UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-K

[X]		R 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934 ded <u>December 31, 2014</u>
[]	TRANSITION REPORT PURSUANT TO SECTION 1	or 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934 iod from to
	Commission 2	File No. <u>1-11596</u>
		MENTAL SERVICES, INC. t as specified in its charter)
	Delaware State or other jurisdiction of incorporation or organization	<u>58-1954497</u> (IRS Employer Identification Number)
83	302 Dunwoody Place, #250, Atlanta, GA (Address of principal executive offices)	30350 (Zip Code)
		187-9898 lephone number)
	Securities registered pursuant to Section 12(b) of the Act: <u>Title of each class</u>	Name of each exchange on which registered
	Common Stock, \$.001 Par Value	NASDAQ Capital Markets
	ate by check mark if the Registrant is a well-known seasoned iss NoX	uer, as defined in Rule 405 of the Securities Act.
	ate by check mark if the Registrant is not required to file reports No X	pursuant to Section 13 or Section 15(d) of the Act.
Act of been s		s required to be filed by Section 13 or 15(d) of the Securities Exchangeriod that the Registrant was required to file such reports), and (2) has
File ro		cally and posted on its corporate Web site, if any, every Interactive Data gulation S-T (§232.405 of this chapter) during the preceding 12 months and post such files).
contai	•	o Item 405 of Regulation S-K is not contained herein, and will not be an or information statements incorporated by reference in Part III of this
compa		filer, an accelerated filer, a non-accelerated filer, or a smaller reporting and "smaller reporting company" in Rule 12b-2 of the Exchange Act
	e accelerated filer \square Accelerated Filer \square Non-accelerate	ed Filer □ Smaller reporting company ⊠
	ate by check mark whether the Registrant is a shell company (as $No X$	defined in Rule 12b-2 of the Act).
The a	aggregate market value of the Registrant's voting and non-votin	g 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, 2014), was approximately \$48,731,000. For the purposes of this calculation, all 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, are, in fact,

affiliates of the Registrant. The Company's Common Stock is listed on the NASDAQ Capital Markets.

	015, there were 11,486,1		nts Common Stock, \$.0	001 par value, outstandin	g.	
Documents incorp	porated by reference: Nor	ne				
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PERMA-FIX ENVIRONMENTAL SERVICES, INC.

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PART I

ITEM 1. BUSINESS

Company Overview and Principal Products and Services

Perma-Fix Environmental Services, Inc. (the Company, which may be referred to as we, us, or our), a Delaware corporation incorporated in December of 1990, is an environmental and environmental technology know-how company, which provides services through our two reportable segments as discussed below. The Company is also involved in the research and development ("R&D") and marketing of medical isotope technology ("Technetium-99" or "Tc-99m") by our Perma-Fix Medical S.A subsidiary.

We have grown through acquisitions and internal growth. Our goal is to continue to focus on the efficient operation of our facilities and onsite activities, to continue to evaluate strategic acquisitions, to continue the R&D of innovative technologies to expand company service offering and to treat nuclear waste, mixed waste, and industrial waste, and to continue R&D and marketing of medical isotope technology used in medical diagnostic testing by our Polish subsidiary, Perma-Fix Medical S.A. The Company is focusing on expansion into both commercial and international markets to help offset the uncertainties of government spending in the USA, from which a significant portion of the Company's revenue is derived. This includes new services, new customers and increased market share in our current markets.

Segment Information and Foreign and Domestic Operations and Sales

The Company has two reportable segments. In accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 280, "Segment Reporting", 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 Chief Operating Officer to make decisions about resources to be allocated and assess its performance; and
- for which discrete financial information is available.

TREATMENT SEGMENT reporting includes:

- nuclear, low-level radioactive, mixed, hazardous and non-hazardous waste treatment, processing and disposal services primarily through four uniquely licensed (Nuclear Regulatory Commission or state equivalent) and permitted (Environmental Protection Agency ("EPA") or state equivalent) treatment and storage facilities held by the following subsidiaries: Perma-Fix of Florida, Inc. ("PFF"), Diversified Scientific Services, Inc., ("DSSI"), Perma-Fix Northwest Richland, Inc. ("PFNWR"), and East Tennessee Materials & Energy Corporation ("M&EC"). 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; and
- R&D activities to identify, develop and implement innovative waste processing techniques for problematic waste streams.

For 2014, the Treatment Segment accounted for \$42,343,000 or 74.2% of total revenue from continuing operations, as compared to \$35,540,000 or 47.8% of total revenue from continuing operations for 2013. See "– Dependence Upon a Single or Few Customers" for further details and a discussion as to our Segments' contracts with the federal government or with others as a subcontractor to the federal government.

SERVICES SEGMENT reporting includes:

- On-site waste management services to commercial and government customers;
- Technical services, which include:
 - o professional radiological measurement and site survey of large government and commercial installations using advanced methods, technology and engineering;
 - o integrated Occupational Safety and Health services including industrial hygiene ("IH") assessments; hazardous materials surveys, e.g., exposure monitoring; lead and asbestos management/abatement oversight; indoor air quality evaluations; health risk and exposure assessments; health & safety plan/program development, compliance auditing and training services; and Occupational Safety and Health Administration ("OSHA") citation assistance; and

- o global technical services providing consulting, engineering, project management, waste management, environmental, and D&D field, technical, and management personnel and services to commercial and government customers;
- Nuclear services, which include:
 - o technology-based services including engineering, D&D, specialty services and construction, logistics, transportation, processing and disposal;
 - o remediation of nuclear licensed and federal facilities and the remediation cleanup of nuclear legacy sites. Such services capability includes: project investigation; radiological engineering; partial and total plant D&D; facility decontamination, dismantling, demolition, and planning; site restoration; site construction; logistics; transportation; and emergency response; and
- A company owned equipment calibration and maintenance laboratory that services, maintains, calibrates, and sources (i.e., rental) of health physics, IH and customized nuclear, environmental, and occupational safety and health ("NEOSH") instrumentation;

For 2014, the Services Segment accounted for \$14,722,000 or 25.8% of total revenue from continuing operations, as compared to \$38,873,000 or 52.2% of total revenue from continuing operations for 2013. See " – Dependence Upon a Single or Few Customers" for further details and a discussion as to our Segments' contracts with the federal government or with others as a subcontractor to the federal government

Our segments provide services to research institutions, commercial companies, public utilities, and governmental agencies nationwide, including the U.S. Department of Energy ("DOE") and U.S. Department of Defense ("DOD"). The distribution channels for our services are through direct sales to customers or via intermediaries.

On April 4, 2014, the Company completed the acquisition of a controlling interest in a Polish Company, a publicly traded shell company on the NewConnect (alternative share market run by the Warsaw Stock Exchange) in Poland and sold to the Polish shell all of the shares of Perma-Fix Medical Corporation, a Delaware corporation ("PF Medical") organized by the Company (incorporated in January 2014). PF Medical's only asset was and is a worldwide license granted by the Company to use, develop and market the new process and technology developed by the Company in the production of Technetium-99 or "Tc-99m" for medical diagnostic applications. Since the acquired shell company (now named as Perma-Fix Medical S.A.) does not meet the definition of a business under Accounting Standards Codification ("ASC") 805, "Business Combinations", the transaction was accounted for as a capital transaction. The primary purpose of PF Medical S.A. (which we own 64%) is to provide a financing vehicle for the development and marketing of its medical isotope ("Tc-99m") technology used in medical diagnostic testing for potential use throughout the world.

Our corporate office is located at 8302 Dunwoody Place, Suite 250, Atlanta, Georgia 30350.

Foreign Revenue

Our consolidated revenue from continuing operations for 2014 and 2013 included approximately \$147,000 or 0.3% and \$144,000 or 0.2%, respectively, from our United Kingdom operation, Perma-Fix UK Limited.

Our consolidated revenue from continuing operations for 2014 and 2013 included approximately \$1,855,000 or 3.3% and \$4,409,000 or 5.9%, respectively, from customers located in Canada.

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 May 2022 and December 2020, for the service marks "Perma-Fix Environmental Services" and "Perma-Fix", respectively. In addition, we have received registration for three service marks for our Safety & Ecology Holdings Corporation and its subsidiaries (collectively known as "Safety and Ecology Corporation" or "SEC") to periods ranging from 2016 to 2017.

We are active in the 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 twelve active patents and the filing of several applications for which patents are pending. These twelve active patents have remaining lives ranging from approximately five to fourteen years. Our R&D efforts have also resulted in the granting of a patent for the new technology for the production of Technetium-99 ("Tc-99m") for certain types of medical applications, which we have granted a worldwide exclusive license to our subsidiary, Perma-Fix Medical S.A. This patent is effective through March 2032.

Our flagship technology, the Perma-Fix Process, is a proprietary, cost effective, treatment technology that converts hazardous waste into non-hazardous material. We have also 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. 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.

Permits and Licenses

Waste management service 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. We are dependent on our permits and licenses discussed below in order to operate our businesses. 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. We believe that these permit and license requirements represent a potential barrier to entry for possible competitors.

PFF, located in Gainesville, Florida, operates its hazardous, mixed and low-level radioactive waste activities under a RCRA ("Resource Conservation and Recovery Act") Part B permit, Toxic Substances Control Act ("TSCA") authorization, Restricted RX Drug Distributor-Destruction license, and a radioactive materials license issued by the State of Florida.

DSSI, located in Kingston, Tennessee, conducts mixed and low-level radioactive waste storage and treatment activities under RCRA Part B permits and a radioactive materials license issued by the State of Tennessee Department of Environment and Conservation. Co-regulated TSCA Polychlorinated Biphenyl ("PCB") wastes are also managed for PCB destruction under the U.S. EPA Approval effective June 2008.

M&EC, located in Oak Ridge, Tennessee, performs hazardous, low-level radioactive and mixed waste storage and treatment operations under a RCRA Part B permit and a radioactive materials license issued by the State of Tennessee Department of Environment and Conservation. Co-regulated TSCA PCB wastes are also managed under EPA Approvals applicable to site-specific treatment units.

PFNWR, located in Richland, Washington, operates a low-level radioactive waste processing facility as well as a mixed waste processing facility. Radioactive material processing is authorized under radioactive materials licenses issued by the State of Washington and mixed waste processing is additionally authorized under a RCRA Part B permit with TSCA authorization issued jointly by the State of Washington and the EPA

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

Backlog

The Treatment 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, 2014, our Treatment Segment had a backlog of approximately \$9,228,000, as compared to approximately \$7,695,000 as of December 31, 2013. Additionally, the time it takes to process 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 segments have significant relationships with the federal government, and continue to enter into contracts, directly as the prime contractor or indirectly as a subcontractor, with 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 on 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 as a prime contractor or indirectly as a subcontractor to the federal government, representing approximately \$34,780,000 or 60.9% of our total revenue from continuing operations during 2014, as compared to \$47,557,000 or 63.9% of our total revenue from continuing operations during 2013.

The following customers accounted for 10% or more of the total revenues generated from continuing operations for twelve months ended December 31, 2014 and 2013:

		Total	% of Total
Customer	Year	 Revenue	Revenue
United States Enrichment Corporation ("USEC")	2014	\$ 10,272,000	18.0%
	2013	\$ 2,037,000	2.7%
CH Plateau Remediation Company ("CHPRC")	2014	\$ 5,762,000	10.1%
	2013	\$ 19,922,000	26.8%

As our revenues are project/event based where the completion of one contract with a specific customer may be replaced by another contract with a different customer from year to year, we do not believe the loss of one specific customer from one year to the next will generally have a material adverse effect on our operations and financial condition.

Competitive Conditions

The Treatment Segment's largest competitor is EnergySolutions that operates treatment and disposal facilities in Oak Ridge, TN and Clive, UT. Waste Control Specialists ("WCS"), which has newly licensed disposal capabilities in Andrews, TX, has recently emerged as a competitor in the treatment market and is gaining market share. Perma-Fix now has two options for disposal of treated nuclear waste and thus mitigates the prior risk of EnergySolutions providing the only outlet for disposal. The Treatment 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 Treatment Segment currently solicits business primarily on a North American basis with both government and commercial clients; however, we are also focusing on emerging international markets for additional work.

We believe that the permitting and licensing requirements, and the cost to obtain such permits, are barriers to the entry of hazardous waste and radioactive and mixed waste activities as presently operated by our waste treatment subsidiaries. If the permit requirements for hazardous waste treatment, storage, and disposal ("TSD") 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.

Our Services Segment is engaged in highly competitive businesses in which a number of our government contracts and some of our commercial contracts are awarded through competitive bidding processes. The extent of such competition varies according to the industries and markets in which our customers operate as well as the geographic areas in which we operate. The degree and type of competition we face is also often influenced by the project specification being bid on and the different specialty skill sets of each bidder for which our Services Segment competes, especially projects subject to the governmental bid process. We also have the ability to prime federal government small business procurements (small business set asides). Large businesses are more willing to team with small businesses in order to be part of these often substantial procurements. There are a number of qualified small businesses in our market that will provide intense competition that may provide a challenge to our ability to maintain strong growth rates and acceptable profit margins. For international business there are additional competitors, many from within the country the work is to be performed, making winning work in foreign countries more challenging. If our Services Segment is unable to meet these competitive challenges, it could lose market share and experience an overall reduction in its profits.

