE: DESIGNATION OF SERIES 16 CLASS P PREFERRED STOCK.**

**RESOLVED:** That the designations, powers, preferences and rights of the Series 16 Class P Convertible Preferred Stock be, and they hereby are, as set forth below:

**1. Number of Shares of Common Stock of Series 16 Class P Convertible Preferred Stock**

The Corporation hereby authorizes the issuance of up to one thousand eight hundred two (1,802) shares of Series 16 Class P Convertible Preferred Stock par value \$.001 per share (the "Preferred Stock"). This Preferred Stock shall pay an annual dividend based on a 365 day calendar year of 4% of the Liquidation Value (as defined in Section 3 hereof) ("Dividend Rate"), payable semiannually within ten (10) business days after each subsequent June 30th and December 31st (each a "Dividend Declaration Date"), and shall be payable in cash or shares of the Corporation's par value \$.001 per share common stock (Common Stock) at the Corporation's option. The first Dividend Declaration Date shall be December 31st, 1999.

In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on the outstanding shares of Preferred Stock in Common Stock of the Corporation, the Holder of each share of Preferred Stock shall receive that number of shares of Common Stock equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange, the average closing bid price of the Common Stock as quoted on such national exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Preferred Stock shall have been paid or declared and set aside for payment.

## 2. Voting.

Except as provided under Section 242 of the GCL, holders of Preferred Stock (the "Holders") shall not have the right to vote on any matter. Notwithstanding the provisions of Section 242 of the GCL or Section 4 hereof, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of Section 242 of the GCL.

## 3. Liquidation.

In the event of a voluntary or involuntary dissolution, liquidation, or winding up of the Corporation, the Holders of Preferred Stock shall be entitled to receive out of the assets of the Corporation legally available for distribution to holders of its capital stock, before any payment or distribution shall be made to holders of shares of Common Stock or any other class of stock ranking junior to the Preferred Stock, an amount per share of Preferred Stock equal to \$1,000 (the "Liquidation Value") plus any accrued and unpaid dividends on the Preferred Stock. If upon such liquidation, dissolution, or winding up of the Corporation, whether voluntary or involuntary, the assets to be distributed among the Holders of Preferred Stock shall be insufficient to permit payment to the Holders of Preferred Stock of the amount distributable as aforesaid, then the entire assets of the Corporation to be so distributed shall be distributed ratably among the Holders of Preferred Stock and shares of such other classes or series ranking on a parity with the shares of this Preferred Stock in proportion to the full distributable amounts for which holders of all such parity shares are entitled upon such distribution, liquidation, or winding up. Upon any such liquidation, dissolution or winding up of the Corporation, after the Holders of Preferred Stock shall have been paid in full the amounts to which they shall be entitled, the remaining net assets of the Corporation may be distributed to the holders of stock ranking on liquidation junior to the Preferred Stock and the Holders of the Preferred Stock shall have no right or claim to any of the remaining assets of the Corporation. Written notice of such liquidation, dissolution or winding up, stating a payment date, the amount of the liquidation payments and the place where said liquidation payments shall be payable, shall be given by mail, postage prepaid or by telex or facsimile to non-U.S. residents, not less than 10 days prior to the payment date stated therein, to the Holders of record of Preferred Stock, such notice to be addressed to each such Holder at its address as shown by the records of the Corporation. For purposes hereof the shares of Common Stock, shall rank on liquidation junior to the Preferred Stock.

## 4. Restrictions.

The Corporation will not amend or modify the terms of its Restated Certificate of Incorporation so as to adversely alter or change the Preferred Stock at any time when shares of Preferred Stock are outstanding, without the approval of the Holders of at least a majority of the then outstanding shares of Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a series, except where the vote or written consent of the Holders of a

greater number of shares of Common Stock of the Corporation is required by law or by the Corporation's Certificate of Incorporation, as amended.

#### 5. Optional Conversion.

The Holders of shares of Preferred Stock shall have the following conversion rights to convert the shares of Preferred Stock into shares of Common Stock of the Corporation:

(a) **No Right to Convert.** The Preferred Stock shall not be convertible into shares of Common Stock until after April 20, 2000.

(b) **Conversion Dates.** The Preferred Stock may be convertible into shares of Common Stock at any time after April 20, 2000.

(c) **Right to Convert; Conversion Price.** Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Preferred Stock shall be One Dollar and 875/100 (\$1.875); except that after the expiration of one hundred and eighty (180) days after the Closing Date if the average of the closing bid price per share of Common Stock quoted on the NASDAQ (or the closing bid price of the Common Stock as quoted on the national securities exchange if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange) for the five (5) trading days immediately prior to the particular date of each Conversion Notice (as defined below) is less than Two Dollars and 34/100 (\$2.34), then the Conversion Price for that particular conversion shall be eighty percent (80%) of the average of the closing bid price of the Common Stock on the NASDAQ (or if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange then eighty percent (80%) of the average of the closing bid price of the Common Stock on the national securities exchange) for the five (5) trading days immediately prior to the particular date of the Conversion Notice. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$1.50 per share ("Minimum Conversion Price") for a period of twenty-four (24) months from April 20, 1999.

If any of the outstanding shares of Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Section 5(c), the number of shares of whole Common Stock to be issued to the Holder as a result of such conversion shall be determined by dividing (a) the aggregate Stated Value of the Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect on the date of that particular Conversion Notice relating to such conversion. At the time of conversion of shares of the Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon on the shares of Preferred so converted to the date of the Conversion Notice relating to such conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of the Conversion Notice relating to such conversion of the shares of Preferred Stock so converted divided by the Stock Dividend Price, in effect at the date of the Conversion Notice relating to such conversion.

(d) **Conversion Notice.** The right of conversion shall be exercised by the Holder thereof by telecopying or faxing an executed and completed written notice signed by an authorized representative of the Holder, ("Conversion Notice") to the Corporation that the Holder elects to convert a specified number of shares of Preferred Stock representing a specified Stated Value thereof into shares of Common Stock and by delivering by express courier the certificate or certificates of Preferred Stock being converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the Holders of the Preferred Stock). The business date indicated on a Conversion Notice which is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a Conversion Date. The Conversion Notice shall include therein the Stated Value of shares of Preferred Stock to be converted, and a calculation (a) of the Stock Dividend Price, (b) the Conversion Price, and (c) the number of Shares of Common Stock to be issued in connection with such conversion. The Corporation shall have the right to review the calculations included in the Conversion Notice, and shall provide notice of any discrepancy or dispute therewith within three (3) business days of the receipt thereof. The Holder shall deliver to the Corporation an original Conversion Notice and the original Preferred to be converted within three (3) business days from the date of the Conversion Notice.