Certain Environmental Expenditures and Potential Environmental Liabilities

Environmental Liabilities

We have four remediation projects, which are currently in progress at our Perma-Fix of Dayton, Inc. ("PFD"), Perma-Fix of Memphis, Inc. ("PFM"), Perma-Fix of Michigan, Inc. ("PFMI") and Perma-Fix South Georgia, Inc. ("PFSG") subsidiaries, which are all included within our discontinued operations. These remediation projects principally entail the removal/remediation of contaminated soil and, in most cases, the remediation of surrounding ground water. All of the remedial clean-up projects 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.

At December 31, 2014, we had total accrued environmental remediation liabilities of \$1,016,000, of which \$728,000 is recorded as a current liability, which reflects a decrease of \$15,000 from the December 31, 2013 balance of \$1,031,000. The net decrease of \$15,000 represents payments on remediation projects at the PFSG location.

No insurance or third party recovery was taken into account in determining our cost estimates or reserves.

The nature of our business exposes us to significant cost to comply with governmental environmental laws, rules and regulations and 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. 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. 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 2014 and 2013, we spent approximately \$1,315,000 and \$1,764,000, respectively, in research and development activities, of which approximately \$759,000 and \$585,000, respectively, were related to the R&D of the medical isotope technology.

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, 2014, we employed approximately 281 employees, of whom 275 are full-time employees, three are part-time employees, and three are temporary employees. Seven of the full time employees are unionized and covered by a collective bargaining agreement.

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 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.

ITEM 1A. RISK FACTORS

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 (the "Commission").

Risks Relating to our Operations

Failure to maintain our financial assurance coverage that we are required to have in order to operate our permitted treatment, storage and disposal facilities could have a material adverse effect on us.

American International Group ("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 of those facilities. We are required to provide and to maintain financial assurance that guarantees to the state that in the event of closure, our permitted facilities will be closed in accordance with the regulations. Our initial policy provides a maximum of \$39,000,000 of financial assurance coverage. We also maintain a financial assurance policy for our PFNWR facility, which provides a maximum coverage of \$8,200,000. In the event that we are unable to obtain or maintain our financial assurance coverage for any reason, 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 segments' 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 segments were approximately \$34,780,000 or 60.9% and \$47,557,000 or 63.9%, of our consolidated operating revenues from continuing operations for 2014 and 2013, respectively. 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.

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;
- a reduction in demand for nuclear generating capacity; or
- failure to perform under existing contracts, directly or indirectly, with the federal government.

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 and/or to perform remediation projects, 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 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 economic conditions, 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 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. 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, such as our CH Plateau Remediation Company subcontract which was completed effective September 30, 2013. 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 similar significant 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.

We are a holding company and depend, in large part, on receiving funds from our subsidiaries to fund our indebtedness.

Because we are a holding company and operations are conducted through our subsidiaries, our ability to meet our obligations depends, in large part, on the operating performance and cash flows of our subsidiaries.

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, 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.

Our Treatment Segment has limited end disposal sites to utilize to dispose of its waste which could significantly impact our results of operations.

Our Treatment Segment has limited options available for disposal of its waste. Currently, there are only two disposal sites for our low level radioactive waste we receive from non-governmental sites. If either of these disposal sites ceases to accept waste or closes for any reason or refuses to accept the waste of our Treatment Segment, for any reason, we would be limited to only the one remaining site to dispose of our nuclear waste. With only one end disposal site to dispose of our waste, we could be subject to significantly increased costs which could negatively impact our results of operations.

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 could 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 be exposed to certain regulatory and financial risks related to climate change.

Climate change is receiving ever increasing attention from scientists and legislators alike. The debate is ongoing as to the extent to which our climate is changing, the potential causes of this change and its potential impacts. Some attribute global warming to increased levels of greenhouse gases, including carbon dioxide, which has led to significant legislative and regulatory efforts to limit greenhouse gas emissions.

Presently there are no federally mandated greenhouse gas reduction requirements in the United States. However, there are a number of legislative and regulatory proposals to address greenhouse gas emissions, which are in various phases of discussion or implementation. The outcome of federal and state actions to address global climate change could result in a variety of regulatory programs including potential new regulations. Any adoption by federal or state governments mandating a substantial reduction in greenhouse gas emissions could increase costs associated with our operations. Until the timing, scope and extent of any future regulation becomes known, we cannot predict the effect on our financial position, operating results and cash flows.

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

We must be successful in winning mandates from our government, commercial customers and international customers to replace revenues from projects that we have completed or 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.

Under certain conditions, the Price-Anderson Act's indemnification provisions may 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 under-represented minority contractors. Although the Company has the ability to certify and bid government contract as a small business, there are a number of qualified small businesses in our market that will provide intense competition. Competition 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 on 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 may be unable to utilize loss carryforwards in the future.

We have approximately \$5,553,000 and \$50,224,000 in net operating loss carryforwards which will expire in various amounts starting in 2021 if not used against future federal and state income tax liabilities, respectively. 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.

If our permit or other intangible assets become further impaired, we may be required to record additional significant charge to earnings.

Under accounting principles generally accepted in the United States ("U.S. GAAP"), we review our intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Our permits are tested for impairment at least annually (The Company has no goodwill as of December 31, 2014). Factors that may be considered a change in circumstances, indicating that the carrying value of our permit or other intangible assets may not be recoverable, include a decline in stock price and market capitalization, reduced future cash flow estimates, and slower growth rates in our industry. We may be required, in the future, to record additional impairment charges in our financial statements, in which any impairment of our permit or other intangible assets is determined. Such impairment charges could negatively impact our results of operations.

We bear the risk of cost overruns in fixed-price contracts. We may experience reduced profits or, in some cases, losses under these contracts if costs increase above our estimates.

Our revenues may be earned under contracts that are fixed-price in nature. Fixed-price contracts expose us to a number of risks not inherent in cost-reimbursable contracts. Under fixed price and guaranteed maximum-price contracts, contract prices are established in part on cost and scheduling estimates which are based on a number of assumptions, including assumptions about future economic conditions, prices and availability of labor, equipment and materials, and other exigencies. If these estimates prove inaccurate, or if circumstances change such as unanticipated technical problems, difficulties in obtaining permits or approvals, changes in local laws or labor conditions, weather delays, cost of raw materials or our suppliers' or subcontractors' inability to perform, cost overruns may occur and we could experience reduced profits or, in some cases, a loss for that project. Errors or ambiguities as to contract specifications can also lead to cost-overruns.

Adequate bonding is necessary for us to win certain types of new work.

We are often required to provide performance bonds or other financial assurances to customers under fixed-price contracts, primarily within our Services Segment. These surety instruments indemnify the customer if we fail to perform our obligations under the contract. If a bond is required for a particular project and we are unable to obtain it due to insufficient liquidity or other reasons, we may not be able to pursue that project. We currently have a bonding facility but, the issuance of bonds under that facility is at the surety's sole discretion. Moreover, due to events that affect the insurance and bonding markets generally, bonding may be more difficult to obtain in the future or may only be available at significant additional cost. There can be no assurance that bonds will continue to be available to us on reasonable terms. Our inability to obtain adequate bonding and, as a result, to bid on new work could have a material adverse effect on our business, financial condition and results of operations.

Failure to maintain effective internal control over financial reporting or failure to remediate a material weakness in internal control over financial reporting could have a material adverse effect on our business, operating results, and stock price.

Maintaining effective internal control over financial reporting is necessary for us to produce reliable financial reports and is important in helping to prevent financial fraud. If we are unable to maintain adequate internal controls, our business and operating results could be harmed. We are required to satisfy the requirements of Section 404 of Sarbanes Oxley and the related rules of the Commission, which require, among other things, management to assess annually the effectiveness of our internal control over financial reporting. Management has determined that a material weakness, as described in Part II – Item 9A, "Controls and Procedures," of this Annual Report, existed as of December 31, 2014. Accordingly, we have concluded that our internal control over financial reporting was not effective as of December 31, 2014. We are currently working to remediate this material weakness. If we are unable to effectively remediate this material weakness or we are otherwise unable to maintain adequate internal control over financial reporting, there is a reasonable possibility that a misstatement of our annual or interim financial statements will not be prevented or detected in a timely manner. If we cannot produce reliable financial reports, investors could lose confidence in our reported financial information, the market price of our common stock could decline significantly, and our business, financial condition, and reputation could be harmed.

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 nuclear services and 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, we had instances in which we failed to meet our quarterly fixed charge coverage ratio; however, these instances of non-compliance were waived by our lender. In the past, our lender also has amended the methodology in calculating the quarterly fixed charge coverage ratio and changed the minimum quarterly fixed charge coverage ratio requirement so we can meet our quarterly fixed charge coverage ratio. We met our fixed charge coverage ratio in each of the second to fourth quarters of 2014. Our lender waived the quarterly fixed charge coverage ratio testing requirement for the first quarter of 2014. If we fail to meet the minimum quarterly fixed charge coverage ratio requirement 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 accelerates the payment of our borrowings under our credit facility. In such event, we may not have sufficient liquidity to repay our debt under our credit facility and other indebtedness.

Our amount of debt could adversely affect our operations.

At December 31, 2014, our aggregate consolidated debt was approximately \$11,372,000 (net of debt discount of \$137,000). Our Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated October 31, 2011, as amended ("Amended Loan Agreement") provides for a total Credit Facility commitment of \$28,000,000, consisting of a \$12,000,000 revolving line of credit and a term loan of \$16,000,000. 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, 2014, we had no borrowings under the revolving part of our Credit Facility and borrowing availability of up to an additional \$7,402,000 based on our outstanding eligible receivables. A lack of positive 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.

Our substantial level of indebtedness could limit our financial and operating activities, and adversely affect our ability to incur additional debt to fund future needs.

We currently have a substantial amount of indebtedness. As a result, this level of indebtedness could, among other things:

- require us to dedicate a substantial portion of our cash flow to the payment of principal and interest, thereby reducing the funds available for operations and future business opportunities;
- make it more difficult for us to satisfy our obligations;
- limit our ability to borrow additional money if needed for other purposes, including working capital, capital expenditures, debt service requirements, acquisitions and general corporate or other purposes, on satisfactory terms or at all;
- limit our ability to adjust to changing economic, business and competitive conditions;
- place us at a competitive disadvantage with competitors who may have less indebtedness or greater access to financing;
- make us more vulnerable to an increase in interest rates, a downturn in our operating performance or a decline in general economic conditions; and
- make us more susceptible to changes in credit ratings, which could impact our ability to obtain financing in the future and increase the cost of such financing.

Any of the foregoing could adversely impact our operating results, financial condition, and liquidity. Our ability to continue our operations depends on our ability to generate profitable operations or complete equity or debt financings to increase our capital.

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, 2014, we had 11,468,843 shares of Common Stock outstanding.

In addition, as of December 31, 2014, we had outstanding options to purchase 239,023 shares of Common Stock at exercise prices from \$2.79 to \$14.75 per share and two outstanding warrants to purchase up to an aggregate 70,000 shares of Common Stock at exercise price of \$2.23 per share. Further, our preferred share rights plan, if 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 under the preferred share rights plan 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 of our Common Stock could adversely affect the price of our Common Stock, our ability to raise funds in new stock offerings and could dilute the percentage ownership of our common stockholders.

Future sales of substantial amounts of our Common Stock or equity-related securities in the public market, or the perception that such sales or conversions could occur, could adversely affect prevailing trading prices of our Common Stock and could dilute the value of Common Stock held by our existing stockholders. No prediction can be made as to the effect, if any, that future sales of shares of Common Stock or the availability of shares of Common Stock for future sale will have on the trading price of our Common Stock. Such future sales or conversions could also significantly reduce the percentage ownership of our 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 antitakeover 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 18,214,492 (which includes shares issuable under outstanding options to purchase 239,023 shares of our Common Stock and two warrants to purchase 70,000 shares of our Common Stock) shares of Common Stock and 2,000,000 shares of Preferred Stock as of December 31, 2013 (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.

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 initial purchase price of each Right was \$13, subject to adjustment and adjustment for the reverse stock split.

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 1B. UNRESOLVED STAFF COMMENTS

Not Applicable.

ITEM 2. PROPERTIES

Our principal executive office is in Atlanta, Georgia. Our Business Center is located in Knoxville, Tennessee. Our Treatment Segment facilities are located in Gainesville, Florida; Kingston, Tennessee; Oak Ridge, Tennessee, and Richland, Washington. Our Services Segment operates subsidiaries located in Knoxville, Tennessee and Blaydon On Tyne, England, of which we lease all of the properties. We have a facility located in Valdosta, Georgia, which is included within our discontinued operations. On August 14, 2013, our Valdosta, Georgia facility incurred fire damage which has left it non-operational at this time. The Company is currently evaluating options regarding the future operation of this facility. We continue to market this facility for sale. We also maintain properties in Brownstown, Michigan and Memphis, Tennessee, which are all non-operational and are included within our discontinued operations.

Three of our facilities are subject to mortgages as granted to our senior lender (Kingston, Tennessee; Gainesville, Florida; and Richland, Washington).

The Company currently leases properties in the following locations:

Location	Square Footage	Expiration of Lease
Knoxville, TN (Safety and Ecology Corporation or "SEC")	20,850	May 31, 2018
Knoxville, TN (SEC)	5,000	September 30, 2017
Blaydon On Tyne, England (Perma-Fix UK Limited)	1,000	Monthly
Pittsburgh, PA (SEC)	640	Monthly
Newport, KY (SEC)	1,566	Monthly
Oak Ridge, TN (M&EC)	150,000	January 31, 2018
Atlanta, GA (Corporate)	6,499	February 28, 2018

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 3. LEGAL PROCEEDINGS

Perma-Fix of Northwest Richland, Inc. ("PFNWR")

PFNWR filed suit (PFNWR vs. Philotechnics, Ltd.) in the U.S. District Court, Eastern District of Tennessee, asserting contract breach and seeking specific performance of the "return-of-waste clause" in the brokerage contract between a prior facility owner (now owned by PFNWR) and Philotechnics, Ltd. ("Philo"), as to certain non-conforming waste Philo delivered for treatment from Philo's customer, El du Pont de Nemours and Company ("DuPont"), to the PFNWR facility, before PFNWR acquired the facility. Our complaint seeked an order that Philo: (A) specifically perform its obligations under the contract's "return-of-waste" clause by physically taking custody of and by removing the nonconforming waste, (B) pay PFNWR all additional costs of maintaining and managing the waste, and (C) pay PFNWR the cost to treat and dispose of the nonconforming waste so as to allow PFNWR to compliantly dispose of that waste offsite. PFNWR has processed, packaged, transported from the facility, and disposed of the non-conforming waste. The case was mediated on October 7, 2014 and all parties agreed to dismiss any remaining claims with no further action pending. The case was officially resolved on October 14, 2014.

ITEM 4. MINE SAFETY DISCLOSURE

Not Applicable.

PART II

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

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.

		 20	14		2013				
		Low High			Low	High			
Common Stock	1st Quarter	\$ 2.81	\$	5.15	\$	3.14	\$	5.25	
	2 nd Quarter	3.74		5.86		1.80		4.30	
	3 rd Quarter	3.56		5.19		1.96		4.00	
	4th Quarter	3.65		5.01		2.85		4.28	

As of March 2, 2015, there were approximately 228 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 2, 2015, was approximately 2,911.

Since our inception, we have not paid any cash dividends on our Common Stock and have no dividend policy. Our Amended Loan Agreement prohibits us from 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 occurred during 2014. 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 2014.

We have adopted a preferred share rights plan, which is designed to protect us against certain creeping acquisitions, open market purchases, and certain mergers and other combinations with acquiring companies. See Item 1A. - Risk Factors – "Our Preferred Share Rights Plan may adversely affect our stockholders" as to further discussion relating to the terms of our preferred share rights plan.

Reverse Stock Split and Reduction in Authorized Shares

During September, 2013, our stockholders approved a reverse stock split within the range of 1-for-2 to 1-for-7 of our outstanding common stock and shares subject to outstanding options at any time prior to November 8, 2013, and authorized our Board of Directors, without further action of the stockholders, to amend our Restated Certificate of Incorporation to effect the reverse stock split, with the exact ratio and effective date to be determined by the Board. The Board approved the ratio of 1-for-5 for the reverse stock split, with the reverse stock split effective at 12:01 a.m. on October 15, 2013.

On September 18, 2014 at the Company's 2014 Annual Meeting of Stockholders, the Company's stockholders approved an amendment to the Company's Restated Certificate of Incorporation to reduce the number of shares of Common Stock the Company is authorized to issue from 75,000,000 to 30,000,000. This amendment became effective on September 19, 2014.

ITEM 6. SELECTED FINANCIAL DATA

Not required under Regulation S-K for smaller reporting companies.

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

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

Management's discussion and analysis is based, among other things, upon our audited consolidated financial statements and includes 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.

Revision of Prior Period Financial Statements

During the Company's preparation of the 2014 income tax provision, the Company determined that certain deferred tax liabilities related to acquired indefinite-lived permits from the Company's acquisition of our DSSI subsidiary in 2000 and our M&EC subsidiary in 2001 were not recorded. Upon adoption of Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets" by the Company in 2002 (now ASC 350, "Intangibles-Goodwill and Others"), the acquired permits were determined to be indefinite-lived intangible assets. As a result, deferred tax liabilities should have been established for these indefinite-lived intangible assets on January 1, 2002, with the offset being expense. Further, as these deferred tax liabilities relate to indefinite lived intangible assets, they cannot be utilized for purposes of offsetting deferred tax assets in evaluating the need for a deferred tax asset valuation allowance.

In order to correct these errors, we recorded an adjustment to increase the 2013 opening balance of accumulated deficit in our Consolidated Statements of Stockholders' Equity by \$3,455,000. Due to rules requiring an allocation of valuation allowance to deferred tax assets, the correction of this error also resulted in an increase to deferred tax liabilities (long-term) of \$3,915,000 and an increase to deferred tax assets (current) of \$460,000 for a net deferred tax liability of \$3,455,000 as of December 31, 2013.

The Company considered the guidance in ASC 250, "Accounting Changes and Error Corrections; Staff Accounting Bulletin Topic 1:M, Materiality; and Topic 1:N, Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements," and concluded that the error was not material to previously issued financial statements. The resulting revision had no impact on the Company's previously reported cash, Consolidated Statement of Operations, Consolidated Statement of Comprehensive Loss, and Consolidated Statements of Cash Flows as of and for the year ended December 31, 2013.

For a detailed description and impact of the revision to the Consolidated Financial Statements, see "Note 3 – Revision of Prior Period Financial Statements" in "Notes to Consolidated Financial Statements" of Part II, Item 8 – "Financial Statements and Supplementary Data."

Review

Revenue decreased \$17,348,000 or 23.3% to \$57,065,000 for the twelve months ended December 31, 2014 from \$74,413,000 for the corresponding period of 2013. We saw a revenue decrease of approximately \$24,151,000 or 62.1% within our Services Segment primarily resulting from the completion of certain large contracts with the U.S. Department of Energy ("DOE") (under the nuclear services area) and the completion of the CH Plateau Remediation Company ("CHPRC") subcontract (under the nuclear services area) effective September 30, 2013. The CHPRC subcontract was awarded to our East Tennessee Materials & Energy Corporation ("M&EC") subsidiary in 2008 in connection with CH2M Hill Plateau Remediation Company's prime contract with the DOE, relating to waste management and facility operations at the DOE's Hanford, Washington site. Revenue generated under this subcontract was approximately \$17,653,000 in 2013. Revenue from our Treatment Segment was higher by \$6,803,000 or 19.1% primarily due to a higher priced waste mix. Gross profit increased \$2,092,000 or 21.3%, primarily due to higher revenue generated from our Treatment Segment and the reduction in certain of our fixed costs as we continue to streamline costs. Selling, General, and Administrative ("SG&A") expenses decreased \$2,403,000 or 16.7% for the twelve months ended December 31, 2014 as compared to the corresponding period of 2013.

We had working capital of \$757,000 at December 31, 2014, as compared to working capital deficit of \$2,498,000 at December 31, 2013, an increase of \$3,255,000.

Business Environment, Outlook and Liquidity

The Company achieved substantial improvements in financial position and liquidity in the twelve months ended December 31, 2014, as compared to the corresponding period of 2013. As of December 31, 2014, we had cash on hand of approximately \$3,680,000 and no revolver balance. Our working capital for 2014 was positively impacted by the insurance settlement proceeds that we received from our insurance carriers due to a fire at our discontinued operation, Perma-Fix of South Georgia, Inc. subsidiary ("PFSG"), proceeds received from the sale of our Schreiber, Yonley, and Associates subsidiary ("SYA"), and the receipt of certain proceeds from our Polish subsidiary, Perma-Fix Medical S.A., that it received due to sale of certain equity (see – "Discontinued Operations", "Divestiture of SYA" and "Liquidity and Capital Resources – Financing Activities" for further information of these proceeds). The first six months of 2014 began slow but improved dramatically in the second half of 2014, which was reflected in the net income that we generated from continuing operations during the second half of the year of approximately \$3,083,000. We generated positive cash flow from continuing operations during the twelve months ended December 31, 2014 of approximately \$661,000. As of December 31, 2014, our backlog was \$9,228,000, an increase of \$1,533,000, from the December 31, 2013 balance of \$7,695,000.

The Company's cash flow requirements during 2014 were financed by cash on hand, operations, credit facility, and the proceeds received as discussed above. The Company is continually reviewing operating costs and is committed to further reducing operating costs to bring them in line with revenue levels, when needed.

The Company continues to focus on expansion into both commercial and international markets to increase revenues to offset the uncertainties of government spending in the USA. This includes new services, new customers and increased market share in our current markets. Although no assurances can be given, we believe we will be able to successfully implement this plan and generate positive cash flow in 2015.

Results of Operations

The reporting of financial results and pertinent discussions are tailored to our two reportable segments: The Treatment Segment ("Treatment") and the Services Segment ("Services"):

Below are the results of continuing operations for our years ended December 31, 2014 and 2013 (amounts in thousands):

(Consolidated)	 2014	%	2013	%	
Net revenues	\$ 57,065	100.0	\$ 74,413	100.0	
Cost of goods sold	 45,157	79.1	64,597	86.8	
Gross Profit	11,908	20.9	9,816	13.2	
Selling, general and administrative	11,973	21.0	14,376	19.3	
Research and development	1,315	2.2	1,764	2.4	
Impairment of goodwill	380	.7	27,856	37.4	
(Gain) loss on disposal of property and equipment	 (41)		49		
Loss from operations	(1,719)	(3.0)	(34,229)	(45.9)	
Interest income	27	<u> </u>	35	_	
Interest expense	(616)	(1.1)	(762)	(1.0)	
Interest expense – financing fees	(192)	(.3)	(132)	(.2)	
Foreign exchange loss	(24)	_	_	_	
Other	 (51)	(.1)	(8)		
Loss from continuing operations before taxes	(2,575)	(4.5)	(35,096)	(47.1)	
Income tax expense (benefit)	 417	.7	(62 <u>5</u>)	(.8)	
Loss from continuing operations	\$ (2,992)	(5.2)	\$ (34,471)	(46.3)	

Summary - Years Ended December 31, 2014 and 2013

Net Revenue

Consolidated revenues from continuing operations decreased \$17,348,000 for the year ended December 31, 2014, compared to the year ended December 31, 2013, as follows:

(In thousands)		2014	% Revenue	2013		% Revenue	Change		% Change
<u>Treatment</u>									
Government waste	\$	29,787	52.2	\$	20,188	27.1	\$	9,599	47.5
Hazardous/non-hazardous		4,498	7.9		4,439	6.0		59	1.3
Other nuclear waste	_	8,058	14.1		10,913	14.7		(2,855)	(26.2)
Total		42,343	74.2		35,540	47.8		6,803	19.1
<u>Services</u>									
Nuclear		9,917	17.4		32,067	43.1		(22,150)	(69.1)
Technical		4,805	8.4		6,806	9.1		(2,001)	(29.4)
Total		14,722	25.8		38,873	52.2		(24,151)	(62.1)
Total	\$	57,065	100.0	\$	74,413	100.0	\$	(17,348)	(23.3)

Net Revenue

Treatment Segment revenue increased \$6,803,000 or 19.1% for the twelve months ended December 31, 2014 over the same period in 2013. The increase in revenue within the Treatment Segment was attributed primarily to a higher priced waste mix, with significant increase in revenue from government clients of approximately \$9,599,000 or 47.5%. Other nuclear waste revenue decreased \$2,855,000 or 26.2% primarily due to lower waste volume. Services Segment revenue decreased \$24,151,000 or 62.1% for the twelve months ended December 31, 2014 from the corresponding period of 2013 primarily as a result of the completion of certain large contracts with the DOE (which accounted for approximately \$3,700,000 of the decrease) and the completion of the CHPRC subcontract effective September 30, 2013 within the nuclear services area, and the completion of various other contracts within the Segment. We were not able to replace these completed contracts in a timely manner with new contracts. The CHPRC subcontract generated revenue of approximately \$17,653,000 in 2013.

Cost of Goods Sold

Cost of goods sold decreased \$19,440,000 for the year ended December 31, 2014, as compared to the year ended December 31, 2013, as follows:

(In thousands)	2014	% Revenue	 2013	% Revenue		Change
Treatment	\$ 31,863	75.2	\$ 29,966	84.3	\$	1,897
Services	 13,294	90.3	 34,631	89.1	_	(21,337)
Total	\$ 45,157	79.1	\$ 64,597	86.8	\$	(19,440)

Cost of goods sold for the Treatment Segment increased by \$1,897,000 or 6.3% primarily due to higher revenue. We incurred higher material and supplies, lab, transportation and disposal costs, totaling approximately \$2,700,000. Depreciation expense was also higher this year by approximately \$370,000. This higher cost was partially offset by lower salaries and payroll related expenses from lower headcount of approximately \$380,000 (as we continue to manage headcount to streamline costs), lower regulatory costs by \$701,000 and lower outside services costs of approximately \$120,000. In the prior year, Treatment Segment cost of goods sold included a reduction of approximately \$1,007,000 in depreciation expense and an increase of approximately \$559,000 in closure expense (included in regulatory costs) due to adjustments recorded to our asset retirement obligations for our M&EC, DSSI, PFF, and PFNWR facilities. The adjustments were made principally to record the asset retirement obligation using appropriate discount rates. The closure obligations were previously based on undiscounted values. The associated assets were also adjusted to reflect this change. Services Segment cost of goods sold decreased \$21,337,000 or 61.6% primarily due to reduced revenue as discussed above. We incurred lower costs throughout most categories within cost of goods sold. Salaries and payroll related expenses were lower by approximately \$16,000,000 due to lower headcount resulting from the completion of the CHPRC subcontract effective September 30, 2013 and a reduction in workforce which occurred in early May 2014. The remaining reduction in costs of goods sold was primarily due to lower outside services costs, lower travel expenses, and lower general expenses in various categories resulting from fewer projects and the completion of the CHPRC subcontract. Included within cost of goods sold is depreciation and amortization expense of \$3,826,000 and \$3,486,000 for the twelve months ended December 31, 2014, and 2013, respectively.