(e) **Issuance of Certificates - Time Conversion Effected.** Promptly, but in no event more than six (6) business days, after the receipt by facsimile of the Conversion Notice referred to in Subparagraph (5)(c); and provided within the six (6) business days the Corporation receives the certificate or certificates for the shares of Preferred Stock to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the Holder, registered in the name of the Holder, a certificate or certificates for the number of whole shares of Common Stock into which such shares of Preferred Stock are converted. Such conversion shall be deemed to have been effected as of the close of business on the date on which the telecopy or facsimile Conversion Notice shall have been received by the Corporation, and the rights of the Holder of such share or shares of Preferred Stock shall cease, at such time, and the Holder or Holders shall be deemed to have become the Holder or Holders of record of the shares of Common Stock represented thereby.

In the event that the shares of Common Stock issuable upon conversion of the Preferred, are not delivered within six (6) business days of the date the Corporation receives the Conversion Notice, the Corporation shall pay to the Holder, by wire transfer, as liquidated damages for such failure and not as a penalty, for each \$100,000 of Preferred sought to be converted, \$500 for each of the first five (5) calendar days and \$1,000 per calendar day thereafter that the shares of Common Stock are not delivered, which liquidated damages shall begin to run from the seventh (7th) business day after the Conversion Date. Any and all payments required pursuant to this paragraph shall be payable only in cash. Notwithstanding the above, liquidated damages shall not exceed \$2,000.00 per day. In addition to the liquidated damages set forth herein, in the event the Corporation fails to deliver the shares of Common Stock within six (6) business days after the Conversion date, the Corporation agrees to issue the larger number of shares of Common Stock derived from (i) the original Conversion Notice, or (ii) utilizing the five lowest closing bid prices of the Corporation's shares of Common Stock beginning on the Conversion Date and ending on the day the shares of Common Stock are delivered. The Corporation understands that a delay in

the issuance of the shares of Common Stock could result in economic loss to the Holder. Nothing contained herein, or in the Preferred shall limit the Holder's rights to pursue actual damages for the Corporation's failure to issue and deliver shares of Common Stock to the Holder in accordance with the terms of the Certificate of Designations, and this Agreement.

(f) **Fractional Shares of Common Stock.** No fractional shares of Common Stock shall be issued upon conversion of any Preferred Stock into shares of Common Stock. All fractional shares of Common Stock shall be aggregated and then rounded down to the nearest whole share of Common Stock. In case the number of shares of Preferred Stock represented by the certificate or certificates surrendered pursuant to Subparagraph 5(d) exceeds the number of shares of Common Stock converted, the Corporation shall, upon such conversion, execute and deliver to the Holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Preferred Stock represented by the certificate or certificates surrendered which are not to be converted.

(g) **Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective while any shares of Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering all the shares of Common Stock issuable upon the conversion of the Preferred Stock is declared effective by the U.S. Securities and Exchange Commission ("Commission"), the Corporation or such successor corporation as the case may be, shall make appropriate provision so that the Holder of each share of Preferred Stock then outstanding shall have the right to convert such share of Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 5.

In the event of a Merger or Sale, where the Corporation is not the surviving Corporation, the Holder shall have the right to redeem all of the outstanding shares of Preferred Stock at 120% of the Liquidation Value of each share of Preferred Stock then outstanding plus all accrued and unpaid dividends (the "Redemption Amount"). The Corporation shall pay this Redemption Amount in cash within ten (10) business days of receipt by the Corporation of notice from the Holder, and receipt by the Corporation of all outstanding shares of Preferred Stock duly endorsed by the Holder to the Corporation.

(h) **Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation at any time or from time to time while shares of Preferred Stock are issued and outstanding shall declare or pay, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock), or if the outstanding shares of

Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

(i) **Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of Common Stock of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares of Common Stock provided for in Section 5(h) hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Preferred Stock would otherwise have been entitled to receive, a number of shares of Common Stock of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Preferred Stock immediately before that change.

## 6 Redemption.

(a) **Redemption at Corporation's Option.** Except as otherwise provided in this Section 6, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time the then outstanding Series 16 Class P Preferred Stock at the following cash redemption prices if redeemed during the following periods: (i) within twelve (12) months from April 20, 1999 - \$1,100 per share, and (ii) after twelve (12) months from April 20, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

(b) **Mechanics of Redemption.** Prior to any date stipulated by the Corporation for the redemption of Series 16 Class P Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 16 Class P Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 16 Class P Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 16 Class P Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 16 Class P Preferred Stock to be redeemed as provided in this Part 6 and, if the Redemption Notice is mailed to the Holder after the first twelve (12) months from April 20, 1999, the number of shares to be converted into Common Stock as provided in Part 5 hereof.

(c) **Rights of Conversion Upon Redemption.** If the redemption occurs during the first twelve (12) months after April 20, 1999, the holder may not convert any redeemed shares. If the redemption occurs after the first twelve (12) months after April 20, 1999, then, upon receipt of the Redemption Notice, any holder of Series 16 Class P Preferred Stock shall have five business

days during which it may exercise the option, at its sole election, to specify what portion of its Series 16 Class P Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 6 or converted into Common Stock in the manner provided in Part 5 hereof, except that, notwithstanding any provision of such Part 5 to the contrary, after twelve (12) months from April 20, 1999, such holder shall have the right to convert into Common Stock that number of Series 16 Class P Preferred Stock called for redemption in the Redemption Notice.

(d) **Surrender of Certificates.** On or before the Redemption Date in respect of any Series 16 Class P Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 16 Class P Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

(e) **Payment.** On the Redemption Date in respect of any Series 16 Class P Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 16 Class P Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 16 Class P Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

#### 7. Assignment.

Subject to all applicable restrictions on transfer, the rights and obligations of the Corporation and the Holder of the Preferred Stock shall be binding upon and benefit the successors, assigns, heirs, administrators, and transferees of the parties.