Gross Profit

Gross profit for the year ended December 31, 2014, was \$2,092,000 higher than 2013, as follows:

(In thousands)			% Revenue	2013		% Revenue		Change	
Treatment	\$	10,480	24.8	\$	5,574	15.7	\$	4,906	
Services		1,428	9.7		4,242	10.9		(2,814)	
Total	\$	11,908	20.9	\$	9,816	13.2	\$	2,092	

The Treatment Segment gross profit increased \$4,906,000 or 88.0% due to increased revenue from higher priced waste mix and gross margin increased to 24.8% from 15.7% primarily due to revenue mix and the reduction in certain of our fixed costs as discussed above. In the Services Segment, gross profit decreased \$2,814,000 or 66.3% due to reduced revenue as discussed in the revenue section above. The decrease in gross margin from 10.9% to 9.7% was impacted by the completion of the CHPRC subcontract which was a higher margin subcontract; however, this decrease was partially offset by the reduction in headcount from a reduction in workforce which occurred in May 2014.

Selling, General and Administrative ("SG&A")

SG&A expenses decreased \$2,403,000 for the year ended December 31, 2014, as compared to the corresponding period for 2013, as follows:

(In thousands)	2014	% Revenue	 2013	2013 % Revenue		Change	
Administrative	\$ 5,017	_	\$ 5,215	_	\$	(198)	
Treatment	3,849	9.1	4,253	12.0		(404)	
Services	3,107	21.1	4,908	12.6		(1,801)	
Total	\$ 11,973	21.0	\$ 14,376	19.3	\$	(2,403)	

The primary reduction in SG&A was within the Services Segment. Services SG&A was lower in almost all categories, with the primary reduction in salaries and payroll related expenses of approximately \$1,700,000 resulting from a reduction in workforce which occurred in May 2014. The remaining reduction of approximately \$640,000 was in lower outside services expenses resulting from lower consulting, legal, and sub-contract expense and lower general expenses in various categories as we continue to streamline our costs. The lower cost was partially offset by higher bad debt expense of approximately \$600,000. During the third quarter of 2013, we reversed approximately \$380,000 in bad debt expense resulting from the collection of accounts receivable previously reserved in our allowance for doubtful account for a certain fixed price contract. During the fourth quarter of 2014, we reserved approximately \$260,000 for an uncertain account receivable. The decrease in administrative SG&A was primarily the result of lower outside services expenses resulting from fewer business/legal matters, lower travel expenses, and lower salaries and payroll related expenses from lower headcount totaling approximately \$320,000. The lower cost was partially offset by higher public company expenses of approximately \$120,000 resulting from two additional outside directors elected in September 2013 and October 2013. Treatment SG&A was lower primarily due to lower salaries and payroll related expenses from lower headcount. Included in SG&A expenses is depreciation and amortization expense of \$324,000 and \$425,000 for the twelve months ended December 31, 2014 and 2013, respectively.

Research and Development ("R&D")

R&D costs decreased \$449,000 for the year ended December 31, 2014, as compared to the corresponding period of 2013. Research and development costs consist primarily of employee salaries and benefits, laboratory costs, third party fees, and other related costs associated with the development of new technologies to increase company offerings and technological enhancement of new potential waste treatment processes. The decrease for the twelve months ended December 31, 2014 as compared to the corresponding period of 2013 was primarily due to lower costs incurred for the R&D for our treatment processes. Our R&D costs included approximately \$759,000 and \$585,000 for the twelve months ended December 31, 2014 and the corresponding period of 2013, respectively for the R&D of the medical isotope (Technetium-99 or "Tc-99m") technology (see "Financial Activities" in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" for further information of PF Medical S.A. whose primary purpose is the R&D of technology for the Medical Isotope project). Included in research and development expense is depreciation expense of \$90,000 and \$215,000 for the twelve months ended December 31, 2014 and 2013, respectively.

Goodwill Impairment

In 2014, the Company recorded an impairment charge of \$380,000 in connection with the sale of our SYA subsidiary on July 29, 2014, in accordance with Accounting Standards Codification ("ASC") Topic 350 "Intangible – Goodwill and Other". In 2013, we recorded a total goodwill impairment charge of \$27,856,000, which represented the total goodwill for each of the Treatment, Safety and Ecology Corporation ("SEC"), and CH Plateau Remediation Company ("CHPRC") reporting units of \$13,691,000, \$13,016,000 and \$1,149,000, respectively, in accordance with ASC 350. The impairment charges recorded were non-cash in nature and did not affect our liquidity or cash flows from operating activities. Additionally, the goodwill impairment had no effect on our borrowing availability or covenants under our credit facility agreement.

Interest Expense

Interest expense decreased \$146,000 for the twelve months ended December 31, 2014, as compared to the corresponding periods of 2013. The decrease in interest expense was primarily due to lower interest from our reducing Term Loan balance and lower average Revolving Credit line balance. In addition, we recorded approximately \$37,000 in loss on debt modification (in accordance with ASC 470-50, "Debt – Modification and Extinguishment") during the second quarter of 2014 resulting from an amendment that we entered into with our lender which reduced our Revolving Credit line from \$18,000,000 to \$12,000,000 as compared to a \$65,000 loss on debt modification recorded during the third quarter of 2013 which reduced our Revolving Credit line from \$25,000,000 to \$18,000,000.

Interest Expense- Financing Fees

Interest expense-financing fees increased approximately \$60,000 for the twelve months ended December 31, 2014, as compared to the corresponding period of 2013. The increase was primarily due to debt discount amortized as financing fees in connection with the issuance of our Common Stock and two purchase Warrants as consideration for the Company receiving a \$3,000,000 loan from Messrs. Ferguson and Lampson on August 2, 2013 (See "Liquidity and Capital Resources – Financing Activities" for further information of this debt discount).

Income Taxes

We recorded an income tax expense of \$417,000 and income tax benefit of \$625,000 for continuing operations for the years ended December 31, 2014 and 2013, respectively. The Company's effective tax rates were approximately 16.5% and 8.7% for the twelve months ended December 31, 2014 and 2013, respectively. The differences in effective tax rate for the twelve months ended December 31, 2014 as compared to the twelve months ended December 31, 2013 was primarily due to the increase in tax expense associated with the recording of deferred tax liabilities on indefinite lived intangible assets and increases in the impact of permanent differences to the effective tax rate for 2014 as compared to 2013 due to a significant reduction in pre-tax losses from 2013 to 2014.

Divestiture of SYA

On April 3, 2014, our Board of Directors approved management to pursue the sale of our wholly owned subsidiary, SYA. The sale was completed on July 29, 2014. SYA was a professional engineering and environmental consulting services company and was included in the Company's Services Segment. We elected to early adopt Accounting Standards Update ("ASU") No. 2014-08, "Presentation of Financial Statements (Topic 205) and Property, Plant, and Equipment (Topic 360): Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity" during the second quarter of 2014. In accordance with ASU 2014-08, the divestiture of SYA has been reported in continuing operations for all periods presented. The sale of SYA did not represent a strategic shift that had or will have a major effect on our operations and financial results as defined by ASU 2014-08.

The purchaser of SYA paid approximately \$1,300,000 for 100% of the capital stock and \$60,000 as an adjustment to the purchase price for excess working capital with \$50,000 of such consideration placed in escrow for a period of one year to cover any claims by the purchaser for indemnification for certain limited types of losses incurred by the purchaser following the closing. The proceeds received were used to pay down our revolver and used for working capital. As of December 31, 2014, expenses related to the sale of SYA totaled approximately \$96,000. We recorded a loss of approximately \$53,000 (net of taxes of \$0) on the sale of SYA, which included an additional final excess working capital of approximately \$42,000. The loss recorded was included in "other" expense on our Consolidated Statements of Operations. In 2013, SYA had net revenues of \$2,564,736 and a net loss of \$621,288.

Discontinued Operations

The Company's discontinued operations consist of all our subsidiaries included in our Industrial Segment: (1) subsidiaries divested in 2011 and prior, (2) two previously closed locations, and (3) our Perma-Fix of South Georgia, Inc. ("PFSG") facility.

On August 14, 2013, our PFSG facility incurred fire damage which left it non-operational. Certain equipment and portions of the building structures were damaged, which resulted in the Company recognizing an impairment charge of fixed assets for approximately \$130,000. The Company carries general liability, pollution, property and business interruption, and workers compensation insurance with a maximum deductible of approximately \$300,000. Total incurred costs through December 31, 2013 relating to the fire, inclusive of the impairment charge, was \$6,859,000. For the year ended December 31, 2013, the Company had received \$3,664,000 of insurance proceeds and recorded an insurance recovery receivable of \$2,995,000 as we had determined that receipt of reimbursement of these expenses from our insurer was probable in accordance with its insurance policies.

On June 20, 2014, the Company entered into a settlement agreement and release with one of its insurance carriers, resulting in receipt of approximately \$3,850,000 in insurance settlement proceeds, which was used to pay down the Company's Revolving Credit facility. On November 10, 2014, the Company received approximately \$391,000 from another insurance carrier. Additionally, \$1,500,000 of insurance proceeds were paid directly to the vendors working on the clean-up of the facility.

The table below shows the total costs incurred and insurance proceeds received through December 31, 2014 relating to the fire:

	P	Property & Interruption			
	E	quipment	a	nd Other	Total
Costs incurred through December 31, 2014	\$	4,507,000	\$	4,096,000	\$ 8,603,000
Insurance proceeds through December 31, 2014 (1)		7,477,000		4,968,000	12,445,000
Gain on insurance recoveries	\$	2,970,000	\$	872,000	\$ 3,842,000

(1) Inclusive of \$1,500,000 paid directly to vendors

In 2014, the Company elected not to rebuild the PFSG facility, which resulted in a triggering event under ASC 360. Based on our long-lived asset impairment test, the Company concluded that tangible asset impairments existed for PFSG and therefore recorded approximately \$723,000 of asset impairment charges for the twelve months ended December 31, 2014, which is included in "Income (loss) from discontinued operations, net of taxes" in the Consolidated Statements of Operations. No remaining intangible assets exist at PFSG at December 31, 2014. The Company continues to market our PFSG facility for sale.

Our discontinued operations had net revenue of \$0 for the twelve months ended December 31, 2014, as compared to \$1,789,000 for the corresponding period of 2013. We had net income of \$1,688,000 and net loss of \$1,568,000 for our discontinued operations for the twelve months ended December 31, 2014 and 2013, respectively. Our net income for our discontinued operations for the twelve months ended December 31, 2014, included a gain on insurance settlement of approximately \$3,842,000 in connection with the fire sustained at our PFSG subisidary and an asset impairment charge of approximately \$723,000 as discussed above. Our net loss for our discontinued operations for 2013 included a charge to income tax expense of approximately \$1,164,000 to provide a full valuation allowance on our net deferred tax assets.

Liquidity and Capital Resources

The Company achieved substantial improvements in financial position and liquidity in the twelve months ended December 31, 2014 as compared to the corresponding period of 2013. As of December 31, 2014, we had cash on hand of approximately \$3,680,000, no revolver balance, and working capital of approximately \$757,000 as compared to working capital deficit of \$2,498,000 as of December 31, 2013. Our working capital for 2014 was positively impacted by the insurance settlement proceeds that we received from our insurance carriers for our PFSG subsidiary, proceeds received from the sale of our SYA subsidiary, and the receipt of certain proceeds from our Polish subsidiary, Perma-Fix Medical S.A., that it received due to sale of certain equity (see – "Discontinued Operations", "Divestiture of SYA" and "Liquidity and Capital Resources – Financing Activities" for further information of these proceeds). The first six months of 2014 began slow but improved dramatically in the second half of 2014, which was reflected in the net income that we generated from continuing operations during the second half of the year of approximately \$3,083,000. We generated positive cash flow from continuing operations during the twelve months ended December 31, 2014 of approximately \$661,000. As of December 31, 2014, our backlog was \$9,228,000, an increase of \$1,533,000, from the December 31, 2013 balance of \$7,695,000.

The Company's cash flow requirements during 2014 were financed by cash on hand, operations, credit facility and the proceeds received as discussed above. The Company is continually reviewing operating costs and is committed to further reducing operating costs to bring them in line with revenue levels, when needed.

The following table reflects the cash flow activities during the twelve months ended December 31, 2014 and the corresponding period of 2013:

(In thousands)	2014		2013	
Cash provided by (used in) operating activities of continuing operations	\$	661	\$	(1,696)
Cash used in operating activities of discontinued operations		(2,093)		(1,020)
Cash provided by (used in) investing activities of continuing operations		856		(1,487)
Proceeds from property insurance claims of discontinued operations		5,727		
Cash (used in) provided by financing activities of continuing operations		(1,769)		204
Principal repayment of long-term debt for discontinued operations		(35)		(36)
Increase (decrease) in cash	\$	3,347	\$	(4,035)

As of December 31, 2014, we were in a positive cash position primarily as a result of the proceeds as discussed above. We move all excess cash into a Money Market Sweep account in accordance with our Amended Loan Agreement (with the exception of proceeds from Perma-Fix Medical S.A. which is not a credit party under our Amended Loan Agreement). When we are in a net borrowing position, we 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 a remittance lock box 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, 2014, primarily represents cash received as discussed above.

Operating Activities

Accounts Receivable, net of allowances for doubtful accounts, totaled \$8,272,000 at December 31, 2014, an increase of \$31,000 from the December 31, 2013 balance of \$8,241,000. The increase was primarily due to higher billing primarily within our Treatment Segment partially offset by increased cash receipts.

Accounts Payable, totaled \$5,350,000 at December 31, 2014, a decrease of \$112,000 from the December 31, 2013 balance of \$5,462,000. We utilized our accounts receivable cash receipts, proceeds from the divestiture of SYA and insurance settlement to pay down our accounts payables. We continue to manage payment terms with our vendors to maximize our cash position throughout all segments.

As of December 31, 2014, unbilled receivables totaled \$7,450,000, an increase of \$2,231,000 from the December 31, 2013 balance of \$5,219,000. Treatment unbilled receivables increased \$1,758,000 from \$4,198,000 as of December 31, 2013 to \$5,956,000 as of December 31, 2014. Services Segment unbilled receivables increased \$473,000 from a balance of \$1,021,000 as of December 31, 2013 to \$1,494,000 as of December 31, 2014. The increase was primarily due to higher waste shipments received in the latter half of 2014.

Disposal/transportation accrual as of December 31, 2014, totaled \$1,737,000, an increase of \$352,000 over the December 31, 2013 balance of \$1,385,000. Our disposal accrual can vary based on revenue mix and the timing of waste shipments for final disposal. As the majority of the disposal accrual is impacted by on-site waste inventory, during 2014, we shipped less waste for disposal (due to pending approval from the disposal site) which is reflected in a higher inventory on-site as compared to year end 2013.

We had working capital of \$757,000 (which included working capital of our discontinued operations) as of December 31, 2014, as compared to working capital deficit of \$2,498,000 as of December 31, 2013. Our working capital was primarily impacted by insurance proceeds received from our insurance company for our PFSG facility and proceeds received from the sale of our SYA subsidiary, which were used to pay down our revolving credit facility (which is classified as long term debt). In addition, the increase in our unbilled receivables and the cash from equity financing at PF Medical S.A. positively impacted our working capital (see "Financing Activities below for further information of PF Medical S.A.).

Investing Activities

During 2014, our purchases of capital equipment totaled approximately \$464,000. These expenditures were primarily for improvements in our Treatment Segment. These capital expenditures were funded by cash from operations. We have budgeted approximately \$1,100,000 for 2015 capital expenditures for our Segments to maintain operations and regulatory compliance requirements. Certain of these budgeted projects may either be delayed until later years or deferred altogether. We have traditionally incurred actual capital spending totals for a given year at less than the initial budgeted amount. We plan to fund our capital expenditures from cash from operations and/or financing. The initiation and timing of projects are also determined by financing alternatives or funds available for such capital projects.

Financing Activities

The Company entered into an Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated October 31, 2011, ("Agreement"), with PNC Bank, National Association ("PNC"), acting as agent and lender. The Agreement, as amended ("Amended Loan Agreement"), provides us with the following credit facilities: (a) up to \$12,000,000 revolving credit facility (which was reduced from \$18,000,000 pursuant to an amendment dated April 14, 2014.) ("Revolving Credit"), subject to the amount of borrowings based on a percentage of eligible receivables (as defined) and (b) a term loan ("Term Loan") of \$16,000,000, which requires monthly installments of approximately \$190,000 (based on a seven-year amortization). As a result of the reduction in the maximum borrowing Revolving Credit noted above, the Company recorded approximately \$37,000 in loss on debt modification (included in interest expense) during the second quarter of 2014 in accordance with ASC 470-50, "Debt – Modification and Extinguishment."

On July 25, 2014, the Company entered into Amendment 5 to the Amended Loan Agreement with PNC. This Amendment added our Perma-Fix of Canada, Inc. subsidiary as a guarantor under our credit facility. On July 28, 2014, the Company entered into Amendment 6 to the Amended Loan Agreement. This Amendment authorized the Company to sell our SYA subsidiary, released a hold by PNC which allows the Company to use the \$3,850,000 insurance settlement proceeds received on June 30, 2014 by our PFSG subsidiary for working capital purposes but placed an indefinite reduction on our borrowing availability by \$1,500,000. As a condition of Amendment 6, we agreed to pay PNC a fee of \$15,000, which is being amortized over the term of the Amended Loan Agreement. All other terms of the Amended Loan Agreement remain principally unchanged.

Our credit facility with PNC contains certain financial covenants, along with customary representations and warranties. A breach of any of these financial covenants, unless waived by PNC, could result in a default under our credit facility allowing our lender to immediately require the repayment of all outstanding debt under our credit facility and terminate all commitments to extend further credit. The following table illustrates the most significant financial covenants under our credit facility and reflects the quarterly compliance required by the terms of our senior credit facility as of December 31, 2014. Pursuant to the amendment dated April 14, 2014 as noted above, the fixed charge coverage ratio testing requirement for the first quarter of 2014 was waived by PNC. This amendment also revised the methodology in calculating our quarterly fixed charge coverage ratio for the second to fourth quarters of 2014 and changed the minimum quarterly fixed charge coverage ratio requirement of 1:25 to 1:00 to 1:15 to 1:00 for 2014:

	Quarterly	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
(Dollars in thousands)	Requirement	Actual	Actual	Actual	Actual
Senior Credit Facility					
Fixed charge coverage ratio	1.15:1	Not Required	3.74:1	3.89:1	3.34:1
Minimum tangible adjusted net worth	\$ 30,000	\$ 43,033	\$ 43,499	\$ 47,653	\$ 45,050

We met our quarterly fixed charge coverage ratio requirement in each of the second to fourth quarters of 2014 and we expect to meet the quarterly fixed charge ratio in 2015; however, if we fail to meet the minimum quarterly fixed charge coverage ratio requirement in any of the quarters in 2015 and PNC does not waive the non-compliance or further 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 borrowings, we may not have sufficient liquidity to repay our debt under our credit facility and other indebtedness. We have also met the minimum tangible adjusted net worth requirement in each of the quarters in 2014.

The Amended Loan Agreement terminates as of October 31, 2016, unless sooner terminated. We may terminate the Amended Loan Agreement upon 90 days' prior written notice and upon payment in full of our obligations under the Amended Loan Agreement. No early termination fee shall apply if we pay off our obligations under the Amended Loan Agreement after October 31, 2013.

As of December 31, 2014, the availability under our revolving credit was \$7,402,000, based on our eligible receivables and includes the indefinite reduction of borrowing availability of \$1,500,000 as discussed above.

On February 12, 2013, the Company entered into an unsecured promissory note ("the new note") with Timios National Corporation ("TNC" and formerly known as Homeland Capital Security Corporation) in the principal amount of approximately \$230,000 as a result of a settlement with TNC in connection with certain claims that we asserted against TNC for breach of certain representations and covenant subsequent to our acquisition of Safety and Ecology Corporation and its subsidiaries ("SEC") from TNC on October 31, 2011. The new note was entered into as a result of the settlement in which a previously issued promissory note (with principal balance of \$1,460,000 at February 12, 2013) that the Company entered into with TNC as partial consideration of the purchase price of SEC was cancelled and terminated and replaced with the new note. The outstanding principal balance of the new note as of December 31, 2014 was approximately \$10,000. The new note bears an annual interest rate of 6%, payable in 24 monthly installments of principal and interest of approximately \$10,000, with the first payment due February 28, 2013, as agreed by us and TNC after entering into the new note, with subsequent payments due on the last day of each month thereafter. The new note provides us the right to prepay such at any time without interest or penalty.

On August 2, 2013, the Company completed a lending transaction with Messrs. Robert Ferguson and William Lampson ("collectively, the "Lenders"), whereby the Company borrowed from the Lenders the sum of \$3,000,000 pursuant to the terms of a Loan and Security Purchase Agreement and promissory note (the "Loan"). The Lenders are stockholders of the Company, having received shares of our Common Stock in connection with the acquisition of Perma-Fix Northwest Richland, Inc. subsidiary ("PFNWR") in June 2007. The proceeds from the Loan were used for general working capital purposes. The promissory note is unsecured, with a term of three years with interest payable at a fixed interest rate of 2.99% per annum. The promissory note provides for monthly payments of accrued interest only during the first year of the Loan with the first interest payment due September 1, 2013 and monthly payments of \$125,000 in principal plus accrued interest for the second and third year of the Loan. In connection with the above Loan, the Lenders entered into a Subordination Agreement dated August 2, 2013, with the Company's credit facility lender, whereby the Lenders agreed to subordinate payment under the Loan, and agreed that the Loan will be junior in right of payment to the credit facility in the event of default or bankruptcy or other insolvency proceeding by the Company. As consideration for the Company receiving the Loan, we issued a Warrant to each Lender to purchase up to 35,000 shares of the Company's Common Stock at an exercise price based on the closing price of the Company's Common Stock at the closing of the transaction which was determined to be \$2.23 per share. The Warrants are exercisable six months from August 2, 2013 and expire on August 2, 2016. We estimated the fair value of the Warrants to be approximately \$59,000 using the Black-Scholes option pricing model. As further consideration for the Loan, the Company issued an aggregate 90,000 shares of the Company's Common Stock, with each Lender receiving 45,000 shares. The 90,000 shares of Common Stock and 70,000 Common Stock purchase warrants were issued in a private placement and bear a restrictive legend against resale except in a transaction registered under the Securities Act or in a transaction exempt from registration thereunder. We determined the fair value of the 90,000 shares of Common Stock to be approximately \$200,000 which was based on the closing price of the stock of \$2.23 per share on August 2, 2013. The fair value of the Warrants and Common Stock and the related closing fees incurred from the transaction were recorded as a debt discount, which is being amortized over the term of the loan as interest expense – financing fees. Mr. Robert Ferguson serves as an advisor to our Board of Directors (see "Related Party Transactions - Robert L. Ferguson" in this section for further information on Mr. Ferguson).

During August, 2014, the Company's Polish subsidiary, PF Medical S.A. (which we own approximately 64%) executed stock subscription agreements totaling approximately \$2,357,000 for 250,000 shares of its Series E Common Stock to non-U.S. persons in an offshore private placement under Regulation S promulgated under the Securities Act of 1933, as amended ("Securities Act"). In connection with this transaction, as of December 31, 2014, PF Medical S.A. has received approximately \$1,478,000 for 155,839 shares (before deduction for commissions and legal expenses relating to this offering of approximately \$242,000). PF Medical S.A. further expects to receive approximately \$636,000, prior to any commission, on or prior to July 31, 2015, for payment of 68,161 of such shares and another \$243,000 by December 2015, for payment of the remaining 26,000 of such shares. The unpaid shares as of December 31, 2014 in this transaction were accounted for as subscription receivables and are offset against non-controlling interest. If PF Medical S.A. is not paid for the 68.161 shares on or prior to July 31, 2015, PF Medical S.A. has the option to have the purchaser of such shares transfer all of its rights, title and interest in such shares to PF Medical S.A. or for PF Medical S.A. be paid for the 68,161 shares with shares in another publicly traded company. In addition, during January 2015, Perma-Fix Medical, S.A. entered into a preliminary Letter of Intent ("LOI") to form a strategic partnership and secure investment from a U.S company which is one of the largest national providers of in-office nuclear cardiology imaging services. This company uses Tc-99m in its nuclear imaging services business and provides imaging expertise to the medical community. Under the LOI, this company would, if the LOI is completed and definitive agreements are executed, invest \$1,000,000 into Perma-Fix Medical S.A. The investment, when completed, would constitute approximately 5.4% of the outstanding common shares of Perma-Fix Medical S.A. When completed, this company will have the right to appoint one member to Perma-Fix Medical S.A.'s Supervisory Board, and a second appointee to either the Supervisory Board or the management team. The investment and agreements with this company are subject to numerous conditions, including, but not limited to, entering into definitive supply, stock purchase and other agreements, approval by each of the parties Boards and obtaining required approvals by Polish regulatory authorities as to issuance of the shares to this company. These arrangements are neither an offer to sell nor a solicitation of an offer to buy PF Medical S.A.'s Common Stock or any other securities and shall not constitute an offer, solicitation or sale in any jurisdiction in which such offer, solicitation or sale is unlawful. PF Medical S.A.'s Common Stock is not registered under the Securities Act or any state securities laws and may not be offered or sold in the U.S. absent registration or applicable exemption from registration from the registration requirements under the Securities Act and applicable state securities laws. As a result, the share certificate or purchase confirmation issued in connection with such private placements of PF Medical S.A.'s Common Stock will be required to bear restrictive legends describing the applicable restrictions of transferring such shares in the U.S. or to U.S. persons unless in compliance with the Securities Act.