## 8. Shares of Common Stock to be Reserved.

The Corporation, upon the effective date of this Certificate of Designations, has a sufficient number of shares of Common Stock available to reserve for issuance upon the conversion of all outstanding shares of Preferred Stock, pursuant to the terms and conditions set forth in Section 5, and exercise of the Warrants as defined in Section 12. The Corporation will at all times reserve and keep available out of its authorized shares of Common Stock, solely for the purpose of issuance upon the conversion of Preferred Stock, and exercise of the Warrants, as herein provided, such number of shares of Common Stock as shall then be issuable upon the conversion of all outstanding shares of Preferred Stock, and exercise of the Warrants. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued, fully paid and non assessable. The Corporation will take such action as may be required, if the total number of shares of Common Stock issued and issuable after such action upon conversion of the Preferred Stock, and exercise of the Warrants would exceed the total number of shares of Common Stock then authorized by the Corporation's Certificate of Incorporation, as amended, or would exceed 19.99% of the shares of Common Stock then outstanding if required by law or the Rules and Regulations of NASDAQ or the National Securities Exchange applicable to the Corporation to take such action as a result of exceeding such 19.99%, in order to increase the number of shares of Common Stock to permit the Corporation to issue the number of shares of Common Stock required to effect conversion of the Preferred, and exercise of the Warrants, to a number sufficient to permit conversion of the Preferred Stock, and exercise of the Warrants, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to the Corporation's Restated Certificate of Incorporation, and to obtain shareholders approval in order to effect conversion of the Preferred Stock, and exercise of the Warrants, if required by law or the rules or regulations of the NASDAQ or National Securities Exchange applicable to the Corporation.

**8(a) Shareholder Approval.** In connection with the issuance to the Holder of the shares of Preferred Stock, pursuant to this Certificate of Designations, the Corporation is also issuing (i) certain warrants ("RBB Warrants") to the Holder pursuant to the terms of that certain Private Securities Subscription Agreement dated June 30, 1998 (the "Agreement"), providing for the purchase of up to 150,000 shares of Common Stock at an exercise price of \$2.50 per share and (ii) certain warrants (collectively, the "Liviakis Warrants") to Liviakis Financial Communication, Inc. ("Liviakis") and Robert B. Prag providing for the purchase of up to an aggregate of 2,500,000 shares of Common Stock at an exercise price of \$1.875 per share pursuant to the terms of that Liviakis Agreement dated June 30, 1998, between Liviakis and the Corporation.

If (i) the aggregate number of shares of Common Stock issued by the Corporation as a result of any or all of the following: (a) conversion of the Preferred Stock, (b) payment of dividends accrued on the Preferred Stock (c) exercise of the RBB Warrants, and (d) exercise of the Liviakis Warrants exceeds 2,388,347 shares of Common Stock (which equals 19.9% of the outstanding shares of Common Stock of the Corporation as of the date of this Certificate of Designations) and (ii) the Holder has converted or elects to convert any of the then outstanding shares of Preferred Stock pursuant to the terms of Section 5 at a Conversion Price less than \$ 1.875 (\$1.875 being the

market value per share of Common Stock as quoted on the NASDAQ as of the close of business on June 30, 1998) pursuant to the terms of Section 5(c) hereof, other than if the Conversion Price is less than \$ 1.875 solely as a result of the anti-dilution provisions of Section 5(h) and (i) hereof, then, notwithstanding anything in Section 5 to the contrary, the Corporation shall not issue any shares of Common Stock as a result of receipt of a Conversion Notice unless and until the Corporation shall have obtained approval of its shareholders entitled to vote on the transactions in accordance with subparagraphs (25)(H)(i)d, (iv) and (v) of Rule 4310 of the NASDAQ Marketplace Rules ("Shareholder Approval").

If Shareholder Approval is required as set forth in the above paragraph, the Corporation shall take all necessary steps to obtain such Shareholder Approval upon receipt of the Conversion Notice triggering the need for Shareholder Approval ("Current Conversion Notice"). If the Corporation has not received from the Holder a Current Conversion Notice, the Holder, subsequent to January 1st, 1999 may, if the Corporation's shares of Common Stock trade, subsequent to January 1st, 1999, at a five (5) day average closing bid price below Two Dollars and 34/100 (\$2.34), upon written notice to the Corporation, require the Corporation to obtain Shareholder Approval ("Holder's Notice"). The Holder and the Corporation's officers and directors covenant to vote all shares of Common Stock over which they have voting control in favor of Shareholder Approval. If the Corporation does not obtain Shareholder Approval within ninety (90) days of the earlier of the Corporation's receipt of (i) the Current Conversion Notice or (ii) the Holder's Notice, and the Holder has not breached its covenant to vote all shares of Common Stock over which they have voting control in favor of Shareholder Approval, the Corporation shall pay in cash to the Holder liquidated damages, in an amount of 4% per month of the Liquidation Value of each share of Preferred Stock then outstanding, commencing on the 91st day of the Corporation's receipt of the Holder's Current Conversion Notice, and continuing every thirty (30) days pro-rata until such time the Corporation receives Shareholder Approval.

**9. No Reissuance of Series 16 Class P Convertible Preferred Stock.**

Shares of Preferred Stock which are converted into shares of Common Stock as provided herein shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred stock hereafter created.

**10. Closing of Books.**

The Corporation will at no time close its transfer books against the transfer of any Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Common Stock of Preferred Stock in any manner which interferes with the timely conversion of such Preferred Stock, except as may otherwise be required to comply with applicable securities laws.

**11. No Preemptive Rights.**

The Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

**12. Definition of Shares.**

As used in this Certificate of Designations, the term "shares of Common Stock" shall mean and include the Corporation's authorized common stock, par value \$.001, as constituted on the date of filing of these terms of the Preferred Stock, or in case of any reorganization, reclassification, or stock split of the outstanding shares of Common Stock thereof, the stock, securities or assets provided for hereof. The term "Warrants" as used herein shall have the same meaning as defined in Section 1 of the Private Securities Subscription Agreement, dated June 30, 1998, between the Company and RBE Bank Aktiengesellschaft.

The said determination of the designations, preferences and relative, participating, optional or other rights, and the qualifications, limitations or restrictions thereof, relating to the Preferred Stock was duly made by the Board of Directors pursuant to the provisions of the Corporation's Restated Certificate of Incorporation and in accordance with the provisions of the Delaware General Corporation Law.

H:\PES\ARB\B\BretAnge17-99-4\Clubs-516-1.vpd



Certificate of Elimination to the Secretary of State of Delaware  
regarding the Series 11 Class K Convertible Preferred Stock.

6. That the Certificate of Designations of the Series 12 Class L Convertible Preferred Stock, par value \$.001 per share, of the Corporation (the "Series 12 Preferred") was filed on July 15, 1999 (the "Series 12 Certificate of Designations").
7. That all outstanding shares of the Series 12 Preferred have been delivered to the Company and exchanged pursuant to an agreement with the holder thereof in accordance with the terms and conditions of a certain Exchange Agreement between the Company and RBB Bank, dated as of August 3, 1999.
8. That no shares of Series 12 Preferred remain outstanding.
9. That all shares of the Series 12 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.
10. That effective August 3, 1999, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 12 Class L Convertible Preferred Stock, no authorized shares of Series 12 Class L Convertible Preferred Stock will remain outstanding and no shares of Series 12 Class L Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 12 Class L Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 12 Class L Convertible Preferred Stock.
11. That the Certificate of Designations of the Series 13 Class M Convertible Preferred Stock, par value \$.001 per share, of the Corporation (the "Series 13 Preferred") was filed on July 15, 1999 (the "Series 13 Certificate of Designations").
12. That all outstanding shares of the Series 13 Preferred have been delivered to the Company and exchanged pursuant to an agreement with the holder thereof in accordance with the terms and conditions of a certain Exchange Agreement between the Company and RBB Bank, dated as of August 3, 1999.