During January 2015, a consortium led by Perma-Fix Medical S.A. received an official notification from the National Centre for Research and Development in Poland for certain grant funding to further develop and commercialize a novel prototype generator for the production of Tc-99m for use in cancer and cardiac imaging ("Generator Project"). The total Generator Project budget is approximately \$3,700,000, of which, Generator Project grant subsidies allocated to the project team will be approximately \$2,800,000. Of the \$2,800,000 grant allocation, Perma-Fix Medical S.A. will directly receive approximately \$800,000 and the remaining amount will be allocated to other members of the Generator Project team to support technology development and testing. The Generator Project team will be under the leadership and supervision of Perma-Fix Medical S.A. and consists of four additional entities from Poland, including: the National Centre for Nuclear Research - Radioisotope Centre POLATOM in Otwock; the Institute for Biopolymers and Chemical Fibers - Department of Biopolymers in £ódz; Warsaw Medical University - Department of Nuclear Administration; and the Institute of Industrial Organic Chemistry Branch in Pszczyna. The goal of the Generator Project is to develop a novel prototype generator utilizing Perma-Fix Medical S.A.'s microporous resin to produce molybdenum-derived Tc-99m, test the chemical and radionuclide purities of Tc-99m eluent and verify the performance of the final product, which will be the cancer and cardiac pharmaceutical kits used during animal and human imaging to fulfill both Polish and European Pharmacopoeia standards. The funding of this grant is subject to execution of agreements by Perma-Fix Medical S.A. with the project team partners and formal acceptance of the grant by Perma-Fix Medical S.A, which is expected to occur during the second quarter of 2015.

In summary, we achieved substantial improvements in our financial results for the twelve months ended December 31, 2014 resulting from a number of sizable projects awarded in both of our Segments. As of December 31, 2014, we were in a positive cash position primarily as a result of the proceeds we received from the sale of our SYA subsidiary, the insurance settlement proceeds, and proceeds received from the equity financing related to our Perma-Fix Medical S.A. subsidiary. As of December 31, 2014, our backlog was \$9,228,000, an increase of \$1,533,000, from the December 31, 2013 balance of \$7,695,000. We continue to take steps to improve our operations and liquidity and to invest working capital into our facilities to fund capital additions in our segments. Although there are no assurances, we believe that our cash flows from operations and our available liquidity from the amended and restated line of credit are sufficient to service the Company's obligations.

Off Balance Sheet Arrangements

We have a number of routine operating leases, primarily related to office space rental, office equipment rental and equipment rental for contract projects as of December 31, 2014, which total approximately \$2,223,000, payable as follows: \$679,000 in 2015; \$680,000 in 2016; \$670,000 in 2017; with the remaining \$194,000 in 2018.

From time to time, we are required to post standby letters of credit and various bonds to support contractual obligations to customers and other obligations. As of December 31, 2014, the total amount of these bonds and letters of credit outstanding was approximately \$1,127,000, of which the majority of the amount relates to various bonds. Our Treatment Segment facilities operate under licenses and permits that require financial assurance for closure and post-closure costs. We provide for these requirements through financial assurance policies. As of December 31, 2014, the closure and post-closure requirements for our facilities were approximately \$46,608,000. We have recorded approximately \$21,334,000 in a sinking fund related to these policies in other long term assets within our balance sheets.

Strategic Planning

During the third quarter of 2014, we retained an investment banking firm to assist us with our strategic planning and transactions. We agreed to pay the investment banker a monthly retainer of \$15,000 for a period of ten months, and an additional amount if during the term of this engagement and under certain other conditions certain transactions are completed or we enter into an agreement which subsequently results in a certain transaction being consummated, less the amount of retainer paid by us to the investment banker, or an additional amount under certain other conditions. The engagement of the investment banker shall continue until July 30, 2015, unless terminated prior thereto in accordance with the engagement.

Critical Accounting Policies

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 performance based methodology for purposes of revenue recognition in our Treatment Segment. As we accept more complex waste streams in this segment, the treatment of those waste streams become 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 using a proportional performance method. The major processing phases are receipt, treatment/processing and shipment/final disposition. Upon receiving various wastes we recognize a certain percentage (ranging from 9.0% to 33%) of revenue as we incur costs for transportation, analytical and labor associated with the receipt of mixed waste. As the waste is processed, shipped and disposed of, we recognize the remaining revenue and the associated costs of transportation and burial. We review and evaluate our revenue recognition estimates and policies on an annual basis.

For our Services Segment, revenues on services are performed under time and material, fixed price, and cost-reimbursement contracts. Revenues and costs associated with fixed price contracts are recognized using the percentage of completion (efforts expended) method. We estimate our percentage of completion based on attainment of project milestones. Revenues and costs associated with time and material contracts are recognized as revenue when earned and costs are incurred.

Under cost-reimbursement contracts, we are reimbursed for costs incurred plus a certain percentage markup for indirect costs, in accordance with contract provisions. 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.

Contract costs include all direct labor, material and other non-labor costs and those indirect costs related to contract support, such as depreciation, fringe benefits, overhead labor, supplies, tools, repairs and equipment rental. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined. Changes in job performance, job conditions and estimated profitability, including those arising from contract penalty provisions and final contract settlements, may result in revisions to costs and income and are recognized in the period in which the revisions are determined.

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 3.8% of revenue for 2014 and 20.8% of accounts receivable as of December 31, 2014. Additionally, this allowance was approximately 2.6% of revenue for 2013 and 19.0% of accounts receivable as of December 31, 2013.

Intangible Assets. Intangible assets consist primarily of the recognized value of the permits required to operate our business and goodwill (as in previous years), or the cost of purchased businesses in excess of the estimated fair value of net identifiable assets acquired. As of December 31, 2014, we have no goodwill remaining. In connection with the sale of our SYA subsidiary on July 29, 2014, the Company recorded a goodwill impairment charge of \$380,000 during the second quarter of 2014 for the SYA reporting unit. The Company fully impaired the goodwill for each of our Treatment, SEC, and CHPRC reporting units, totaling approximately \$27,856,000, during 2013. We continually reevaluate the propriety of the carrying amount of permits and goodwill (when applicable) to determine whether current events and circumstances warrant adjustments to the carrying value.

Indefinite-lived intangible assets are not amortized but are reviewed for impairment annually as of October 1, or when events or changes in the business environment indicate that the carrying value may be impaired. If the fair value of the asset is less than the carrying amount, we perform a quantitative test to determine the fair value. The impairment loss, if any, is measured as the excess of the carrying value of the asset over its fair value. Significant judgments are inherent in these analyses and include assumptions for, among others factors, forecasted revenue, gross margin, growth rate, operating income, timing of expected future cash flows, and the determination of appropriate long term discount rates.

We performed impairment testing of our permits related to our Treatment reporting unit as of October 1, 2014 and 2013 and determined no impairment existed.

Intangible assets that have definite useful lives are amortized using the straight-line method over the estimated useful lives (with the exception of customer relationships which are amortized using an accelerated method) and are excluded from our annual intangible asset valuation review as of October 1. The Company has one definite-lived permit which was excluded from our annual impairment review as noted above. The net carrying value of this one definite-lived permit as of December 31, 2014, was approximately \$227,000. Intangible assets with definite useful lives are also tested for impairment whenever events or changes in circumstances indicate that the asset's carrying value may not be recoverable.

Accrued Closure Costs and Asset Retirement Obligations ("ARO"). Accrued closure costs represent our estimated environmental liability to clean up our facilities as required by our permits, in the event of closure. ASC 410, "Asset Retirement and Environmental Obligations" requires that the discounted fair value of a liability for an ARO be recognized in the period in which it is incurred with the associated ARO capitalized as part of the carrying cost of the asset. The recognition of an ARO requires that management make numerous estimates, assumptions and judgments regarding such factors as estimated probabilities, timing of settlements, material and service costs, current technology, laws and regulations, and credit adjusted risk-free rate to be used. This estimate is inflated, using an inflation rate, to the expected time at which the closure will occur, and then discounted back, using a credit adjusted risk free rate, to the present value. ARO's are included within buildings as part of property and equipment and are depreciated over the estimated useful life of the property. In periods subsequent to initial measurement of the ARO, the Company must recognize period-to-period changes in the liability resulting from the passage of time and revisions to either the timing or the amount of the original estimate of undiscounted cash flow. Increases in the ARO liability due to passage of time impact net income as accretion expense and are included in cost of goods sold in the Consolidated Statement of Operations. Changes in the estimated future cash flows costs underlying the obligations (resulting from changes or expansion at the facilities) require adjustment to the ARO liability calculated and are capitalized and charged as depreciation expense, in accordance with the Company's depreciation policy.

Accrued Environmental Liabilities. We have four remediation projects currently in progress (all within discontinued operations). 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 (See "Environmental Contingencies" below for further information of these liabilities).

Disposal/Transportation Costs. We accrue for waste disposal based upon a physical count of the 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.

Stock-Based Compensation. We account for stock-based compensation in accordance with ASC 718, "Compensation – Stock Compensation." ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. We use the Black-Scholes option-pricing model to determine the fair-value of stock-based awards which requires subjective assumptions. 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. In addition, judgment is also required in estimating the amount of stock-based awards that are expected to be forfeited.

Income Taxes. The provision for income tax is determined in accordance with ASC 740, "Income Taxes." As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. We record this amount as a provision or benefit for taxes. This process involves estimating our actual current tax exposure, including assessing the risks associated with tax audits, and assessing temporary differences resulting from different treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities. We assess the likelihood that our deferred tax assets will be recovered from future taxable income and, to the extent that we believe recovery is not likely, we establish a valuation allowance. As of December 31, 2014, we had net deferred tax assets of approximately \$7,896,000 (which excludes a deferred tax liability relating to goodwill and indefinite lived intangible assets), which were primarily related to federal and state net operating loss ("NOL") carryforwards, impairment charges, and closure costs. As of December 31, 2014 and 2013, we concluded that it was more likely than not that \$7,896,000 and \$8,182,000 of our deferred income tax assets would not be realized, and as such, a full valuation allowance was applied against those deferred income tax assets. Our net operating losses are subject to audit by the Internal Revenue Services, and, as a result, the amounts could be reduced.

Known Trends and Uncertainties

Economic Conditions. The DOE and U.S. Department of Defense ("DOD") represent major customers for our Treatment Segment and Services Segment. Although in 2014, we saw significant improvement in revenues generated from wastes from governmental clients or their subcontractors (primarily in our Treatment Segment), revenue were still below our expectations as federal clients have operated in recent years under reduced budgets due to sequestration, general economic conditions, and the large budget deficit that has and continues to face the government. In addition, our government contracts and subcontracts relating to activities at governmental sites are generally subject to termination or renegotiation on 30 days notice at the government's option. Significant reductions in the level of governmental funding in future years could have a material adverse impact on our business, financial position, results of operations and cash flows. See "Management's Discussion and Analysis – Business Environment, Outlook and Liquidity" for a discussion of our business outlook.

Significant Customers. Our segments have significant relationships with the federal government, and continue to enter into contracts, directly as the prime contractor or indirectly as a subcontractor, with 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 on 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 as a prime contractor or indirectly as a subcontractor to the federal government, representing approximately \$34,780,000 or 60.9% of our total revenue from continuing operations during 2014, as compared to \$47,557,000 or 63.9% of our total revenue from continuing operations during 2013.

The following customers accounted for 10% or more of the total revenues generated from continuing operations for twelve months ended December 31, 2014 and 2013:

			Total	% of Total
Customer	Year	Revenue		Revenue
United States Enrichment Corporation ("USEC")	2014	\$	10,272,000	18.0%
	2013	\$	2,037,000	2.7%
CH Plateau Remediation Company ("CHPRC")	2014	\$	5,762,000	10.1%
	2013	\$	19,922,000	26.8%

As our revenues are event/project based where the completion of one contract with a specific customer may be replaced by another contract with a different customer from year to year, we do not believe the loss of one specific customer from one year to the next will generally have a material adverse effect on our operations and financial.

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. In the past, numerous third party disposal sites have improperly managed waste 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 potentially responsible party ("PRP") at a remedial action site, which could have a material adverse effect.

Our subsidiaries where the remediation expenditures will be made are the Leased Property in Dayton, Ohio, a former RCRA storage facility as operated by the former owners of Perma-Fix Dayton, Inc. ("PFD"), Perma-Fix of Memphis Inc.'s ("PFM" – closed location) site in Memphis, Tennessee, PFSG facility in Valdosta, Georgia, and Perma-Fix Michigan, Inc.'s ("PFMI" – closed location) site in Brownstown, Michigan. The environmental liability of PFD (as it relates to the remediation of the storage facility 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. PFSG is non-operational as it suffered a fire on August 14, 2013) All of the reserves are within our discontinued operations. 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, 2014, we had total accrued environmental remediation liabilities of \$1,016,000, of which \$728,000 is recorded as a current liability, which reflects a decrease of \$15,000 from the December 31, 2013 balance of \$1,031,000. The net decrease of \$15,000 represents payments on remediation projects at the PFSG location. The December 31, 2014 current and long-term accrued environmental liability at December 31, 2014 is summarized as follows (in thousands):

	Curre	nt	Long-term		
	Accru	al	Accrual	T	otal
PFD	\$	3 \$	66	\$	69
PFM		30	15		45
PFSG		618	207		825
PFMI		77			77
Total Liability	\$	728 \$	3 288	\$	1,016

Related Party Transactions

Mr. Robert Schreiber, Jr.