13. That no shares of Series 13 Preferred remain outstanding.

14. That all shares of the Series 13 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

15. That effective August 3, 1999, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 13 Class M Convertible Preferred Stock, no authorized shares of Series 13 Class M Convertible Preferred Stock will remain outstanding and no shares of Series 13 Class M Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 13 Class M Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 13 Class M Convertible Preferred Stock.

16. That pursuant to the provisions of § 151(g) of the Delaware General Corporation Law, upon the effective date of the filing of this Certificate, this Certificate will have the effect of eliminating from the Restated Certificate of Incorporation only those matters set forth in the Restated Certificate of Incorporation with respect to the Series 11 Class K Convertible Preferred Stock, the Series 12 Class L Convertible Preferred Stock, and the Series 13 Class M Convertible Preferred Stock

IN WITNESS WHEREOF, this Certificate of Elimination has been executed this 10<sup>th</sup> day of August, 1999, by the President of the Company.

ATTEST:

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

Richard T. Kelecy, Secretary  
(SEAL)

By Dr. Louis F. Centofanti, President

13. That no shares of Series 13 Preferred remain outstanding.
14. That all shares of the Series 13 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.
15. That effective August 3, 1999, the Board of Directors of the Company duly adopted the following resolutions:

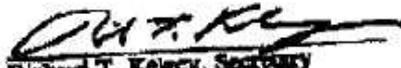
RESOLVED, that upon completion of the exchange with the holder of the Series 13 Class M Convertible Preferred Stock, no authorized shares of Series 13 Class M Convertible Preferred Stock will remain outstanding and no shares of Series 13 Class M Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 13 Class M Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 13 Class M Convertible Preferred Stock.

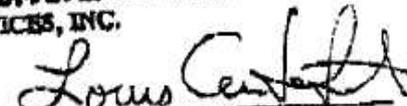
16. That pursuant to the provisions of § 151(g) of the Delaware General Corporation Law, upon the effective date of the filing of this Certificate, this Certificate will have the effect of eliminating from the Restated Certificate of Incorporation only those matters set forth in the Restated Certificate of Incorporation with respect to the Series 11 Class K Convertible Preferred Stock, the Series 12 Class L Convertible Preferred Stock, and the Series 13 Class M Convertible Preferred Stock.

IN WITNESS WHEREOF, this Certificate of Elimination has been executed this 10<sup>th</sup> day of August, 1999, by the President of the Company.

ATTEST:

  
Richard T. Kelecy, Secretary  
(SEAL)

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By   
Dr. Louis P. Cascofani, President

PERMA-FIX ENVIRONMENTAL SERVICES, INC. 12/12/99

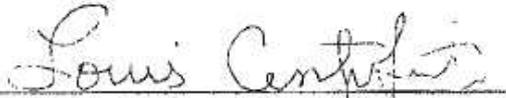
**CERTIFICATE OF DESIGNATIONS  
OF SERIES 17 CLASS Q CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

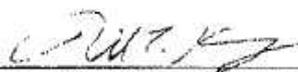
That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 17 Class Q Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 17 Class Q Convertible Preferred Stock as set forth in the attached resolutions.

Dated: May 25, 2001.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By   
Dr. Louis F. Centofanti  
Chairman of the Board

ATTEST:

  
Richard T. Kelecy, Secretary

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
(the "Corporation")

**RESOLUTION OF THE BOARD OF DIRECTORS**

**FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,  
RESTRICTIONS AND CONDITIONS ATTACHING TO THE  
SERIES 17 CLASS Q CONVERTIBLE PREFERRED STOCK**

**RE: DESIGNATION OF SERIES 17 CLASS Q CONVERTIBLE PREFERRED  
STOCK.**

**RESOLVED:** That the designations, powers, preferences and rights of the Series 17 Class Q Convertible Preferred Stock be, and they hereby are, as set forth below:

**I. Designation, Number of Shares of Preferred Stock of Series 17 Class Q Convertible Preferred Stock and Dividends.**

The Corporation hereby authorizes the issuance of up to two thousand five hundred (2,500) shares of Series 17 Class Q Convertible Preferred Stock, par value \$.001 per share (the "Preferred Stock"). The holders of the Preferred Stock (individually, the "Holder," and collectively, the "Holders") are entitled to receive if, when and as declared by the Board of Directors of the Corporation (the "Board") out of funds legally available therefore, cumulative dividends at an annual dividend rate, based on a 365 day calendar year, of 5% of the Liquidation Value (as defined in Section 3 hereof) ("Dividend Rate") for each share of the Preferred Stock then issued and outstanding as of the acceptable declaration of such dividend, payable semiannually within ten (10) business days after each subsequent June 30th and December 31st (each a "Dividend Declaration Date"), and shall be payable in cash or shares of the Corporation's common stock, par value \$.001 per share ("Common Stock"), at the Corporation's option. The first Dividend Declaration Date shall be December 31st, 2001. Dividends shall be paid only with respect to the shares of Preferred Stock actually issued and outstanding on the Dividend Declaration Date and to Holders of record on the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual dividend period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of the issuance of the Preferred Stock.

In the event that the Board elects to pay the accrued dividends due as of a Dividend Declaration Date on the outstanding shares of Preferred Stock in Common Stock of the Corporation, the Holder of each share of Preferred Stock shall receive that number of shares of Common Stock equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the average closing bid quotation of the Corporation's Common Stock as reported on the National

Association of Securities Dealers Automated Quotation system ("NASDAQ"), or if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange, the average closing price of the Common Stock as quoted on such national exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Preferred Stock shall have been paid or declared and set aside for payment.

## **2. Voting.**

Except as provided under Section 242(2) of the Delaware General Corporation Law ("GCL"), the Preferred Stock shall not have any voting rights and the Holders of the Preferred Stock shall not have the right to vote on any matter. Notwithstanding the provisions of Section 242 of the GCL, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of Section 242 of the GCL.

## **3. Liquidation.**

In the event of a voluntary or involuntary dissolution, liquidation, or winding up of the Corporation, the Holders of the Preferred Stock shall be entitled to receive out of the assets of the Corporation legally available for distribution to holders of its capital stock, before any payment or distribution shall be made to holders of shares of Common Stock or any other class of stock ranking junior to the Preferred Stock, an amount per share of the Preferred Stock equal to \$1.000 (the "Liquidation Value"), plus any accrued and unpaid dividends on the Preferred Stock. If upon such liquidation, dissolution, or winding up of the Corporation, whether voluntary or involuntary, the assets to be distributed among the Holders of the Preferred Stock shall be insufficient to permit payment to the Holders of the Preferred Stock of the amount distributable as aforesaid, then the entire assets of the Corporation to be so distributed shall be distributed ratably among the Holders of the Preferred Stock and shares of such other classes or series ranking on a parity with the shares of the Preferred Stock in proportion to the full distributable amounts for which holders of all such parity shares are entitled upon such distribution, liquidation, or winding up. Upon any such liquidation, dissolution or winding up of the Corporation, after the Holders of Preferred Stock shall have been paid in full the amounts to which they shall be entitled, the remaining net assets of the Corporation may be distributed to the holders of stock ranking on liquidation junior to the Preferred Stock and the Holders of the Preferred Stock shall have no right or claim to any of the remaining assets of the Corporation. Written notice of such liquidation, dissolution or winding up, stating a payment date, the amount of the liquidation payments and the place where said liquidation payments shall be payable, shall be given by mail, postage prepaid or by telex or

facsimile to non-U.S. residents, not less than 10 days prior to the payment date stated therein, to the Holders of record of the Preferred Stock, such notice to be addressed to each such Holder at its address as shown by the records of the Corporation. For purposes hereof, the shares of Common Stock shall rank on liquidation junior to the Preferred Stock.

#### **4. Optional Conversion.**

The Holders of shares of Preferred Stock shall have the following conversion rights to convert the shares of Preferred Stock into shares of Common Stock of the Corporation as follows:

**(a) Intentionally left blank.**

**(b) Right to Convert; Conversion Price.** Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Preferred Stock shall be One Dollar and 50/100 (\$1.50). If any of the outstanding shares of Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Section 4, the number of shares of whole Common Stock to be issued as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect on the date of that particular Conversion Notice relating to such conversion. At the time of conversion of shares of the Preferred Stock, the Corporation shall pay in cash to the Holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon on the shares of the Preferred Stock so converted to the date of the Conversion Notice relating to the shares of Preferred Stock so converted under such conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of the Conversion Notice relating to such conversion of the shares of Preferred Stock so converted divided by the Stock Dividend Price in effect at the date of the Conversion Notice relating to such conversion.

**(c) Conversion Notice.** The right of conversion shall be exercised by the Holder thereof by telecopying or faxing an executed and completed written notice signed by an authorized representative of the Holder ("Conversion Notice"), to the Corporation that the Holder elects to convert a specified number of shares of Preferred Stock representing a specified Liquidation Value thereof into shares of Common Stock and by delivering by express courier the certificate or certificates of Preferred Stock being converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the Holders of the Preferred Stock). The business date indicated on a Conversion Notice which is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a Conversion Date. The Conversion Notice shall include therein the Liquidation Value of the shares of Preferred Stock to be converted, and a calculation (a) of the Stock Dividend Price, (b) the Conversion Price, and (c) the number of shares of Common Stock to be issued in connection with such conversion. The Corporation shall have the right to review the calculations included in the Conversion Notice, and shall provide notice of any discrepancy or dispute therewith within five (5) business days of the receipt thereof. The Holder shall deliver to the

Corporation an original Conversion Notice and the original Preferred to be converted within three (3) business days from the date of the Conversion Notice.

**(d) Issuance of Certificates - Time Conversion Effected.** Promptly, but in no event more than fifteen (15) business days, after the receipt by facsimile of the Conversion Notice referred to in Section 4(c); and provided within the ten (10) business days the Corporation receives the certificate or certificates for the shares of Preferred Stock to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the Holder, registered in the name of the Holder, a certificate or certificates for the number of whole shares of Common Stock into which such shares of Preferred Stock are converted. Such conversion shall be deemed to have been effected as of the close of business on the date on which the telecopy or facsimile Conversion Notice shall have been received by the Corporation, and the rights of the Holder of such share or shares of Preferred Stock shall cease at such time, and the Holder or Holders shall be deemed to have become the holder or holders of record of the shares of Common Stock represented thereby.

**(e) Fractional Shares of Common Stock.** No fractional shares of Common Stock shall be issued upon conversion of any Preferred Stock into shares of Common Stock. All fractional shares of Common Stock shall be aggregated and then rounded down to the nearest whole share of Common Stock. In case the number of shares of Preferred Stock represented by the certificate or certificates surrendered pursuant to this Section 4(c) exceeds the number of shares of Common Stock converted, the Corporation shall, upon such conversion, execute and deliver to the Holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Preferred Stock represented by the certificate or certificates surrendered which are not to be converted.

**(f) Merger or Consolidation.** In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective while any shares of Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering all the Conversion Shares is declared effective by the U. S. Securities and Exchange Commission ("SEC"), the Corporation or such successor corporation as the case may be, shall make appropriate provision so that the Holder of each share of Preferred Stock then outstanding shall have the right to convert such share of Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 4.

**(g) Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock.** If the Corporation, at any time or from time to time while shares of Preferred Stock are issued and outstanding, shall declare or pay, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares

of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

**(h) Adjustments for Reclassification and Reorganization.** If the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of common stock of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares of Common Stock provided for in Section 5(g) hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the Holders of Preferred Stock would otherwise have been entitled to receive, a number of shares of common stock of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the Holders upon conversion of the Preferred Stock immediately before that change.

**(i) Other Adjustments to Conversion Price.** Except as provided in subsection 4(j), if, after the Closing Date and during the period that any of the Preferred Stock is issued and outstanding, the Corporation shall sell (a) any shares of Common Stock for a consideration per share less than the Conversion Price in effect immediately prior to such sale, or (b) any rights, warrants or other securities entitling the holders thereof to convert such securities into Common Stock at a price per share (determined by dividing (i) the total amount, if any, received or receivable by the Corporation in consideration of the sale of such rights, warrants or other securities plus the total amount, if any, payable to the Corporation upon exercise or conversion thereof by (ii) the number of additional shares of Common Stock issuable upon exercise or conversion of such securities) which is less than the Conversion Price in effect on the date of such sale, the Conversion Price shall be adjusted as of the date of such sale to the amount per share received and to be received by the Corporation in connection with such sale, conversion and exercise as determined above. The Holders may, if approved by the Holders of record representing a majority of the then issued and outstanding shares of Preferred Stock, waive their rights to any adjustment to the Conversion Price in connection with a particular sale covered by this Section 4(i), and, in the event of such waiver, no adjustment to the Conversion Price shall be made under this Section 4(i) as a result of such sale.

**(j) No Adjustments.** No adjustment in the Conversion Price shall be required in the case of (i) the grant by the Corporation of stock options to employees of the Corporation under a Stock Option Plan approved by the stockholders of the Company or (ii) the issuance of shares of Common Stock upon the exercise of stock options (a) referred to in clause (i) hereof and (b) granted by the Corporation which grant had triggered an adjustment in the Conversion Price.

## 5. Redemption.

(a) **Redemption at Corporation's Option.** Except as otherwise provided in this Section 5, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time the then outstanding Preferred Stock at the following cash redemption prices if redeemed during the following periods: (i) within twelve (12) months from June 1, 2001 - \$1,100 per share, and (ii) after June 1, 2002 - \$1,200 per share (as applicable, the redemption price of \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

(b) **Mechanics of Redemption.** Prior to any date stipulated by the Corporation for the redemption of Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each Holder of record on such notice date of the Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Preferred Stock to be redeemed from such Holder, and (iv) instructions as to how to specify to the Corporation the number of Preferred Stock to be redeemed as provided in this Section 5.

(c) **Rights of Conversion Upon Redemption.** If the redemption occurs, then, upon receipt of the Redemption Notice, any Holder of Preferred Stock shall have five business days during which it may exercise the option, at its sole election, to specify what portion of its Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Section 5 or converted into Common Stock in the manner provided in Section 4 hereof.

(d) **Surrender of Certificates.** On or before the Redemption Date in respect of any Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

(e) **Payment.** On the Redemption Date in respect of any Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or

trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

**6. Assignment.**

Subject to all applicable restrictions on transfer, the rights and obligations of the Corporation and the Holder of the Preferred Stock shall be binding upon and benefit the successors, assigns, heirs, administrators, and transferees of the parties.

**7. Shares of Common Stock to be Reserved.**

The Corporation, upon the effective date of this Certificate of Designations, has a sufficient number of shares of Common Stock available to reserve for issuance upon the conversion of all outstanding shares of Preferred Stock, pursuant to the terms and conditions set forth in Section 4. The Corporation will at all times reserve and keep available out of its authorized shares of Common Stock, solely for the purpose of issuance upon the conversion of Preferred Stock, as herein provided, such number of shares of Common Stock as shall then be issuable upon the conversion of all outstanding shares of Preferred Stock. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued, fully paid and non assessable. The Corporation will take such action as may be required, if the total number of shares of Common Stock issued and issuable after such action upon conversion of the Preferred Stock would exceed the total number of shares of Common Stock then authorized by the Corporation's Certificate of Incorporation, as amended, in order to increase the number of shares of Common Stock to permit the Corporation to issue the number of shares of Common Stock required to effect conversion of the Preferred Stock, and exercise of the Warrants, to a number sufficient to permit conversion of the Preferred Stock.

**8. No Reissuance of Preferred Stock.**

Shares of Preferred Stock which are converted into shares of Common Stock as provided herein shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of preferred stock hereafter created.

**9. Closing of Books.**

The Corporation will at no time close its transfer books against the transfer of any Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Common Stock or Preferred Stock in any manner which interferes with the timely conversion of such Preferred Stock, except as may otherwise be required to comply with applicable securities laws.

**10. No Preemptive Rights.**

The Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

**11. Definition of Shares.**

As used in this Certificate of Designations, the term "shares of Common Stock" shall mean and include the Corporation's authorized common stock, par value \$.001, as constituted on the date of filing of these terms of the Preferred Stock, or in case of any reorganization, reclassification, or stock split of the outstanding shares of Common Stock thereof, the stock, securities or assets provided for hereof.

The said determination of the designations, preferences and relative, participating, optional or other rights, and the qualifications, limitations or restrictions thereof, relating to the Preferred Stock was duly made by the Board of Directors pursuant to the provisions of the Corporation's Restated Certificate of Incorporation and in accordance with the provisions of the Delaware General Corporation Law.

**CERTIFICATE OF ELIMINATION  
OF  
SERIES 14 CLASS N CONVERTIBLE PREFERRED STOCK  
AND  
SERIES 15 CLASS O CONVERTIBLE PREFERRED STOCK  
AND  
SERIES 16 CLASS P CONVERTIBLE PREFERRED STOCK  
OF  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

---

PERMA-FIX ENVIRONMENTAL SERVICES, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (hereinafter called the "Corporation"), hereby certifies the following:

1. That the Certificate of Designations of Series 14 Class N Convertible Preferred Stock, par value \$.001 per share, of the Corporation (the "Series 14 Preferred") was filed with the Delaware Secretary of State on August 10, 1999 (the "Series 14 Certificate of Designations").

2. That a portion of the outstanding shares of the Series 14 Preferred have been converted into common stock of the Corporation and all of the remaining balance have been delivered to the Company and exchanged pursuant to an agreement with the holder thereof in accordance with the terms and conditions of a certain Conversion and Exchange Agreement between the Company and RBB Bank Aktiengesellschaft, dated as of May 25, 2001 ("Exchange Agreement").

3. That no shares of Series 14 Preferred remain outstanding.

4. That all shares of the Series 14 Preferred which have been exchanged have the status of authorized and unissued shares of the preferred stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

5. That effective May 25, 2001, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the conversion and exchange with the holder of the Series 14 Class N Convertible Preferred Stock, no authorized shares of Series 14 Class N Convertible Preferred Stock will remain outstanding and no shares of Series 14 Class N Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 14 Class N Convertible Preferred Stock.

---

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 14 Class N Convertible Preferred Stock.

6. That the Certificate of Designations of the Series 15 Class O Convertible Preferred Stock, par value \$.001 per share, of the Corporation (the "Series 15 Preferred") was filed on August 10, 1999 (the "Series 15 Certificate of Designations").

7. That all outstanding shares of the Series 15 Preferred have been delivered to the Company and exchanged pursuant to the Exchange Agreement.

8. That no shares of Series 15 Preferred remain outstanding.

9. That all shares of the Series 15 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

10. That effective May 25, 2001, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 15 Class O Convertible Preferred Stock no authorized shares of Series 15 Class O Convertible Preferred Stock will remain outstanding and no shares of Series 15 Class O Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 15 Class O Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 15 Class O Convertible Preferred Stock.

11. That the Certificate of Designations of the Series 16 Class P Convertible Preferred Stock, par value \$.001 per share, of the Corporation (the "Series 16 Preferred") was filed on August 10, 1999 (the "Series 16 Certificate of Designations").

12. That all outstanding shares of the Series 16 Preferred have been delivered to the Company and exchanged pursuant to the Exchange Agreement.

13. That no shares of Series 16 Preferred remain outstanding.

14. That all shares of the Series 16 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

15. That effective May 25, 2001, the Board of Directors of the Company duly adopted the following resolutions:

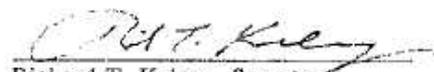
RESOLVED, that upon completion of the exchange with the holder of the Series 16 Class P Convertible Preferred Stock, no authorized shares of Series 16 Class P Convertible Preferred Stock will remain outstanding and no shares of Series 16 Class P Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 16 Class P Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 16 Class P Convertible Preferred Stock.

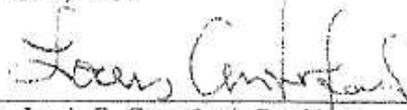
16. That pursuant to the provisions of § 151(g) of the Delaware General Corporation Law, upon the effective date of the filing of this Certificate, this Certificate will have the effect of eliminating from the Restated Certificate of Incorporation only those matters set forth in the Restated Certificate of Incorporation with respect to the Series 14 Class N Convertible Preferred Stock, the Series 15 Class O Convertible Preferred Stock, and the Series 16 Class P Convertible Preferred Stock

IN WITNESS WHEREOF, this Certificate of Elimination has been executed this 25<sup>th</sup> day of May, 2001, by the President of the Company.

ATTEST:

  
Richard T. Kelecny, Secretary  
(SEAL)

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By   
Dr. Louis F. Centofanti, President

**CERTIFICATE OF AMENDMENT  
OF  
RESTATED CERTIFICATE OF INCORPORATION,  
AS AMENDED,  
OF  
FERMA-FIX ENVIRONMENTAL SERVICES, INC.**

---

Ferma-Fix Environmental Services, Inc., a Delaware corporation (the "Corporation"), for purposes of amending its Restated Certificate of Incorporation, as amended, ("Restated Certificate of Incorporation"), as provided by Section 242 of the Delaware General Corporation Law, does hereby certify:

1. The amendment set forth below to the Restated Certificate of Incorporation was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware:

The first paragraph of Article Fourth of the Corporation's Restated Certificate of Incorporation, as amended, is hereby deleted and replaced in its entirety by the following:

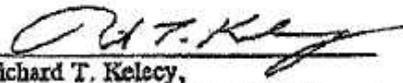
**FOURTH:** The total number of shares of capital stock that the Corporation shall have authority to issue is 77,000,000, of which 75,000,000 shall be designated as common stock, par value \$.001 per share ("Common Stock"), and 2,000,000 shall be designated as preferred stock, par value \$.001 per share ("Preferred Stock").

2. Only the first paragraph of Article Fourth is amended by this Amendment, and the remainder of Article Fourth shall remain in full force and effect. No other provision, paragraph or article of the Restated Certificate of Incorporation is amended or changed by this Amendment. The Restated Certificate of Incorporation, as expressly amended by paragraph 1 of this Amendment, shall be in full force and effect.

3. The Board of Directors, on March 13, 2002, unanimously adopted the foregoing proposed amendment to the first paragraph of Article Fourth of the Restated Certificate of Incorporation declared such amendment to be advisable, and set a Special Meeting of Stockholders for consideration thereof. A Special Meeting of Stockholders was duly called and held on June 14, 2002, at which meeting the necessary number of shares as required by law and the Restated Certificate of Incorporation were voted in favor of such amendment.

IN WITNESS whereof, Perma-Fix Environmental Services, Inc. has caused this Certificate of Amendment to be signed and attested to by its duly authorized officers as of this 17<sup>th</sup> day of June, 2002.

Perma-Fix Environmental Services, Inc.,  
a Delaware corporation

By:   
Richard T. Kelecy,  
Vice President and Chief Financial  
Officer

CERTIFICATE OF DESIGNATIONS

of

~~SERIES A JUNIOR PARTICIPATING PREFERRED STOCK~~

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

(Pursuant to Section 151 of the  
Delaware General Corporation Law)

---

PERMA-FIX ENVIRONMENTAL SERVICES INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (hereinafter called the "Corporation"), hereby certifies that the following resolution was duly adopted by the Board of Directors of the Corporation as required by Section 151 of the General Corporation Law at a meeting duly called and held on May 2, 2008:

Creation of Series A Junior Participating Preferred Stock

RESOLVED, that pursuant to the authority granted to and vested in the Board of Directors of this Corporation (hereinafter called the "Board of Directors" or the "Board") in accordance with the provisions of the Corporation's Restated Certificate of Incorporation, as amended, the Board of Directors hereby creates a new series of Preferred Stock, par value \$.001 per share, designated as Series A Junior Participating Preferred Stock, par value \$.001 per share, of the Corporation and hereby states the designation and number of shares, and does hereby establish and fix the relative rights, preferences, designations and relative participating, optional and other special rights, and qualifications, limitations and restrictions thereof as follows:

Series A Junior Participating Preferred Stock:

Section 1. Designation and Amount. The shares of such series shall be designated as "Series A Junior Participating Preferred Stock" ("Series A Preferred Stock"), par value \$.001 per share, and the number of shares constituting the Series A Preferred Stock shall be 600,000. Such number of shares of Series A Preferred Stock may be increased or decreased by resolution of the Board of Directors; provided, that no decrease shall reduce the number of shares of Series A Preferred Stock to a number less than the number of shares then outstanding plus the number of shares reserved for issuance upon the exercise of outstanding options, rights or warrants or upon the conversion of any outstanding securities issued by the Corporation convertible into Series A Preferred Stock.

---

Section 2. Dividends and Distributions.

(a) Subject to the prior and superior rights of the holders of any shares of any series of the Corporation's preferred stock ranking prior and superior to the shares of Series A Preferred Stock with respect to dividends, if any, the holders of shares of Series A Preferred Stock, in preference to the holders of Common Stock, par value \$.001 per share (the "Common Stock"), of the Corporation, and of any other junior stock, shall be entitled to receive, when, as ~~and if declared by the Board of Directors out of funds legally available for the purpose,~~ quarterly dividends payable in cash on the last business day of March, June, September and December in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$1, or (b) subject to the provision for adjustment hereinafter set forth, 100 times the aggregate per share amount of all cash dividends, and 100 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions, other than a dividend payable in shares of the Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Preferred Stock. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(b) The Corporation shall declare a dividend or distribution on the Series A Preferred Stock as provided in paragraph (a) of this Section immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock); provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$1 per share on the Series A Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(c) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series A Preferred Stock, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue and be cumulative from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events

such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be not be less than 10 days or more than 60 days prior to the date fixed for the payment thereof.

Section 3. Voting Rights. The holders of shares of Series A Preferred Stock shall have the following voting rights:

(a) Subject to the provision for adjustment hereafter set forth, each share of Series A Preferred Stock shall entitle the holder thereof to 100 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the number of votes per share to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(b) Except as otherwise provided herein, in the Restated Certificate of Incorporation, as amended, of the Corporation, in any other Certificate of Designation of the Corporation or by applicable law, the holders of shares of Series A Preferred Stock, the holders of shares of Common Stock and the holders of any other class or series of capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(c) Except as set forth in this Certificate of Designation or as otherwise required by applicable law, holders of Series A Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent that they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

Section 4. Certain Restrictions.

(a) Whenever quarterly dividends or other dividends or distributions payable on the Series A Preferred Stock as provided in Section 2 hereof are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Preferred Stock outstanding shall have been paid in full, or declared and a sum sufficient for the payment therefor be set apart for payment and be in the process of payment, the Corporation shall not:

(i) declare or pay dividends, or make any other distributions, on any shares of Common Stock or stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock;

(ii) declare or pay dividends, or make any other distributions, on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except dividends paid ratably on the Series A Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) redeem or purchase or otherwise acquire for consideration shares of any Common Stock or stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such Common Stock or junior stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Preferred Stock; or

(iv) redeem or purchase or otherwise acquire for consideration any shares of Series A Preferred Stock; or any shares of Common Stock or stock ranking on a parity with the Series A Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(b) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (a) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.

Section 5. Reacquired Shares. Any shares of Series A Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of preferred stock and may be reissued as part of a new series of preferred stock subject to the conditions and restrictions on issuance set forth herein, in the Restated Certificate of Incorporation, as amended, of the Corporation, or in any other Certificate of Designations creating a series of preferred stock or any similar stock or as otherwise required by law.

Section 6. Liquidation, Dissolution or Winding Up. Upon any liquidation, dissolution or winding up of the Corporation, no distribution shall be made (1) to the holders of shares of Common Stock or stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock unless, prior thereto, the holders of shares of Series A Preferred Stock shall have received \$100 per share, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment, provided that the holders of shares of Series A Preferred Stock shall be entitled to receive an aggregate amount per share, subject to the provision for adjustment hereinafter set

forth, equal to 100 times the aggregate amount to be distributed per share to holders of shares of Common Stock or stock ranking junior to the Series A Preferred Stock, or (2) to the holders of shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except distributions made ratably on the Series A Preferred Stock and all such parity stock in proportion to the total amounts to which the holders of all such shares are entitled upon such liquidation, dissolution or winding up. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the aggregate amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event, and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 7. Consolidation, Merger, etc. In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case each share of Series A Preferred Stock shall at the same time be similarly exchanged or changed into an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 100 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 8. No Redemption. The shares of Series A Preferred Stock shall not be redeemable.

Section 9. Ranking. The Series A Preferred Stock shall rank junior to all other series of the Corporation's Preferred Stock as to the payment of dividends and the distribution of assets upon any liquidation, dissolution or winding up of the Corporation unless the terms of any such series shall provide otherwise.

Section 10. Amendment. So long as any shares of the Series A Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of at least two-thirds in number of shares of the Series A Preferred Stock then outstanding, amend, alter, or repeal any of the provisions of this Certificate of Designations or the Corporation's Restated Certificate of

Incorporation, as amended, so as to affect adversely the preferences, special rights or powers of the shares of Series A Preferred Stock.

IN WITNESS WHEREOF, this Certificate of Designation is executed on behalf of the Corporation by its President and attested by its Secretary this 2<sup>nd</sup> day of May, 2008.

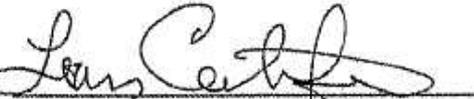
PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

ATTEST

  
Steve Baughman, Secretary

(SEAL)

By:

  
Dr. Louis F. Centofanti, President

## EXHIBIT 21.1

### 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 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.

Perma-Fix of Pittsburgh, Inc., ("PFP") a Pennsylvania 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.

Perma-Fix of Northwest Richland, Inc. ("PFNWR"), a Washington Corporation, is a 100% subsidiary of the Company.

#### **Consulting Services**

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

---



**EXHIBIT 23.1**

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

Perma-Fix Environmental Services, Inc.  
Atlanta, Georgia

We hereby consent to the incorporation by reference in the Registration Statements on Forms S-3 and S-8, File Numbers 333-115061 (S-3), 333-85118 (S-3), 333-14513 (S-3), 333-43149 (S-3), 333-70676 (S-3), 333-87437 (S-3), 333-153086 (S-8), 333-124668 (S-8), 333-110995 (S-8), 333-80580 (S-8), 333-3664 (S-8), 333-17899 (S-8), 333- 25835 (S-8), and 333-76024 (S-8) of Perma-Fix Environmental Services, Inc. (the “Company”) and subsidiaries of our reports dated March 30, 2009, relating to the consolidated financial statements and financial statement schedule and the effectiveness of the Company’s internal control over financial reporting, which appear in this Form 10-K. Our report on the effectiveness of internal control over financial reporting expresses an adverse opinion on the effectiveness of the Company’s internal control over financial reporting as of December 31, 2008.

/s/ BDO Seidman, LLP  
Atlanta, Georgia

March 30, 2009



EXHIBIT 31.1

CERTIFICATIONS

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

Date: March 30, 2009

/s/ Louis F. Centofanti  
Louis F. Centofanti  
Chairman of the Board  
Chief Executive Officer

---



CERTIFICATIONS

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

Date: March 30, 2009

/s/ Ben Naccarato  
Ben Naccarato  
Chief Financial Officer

---



**EXHIBIT 32.1**

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

In connection with the Annual Report of Perma-Fix Environmental Services, Inc. ("PESI") on Form 10-K for the year ended December 31, 2008 as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-K"), I, Dr. Louis F. Centofanti, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Form 10-K fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §78m or §78o(d)); and
- (2) The information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 30, 2009

/s/ Louis F. Centofanti  
Dr. Louis F. Centofanti  
President and  
Chief Executive Officer

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein, and not for any other purpose.

---



**EXHIBIT 32.2**

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

In connection with the Annual Report of Perma-Fix Environmental Services, Inc. ("PESI") on Form 10-K for the year ended December 31, 2008 as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-K"), I, Ben Naccarato, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Form 10-K fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §78m or §78o(d)); and
- (2) The information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 30, 2009

/s/ Ben Naccarato

Ben Naccarato  
Chief Financial Officer

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein, and not for any other purpose.

---