During March 2011, we entered into a five-year lease with Lawrence Properties LLC for certain office and warehouse space used and occupied by SYA, a wholly owned subsidiary of the Company until its sale by the Company on July 29, 2014. Lawrence Properties is owned by Robert Schreiber, Jr., the President of SYA until his resignation on July 29, 2014, and Mr. Schreiber's spouse. Under the lease, which commenced June 1, 2011, we paid monthly rent of approximately \$11,400, which we believe was lower than costs charged by unrelated third party landlords. Rent payment under this lease was approximately \$124,000 and \$72,000 for the years ended December 31, 2014 and 2013, respectively. In connection with the Company's sale of SYA, the lease was terminated on July 29, 2014.

Mr. David Centofanti

Mr. David Centofanti serves as our Director of Information Services. For such services, he received yearly compensation of \$163,000 in 2014 and 2013. Mr. David Centofanti is the son of our Chief Executive Officer, President and a Board member, 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

Mr. Robert L. Ferguson serves as an advisor to the Company's Board of Directors ("Board"). Mr. Ferguson previously served as a Board member from June 2007 to February 2010 and again from August 2011 to September 2012. As an advisor to the Company's Board, Mr. Ferguson is paid \$4,000 monthly plus reasonable expenses. For such services, Mr. Ferguson received compensation of approximately \$56,000 and \$52,000 for the years ended December 31, 2014 and 2013, respectively. On August 2, 2013, the Company completed a lending transaction with Messrs. Robert Ferguson and William Lampson ("collectively, the "Lenders"), whereby the Company borrowed from the Lenders the sum of \$3,000,000 pursuant to the terms of a Loan and Security Purchase Agreement and promissory note (the "Loan") (see further details and terms of this Loan in this "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources - Financing Activities").

Mr. John Climaco

On October 17, 2014, the Company's Compensation Committee and the Board of Directors, with Mr. Climaco abstaining, approved a consulting agreement with John Climaco (a director of the Company). The Company and Mr. Climaco entered into the consulting agreement on October 17, 2014. Mr. Climaco is also is a member of the Strategic Advisory Committee of the Board of Directors.

Pursuant to the consulting agreement, the services to be provided by the Consultant shall include, among other things, the following:

- Review the Company's operations to restructure costs to render the Company more competitive;
- Evaluate all functions, including but not limited to sales, marketing, accounting, operations, and executive management as well as cost structures for each facility;
- Assist in the development of the Company's strategy opportunity and other initiatives, including but not limited to the development of the Company's medical isotope technology; and
- Other assignments as determined by the Board.

In his capacity as a consultant under the consulting agreement, Mr. Climaco shall be paid \$22,000 per month (starting September 2014) plus reasonable expenses. The agreement shall continue unless terminated by either party for any reason or no reason by providing thirty (30) days written notice to the other party. For his services under the consulting agreement, Mr. Climaco received approximately \$107,000 in 2014.

Employment Agreements

We have an employment agreement (each dated July 10, 2014) with each of Dr. Centofanti (our President and Chief Executive Officer or "CEO"), Ben Naccarato (our Chief Financial Officer or "CFO"), and John Lash (our Chief Operating Officer or "COO" – hired on March 20, 2014). Each employment agreement provides for annual base salaries, bonuses, and other benefits commonly found in such agreements. In addition, each employment agreement provides that in the event of termination of such officer without cause or termination by the officer for good reason (as such terms are defined in the employment agreement), the terminated officer shall receive payments of an amount equal to benefits that have accrued as of the termination but had not yet been paid, plus an amount equal to one year's base salary at the time of termination. In addition, the employment agreements provide that in the event of a change in control (as defined in the employment agreements), all outstanding stock options to purchase our Common Stock granted to, and held by, the officer covered by the employment agreement to be immediately vested and exercisable. The Company had an employment agreement dated August 24, 2011 with Mr. James A. Blankenhorn. On March 20, 2014, the Company accepted the resignation of Mr. James A. Blankenhorn, as Vice President and COO of the Company. The resignation was effective March 28, 2014. When Mr. Blankenhorn's resignation as the COO became effective, his employment agreement also terminated. Each Dr. Centofanti and Ben Naccarato also had an employment agreement dated August 24, 2011 which were terminated upon execution of the employment agreement dated July 10, 2014.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not required under Regulation S-K for smaller reporting companies.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

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,

- losses of specific customer from one year to the next will not generally have a material effect on us;
- significant reductions in the level of government funding in future years could have a material adverse impact on our business, financial
 position, results of operations and cash flows;
- expect to meet our quarterly financial covenants in 2015;
- expand into both commercial and international markets to increase revenues;
- ability to improve operations and liquidity;
- permit and license requirements represent a potential barrier to entry for possible competitors;
- failure to obtain and maintain our permit or approvals would have a material adverse effect on us;
- potential effect on our operations with the adoption of programs by federal or state government mandating a substantial reduction in greenhouse gas emissions;
- ability to fund budgeted capital expenditures during 2015 through our operations and lease financing;
- continue focus on efficient operations of facilities and on-site activities, continue to evaluating strategic acquisition, continue the R&D of innovative technologies to expand company service offering and to treat nuclear waste, mixed waste, and industrial waste, and to continue R&D and marketing of medical isotope technology;

- our cash flows from operations and our available liquidity from our amended and restated line of credit are sufficient to service the Company's current obligations;
- continue to take steps to improve our operations and liquidity and to invest working capital into our facilities to fund capital additions to our segments;
- ability to continue under existing contracts that we have with the federal government (directly or indirectly as a subcontractor);
- process our backlog during periods of low waste receipts, which historically has been in the first or fourth quarter;
- future enforcement policies as applied to existing laws or by the enactment of new environmental laws and regulations;
- subject to fines, penalties or other liabilities or could be adversely affected by existing or subsequently enacted laws or regulations;
- we could become a PRP at a remedial action site, which could have a material adverse effect;
- ability to remediate material weakness in internal control over financial reporting; and
- we could be deemed responsible for part for the cleanup of certain properties and be subject to fines and civil penalties in connection with violations of regulatory requirements.

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

- general economic conditions;
- material reduction in revenues;
- ability to meet PNC covenant requirements;
- inability to collect in a timely manner a material amount of receivables;
- increased competitive pressures;
- inability to maintain and obtain required permits and approvals to conduct operations;
- public not accepting our new technology;
- inability to develop new and existing technologies in the conduct of operations;
- inability to maintain and obtain closure and operating insurance requirements;
- inability 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;
- delays at our third party disposal site can extend collection of our receivables greater than twelve months;
- refusal of third party disposal sites to accept our waste;
- changes in federal, state and local laws and regulations, especially environmental laws and regulations, or in interpretation of such;
- requirements to obtain permits for TSD activities or licensing requirements to handle low level radioactive materials are limited or lessened;
- 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;
- inability to continue to be profitable on an annualized basis;
- inability of the Company to maintain the listing of its Common Stock on the NASDAQ;
- terminations of contracts with federal agencies or subcontracts involving federal agencies, or reduction in amount of waste delivered to the Company under the contracts or subcontracts;
- renegotiation of contracts involving the federal government;
- federal government's inability or failure to provide necessary funding to remediate contaminated federal sites;
- disposal expense accrual could prove to be inadequate in the event the waste requires re-treatment;
- inability to raise capital on commercially reasonable terms;
- inability to increase profitable revenue;
- lender refuses to waive non-compliance or revises our covenant so that we are in compliance; and
- Risk factors contained in Item 1A of this report.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Financial Statement Schedules

In accordance with the rules of Regulation S-X, schedules are not submitted because they are not applicable to or required by the Company.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited the accompanying consolidated balance sheet of Perma-Fix Environmental Services, Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2014, and the related consolidated statement of operations, comprehensive loss, stockholders' equity, and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements 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 the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also 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 financial statement presentation. We believe that our audit provides 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 as of December 31, 2014, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

/s/ GRANT THORNTON LLP Atlanta, Georgia March 31, 2015

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 sheet of Perma-Fix Environmental Services, Inc. and subsidiaries as of December 31, 2013 and the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements 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 the financial statements are free of material misstatement. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also 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 financial statement presentation. We believe that our audit provides 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, 2013 and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 (to the 2013 consolidated financial statements), the Company has suffered declining revenues, recurring losses from operations and has a net working capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1 (to the 2013 consolidated financial statements). The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/BDO USA, LLP

Atlanta, Georgia

April 15, 2014, except for Notes 3, 12, and 17 as to which the date is March 31, 2015

PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED BALANCE SHEETS

As of December 31,

(Amounts in Thousands, Except for Share and per Share Amounts)		2014	(Revised) 2013
ASSETS			
Current assets:			
Cash	\$	3,680	\$ 333
Restricted cash		85	35
Accounts receivable, net of allowance for doubtful accounts of \$2,170 and \$1,932, respectively		8,272	8,241
Unbilled receivables - current		7,177	4,917
Inventories		498	520
Prepaid and other assets		3,010	2,949
Deferred tax asset - current		385	460
Current assets related to discontinued operations		20	3,114
Total current assets		23,127	20,569
Property and equipment:			
Buildings and land		19,863	19,486
Equipment		35,933	35.279
Vehicles		403	610
Leasehold improvements		11,613	11,625
Office furniture and equipment		1,799	2,046
Construction-in-progress		336	630
1 0		69,947	69,676
Less accumulated depreciation and amortization		(47,123)	(43,616
Net property and equipment		22,824	26,060
Property and equipment related to discontinued operations		681	1,367
Intermediate and other languages assets.			
Intangibles and other long term assets: Permits		16.709	16.744
Goodwill		16,709	- , -
		2 425	1,330
Other intangible assets - net Unbilled receivables - non-current		2,435 273	2,980
Finite risk sinking fund		21,334	302 21,307
Other assets		1,253	1,401
	\$	88,636	\$ 92,060
Total assets	Ф	00,030	92,000

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

As of December 31,

(Amounts in Thousands, Except for Share and per Share Amounts)		2014		(Revised) 2013
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	5,350	\$	5,462
Accrued expenses	Ψ	4,540	Ψ	5,201
Disposal/transportation accrual		1,737		1.385
Unearned revenue		4,873		4,149
Current liabilities related to discontinued operations		2,137		3,994
Current portion of long-term debt		2,319		2,462
Current portion of long-term debt - related party		1,414		414
Total current liabilities		22,370		23,067
		,;,,		20,007
Accrued closure costs		5,508		5,222
Other long-term liabilities		803		739
Deferred tax liabilities		5,391		4,927
Long-term liabilities related to discontinued operations		590		602
Long-term debt, less current portion		6,690		9,009
Long-term debt, less current portion - related party		949		2,363
Total long-term liabilities		19,931	1	22,862
C				,
Total liabilities		42,301		45,929
Commitments and Contingencies (Note 13)				
Series 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 plus accrued and unpaid				
dividends of \$803 and \$739, respectively		1,285		1,285
dividends of \$605 and \$755, respectively		1,283		1,263
Stockholders' Equity:				
Preferred Stock, \$.001 par value; 2,000,000 shares authorized, no shares issued and outstanding		_		
Common Stock, \$.001 par value; 30,000,000 and 75,000,000 shares authorized, respectively; 11,476,485 and 11,406,573 shares issued, respectively; 11,468,843 and 11,398,931 shares				
outstanding, respectively		11		11
Additional paid-in capital		103,765		103,454
Accumulated deficit		(59,758)		(58,533)
Accumulated other comprehensive income		11		2
Less Common Stock in treasury, at cost; 7,642 shares		(88)		(88)
Total Perma-Fix Environmental Services, Inc. stockholders' equity		43,941		44,846
Non-controlling interest		1,109		_
Total stockholders' equity		45,050		44,846
Total liabilities and stockholders' equity	\$	88,636	\$	92,060

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

For the years ended December 31,

(Amounts in Thousands, Except for Per Share Amounts)		2014	2013
Net revenues	\$	57,065 \$	74,413
Cost of goods sold	Ψ	45,157	64,597
Gross profit		11,908	9,816
Selling, general and administrative expenses		11,973	14,376
Research and development		1,315	1,764
Impairment loss on goodwill		380	27,856
(Gain) loss on disposal of property and equipment		(41)	49
Loss from operations		(1,719)	(34,229)
Other income (expense):			
Interest income		27	35
Interest expense		(616)	(762)
Interest expense-financing fees		(192)	(132)
Foreign currency loss		(24)	_
Other		(51)	(8)
Loss from continuing operations before taxes		(2,575)	(35,096)
Income tax expense (benefit)		417	(625)
Loss from continuing operations, net of taxes		(2,992)	(34,471)
Income (loss) from discontinued operations, net of taxes		1,688	(1,568)
Net Loss		(1,304)	(36,039)
Net loss attributable to non-controlling interest		(79)	(64)
Net loss attributable to Perma-Fix Environmental Services, Inc. common stockholders	\$	(1,225) \$	(35,975)
Net (loss) income per common share attributable to Perma-Fix Environmental Services, Inc. stockholders - basic and diluted:			
Continuing operations	\$	(.26) \$	(3.04)
Discontinued operations		.15	(.14)
Net loss per common share	\$	(.11) \$	(3.18)
Number of common shares used in computing net (loss) income per share:			
Basic		11,443	11,319
Diluted		11,443	11,319

PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

For the years ended December 31,

(Amounts in Thousands)	2014	2013
Net loss	\$ (1,304)) <u>\$ (36,039)</u>
Other comprehensive income:		
Foreign currency translation gain	9	4
Total other comprehensive income	9	4
Comprehensive loss	(1,295)	(36,035)
Comprehensive loss attributable to non-controlling interest	(79)	(64)
Comprehensive loss attributable to Perma-Fix		
Environmental Services, Inc. common stockholders	\$ (1,216)	\$ (35,971)

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

For the years ended December 31, (Amounts in Thousands, Except for Share Amounts)

	Common	ı Stock	Additional Paid-In	Common Stock Held In	Accumulated Other Comprehensive	Non- controlling Interest in	(Revised) Accumulated	(Revised) Total Stockholders'
	Shares	Amount	Capital	Treasury	(Loss) Income	Subsidiary	Deficit	Equity
Balance at								
December 31, 2012 (As								
previously								
reported)	11,247,642	\$ 11	\$ 102,864	\$ (88)	<u>\$</u> (2)	\$ 572	\$ (19,103)	\$ 84,254
Prior period adjustment resulting								
from revision (see								
Note 3)							(3,455)	(3,455)
Balance at December 31,								
2012 (As revised)	11,247,642	11	102,864	(88)	(2)	572	(22,558)	80,799
Net loss	_	_	_	_	<u> </u>	(64)	(35,975)	(36,039)
Foreign currency								
translation	_	_	_	_	4	_	_	4
Distribution to non-								
controlling interest	_		_	_	_	(490)		(490)
Redemption of non-						•		Ì
controlling interest	_	_	_	_	_	(18)	_	(18)
Issuance of Common						, ,		
Stock for services	69,041		206		_			206
Issuance of Common	,							
Stock for debt	90,000	_	200	_	_	_	_	200
Issuance of warrants								
for debt	_		59		_			59
Cash in lieu - reverse								
stock split	(110)	_	_	_	_	_	_	_
Stock-Based	, ,							
Compensation			125		_			125
Balance at								
December 31,								
2013	11,406,573	\$ 11	\$ 103,454	\$ (88)	\$ 2	\$ —	\$ (58,533)	\$ 44,846
Net loss	_				_	(79)	(1,225)	(1,304)
Foreign currency						,	,	,
translation	_	_	_	_	9	_	_	9
Issuance of stock -								
Perma-Fix Medical								
S.A., net of								
expenses of \$242	_		_	_	_	1,188	_	1,188
Issuance of Common						,		,
Stock upon exercise								
of options	2,577	_	7	_	_	_	_	7
Issuance of Common	,- ,-							
Stock for services	67,335	_	270		_			270
Stock-Based	,							
Compensation			34					34
Balance at								
December 31, 2014	11,476,485	\$ 11	\$ 103,765	\$ (88)	\$ 11	\$ 1,109	\$ (59,758)	\$ 45,050

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

For the years ended December 31,

(Amounts in Thousands)	20	14	2013
Cash flows from operating activities:			
Net loss	\$	(1,304) \$	(36,039)
Less: income (loss) on discontinued operations, net of taxes		1,688	(1,568)
Loss from continuing operations		(2,992)	(34,471)
Adjustments to reconcile net loss from continuing operations to cash used in operating		(=,>>=)	(0 1,172)
activities:			
Depreciation and amortization		4,240	4,126
Amortization of debt discount		86	36
Amortization of fair value of customer contracts		_	(1,298)
Deferred tax expense (benefit)		539	(639)
Provision (benefit) for bad debt and other reserves		291	(304)
Impairment of goodwill		380	27,856
(Gain) loss on disposal of plant, property and equipment		(41)	49
Loss on sale of SYA subsidiary (see Note 8)		53	
Issuance of common stock for services		270	206
Stock-based compensation		34	125
Changes in operating assets and liabilities of continuing operations			
Accounts receivable		(713)	3,769
Unbilled receivables		(2,606)	3,448
Prepaid expenses, inventories and other assets		1,149	1,832
Accounts payable, accrued expenses and unearned revenue		(29)	(6,431)
Cash provided by (used in) continuing operations		661	(1,696)
Cash used in discontinued operations		(2,093)	(1,020)
Cash used in operating activities		(1,432)	(2,716)
Coals Clares Coard in coal in coal in coal			
Cash flows from investing activities:		(164)	(0.1.1)
Purchases of property and equipment, net		(464)	(944)
Proceeds from sale of plant, property and equipment		133	_
Proceeds from sale of SYA subsidiary (see Note 8)		1,214	(25)
Payments to finite risk sinking fund		(27)	(35)
Non-controlling interest distribution			(508)
Cash provided by (used in) investing activities of continuing operations		856	(1,487)
Proceeds from property insurance claims of discontinued operations (see Note 8)		5,727	(1.407)
Cash provided by (used in) investing activities		6,583	(1,487)
Cash flows from financing activities:			
Net repayments of revolving credit		_	_
Principal repayments of long term debt		(2,463)	(2,796)
Principal repayments of long term debt - related party		(500)	_
Proceeds from issuance of common stock		7	-
Issuance of stock - Perma-Fix Medical S.A., net of expenses of \$242		1,187	_
Proceeds from issuance of long-term debt		<u> </u>	3,000
Cash (used in) provided by financing activities of continuing operations		(1,769)	204
Principal repayment of long-term debt for discontinued operations		(35)	(36)
Cash (used in) provided by financing activities		(1,804)	168
Increase (decrease) in cash		3,347	(4,035)
Cash at beginning of period		333	4,368
Cash at end of period	\$	3,680 \$	333
			_
Supplemental disclosure: Interest paid	\$	607 \$	714
Income taxes paid	φ	607 \$ 41	714
Issuance of Common Stock for debt		41	110
Issuance of Warrants for debt			200 59
Purchase of equipment through capital lease obligation		_	
i archase of equipment amough capital lease obligation			71

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Notes to Consolidated Financial Statements December 31, 2014 and 2013

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 two reportable segments:

TREATMENT 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 primarily through four uniquely licensed and permitted treatment and storage facilities; and
- research and development activities to identify, develop and implement innovative waste processing techniques for problematic waste

SERVICES SEGMENT, which includes:

- On-site waste management services to commercial and government customers;
- Technical services, which include:
 - o professional radiological measurement and site survey of large government and commercial installations using advanced methods, technology and engineering;
 - o integrated Occupational Safety and Health services including industrial hygiene ("IH") assessments; hazardous materials surveys, e.g., exposure monitoring; lead and asbestos management/abatement oversight; indoor air quality evaluations; health risk and exposure assessments; health & safety plan/program development, compliance auditing and training services; and Occupational Safety and Health Administration ("OSHA") citation assistance;
 - o global technical services providing consulting, engineering, project management, waste management, environmental, and decontamination and decommissioning field, technical, and management personnel and services to commercial and government customers;
- Nuclear services, which include:
 - o technology-based services including engineering, decontamination and decommissioning ("D&D"), specialty services and construction, logistics, transportation, processing and disposal;
 - o remediation of nuclear licensed and federal facilities and the remediation cleanup of nuclear legacy sites. Such services capability includes: project investigation; radiological engineering; partial and total plant D&D; facility decontamination, dismantling, demolition, and planning; site restoration; site construction; logistics; transportation; and emergency response; and
- A company owned equipment calibration and maintenance laboratory that services, maintains, calibrates, and sources (i.e., rental) of health physics, IH and customized nuclear, environmental, and occupational safety and health ("NEOSH") instrumentation.

The Company's consolidated financial statements include our accounts and the accounts of our wholly-owned subsidiaries as follows. The Company's financial statements also include the accounts of SEC Radcon Alliance, LLC ("SECRA"), which we own 75% and Perma-Fix Medical S.A., which we own 64%.

Continuing Operations: 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"), Schreiber, Yonley & Associates ("SYA" which was divested on July 29, 2014), Safety & Ecology Corporation ("SEC"), Perma-Fix Environmental Services UK Limited, Perma-Fix of Canada, Inc., SECRA (which we own 75%), and Perma-Fix Medical S.A. (a 64% owned Polish subsidiary acquired on April 4, 2014, whose primary purpose is the research and development and marketing of medical isotope technology used in medical diagnostic testing – See Note 4 – "Perma-Fix Medical S.A." below for further details of this subsidiary).

Discontinued Operations (See "Note 8"): Consist of all our subsidiaries included in our Industrial Segment which were divested in 2011 and prior, two previously closed locations, and our Perma-Fix of South Georgia, Inc. ("PFSG") facility which suffered a fire on August 14, 2013 which has left it non-operational.

Reduction In Authorized Shares and Reverse Stock Split

On September 18, 2014 at the Company's 2014 Annual Meeting of Stockholders, the Company's stockholders approved an amendment to the Company's Restated Certificate of Incorporation to reduce the number of shares of Common Stock the Company is authorized to issue from 75,000,000 to 30,000,000. This amendment became effective on September 19, 2014.

Effective as of 12:01 a.m. on October 15, 2013, the Company effected a reverse stock split at a ratio of 1-for-5 of the Company's then outstanding Common Stock and shares of Common Stock issuable upon exercise of the then outstanding stock options and warrants. All references in the financial statements and notes thereto to the number of shares outstanding, per share amounts, and outstanding stock options and warrant data of the Company's Common Stock reflects the effect of the reverse stock split for all periods presented. In addition, the shares available for issuance under the Company's various stock option plans reflect the effect of the reverse stock split. The reverse stock did not affect the number of authorized shares of Common Stock which had remained at 75,000,000 through September 19, 2014.

Financial Position and Liquidity

The Company achieved substantial improvements in financial position and liquidity in the twelve months ended December 31, 2014 as compared to the corresponding period of 2013. As of December 31, 2014, we had cash on hand of approximately \$3,680,000, no revolver balance, and a working capital of approximately \$757,000 as compared to a working capital deficit of \$2,498,000 as of December 31, 2013. Our working capital for 2014 was positively impacted by the insurance settlement proceeds that the Company received from its insurance carriers for our Perma-Fix of South Georgia, Inc. subsidiary ("PFSG"), proceeds received from the sale of our SYA subsidiary, and the receipt of certain proceeds from the Company's Polish subsidiary, Perma-Fix Medical S.A., that it received due to the sale of certain equity (see Note 8 - "Divestitures and Discontinued Operations" and Note 4 - "Perma-Fix Medical S.A." for further information of these proceeds).

The Company's cash flow requirements during 2014 were financed by cash on hand, operations, credit facility, and the proceeds received as discussed above. The Company is continually reviewing operating costs and is committed to further reducing operating costs to bring them in line with revenue levels, when needed.

The Company's cash flow requirements for 2015 will consist primarily of general working capital needs, scheduled principal payments on our debt obligations and capital leases, remediation projects and planned capital expenditures which we plan to fund from operations and our credit facility.

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. The consolidated financial statements also include the accounts of SECRA, which we own 75%, and Perma-Fix Medical S.A., which we own 64%.

Reclassifications

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

Use of Estimates

When the Company prepares financial statements in conformity with accounting standards generally accepted in the United States of America ("US GAAP"), the Company 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. Actual results could differ from those estimates. See Notes 8, 11, 12 and 13 for estimates of discontinued operations and environmental liabilities, closure costs, income taxes and contingencies for details on significant estimates.

Restricted Cash

Restricted cash reflects \$35,000 held in escrow for our worker's compensation policy and \$50,000 held in escrow in connection with the divestiture of SYA on July 29, 2014 to be used to cover any potential claims made by the purchaser for indemnification for certain limited types of losses incurred by the purchaser within one year of the divestiture of SYA (see Note 8 – "Divestitures and Discontinued Operations" for further detail of this \$50,000).

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). 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, based on historical experience that allows us to calculate the total allowance 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 from senior management, based on, required approval thresholds.

Retainage receivables represent amounts that are billed or billable to our customers, but are retained by the customer until completion of the project or as otherwise specified in the contract. Our retainage receivable balances are all current. Retainage receivables of approximately \$11,000 and \$135,000 as of December 31, 2014 and 2013, respectively, are included in the accounts receivable balance on the Company's Consolidated Balance Sheets in the respective periods.

Unbilled Receivables

Unbilled receivables are generated by differences between invoicing timing and our performance based methodology used for revenue recognition purposes. As major processing and contract completion phases are completed and the costs incurred, we recognize the corresponding percentage of revenue. Within our Treatment Segment, 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 tasks relating to these delays usually take several months to complete. 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 extend 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.

Unbilled receivables within our Services Segment can result from: (1) revenue recognized by our Earned Value Management program (a program which integrates project scope, schedule, and cost to provide an objective measure of project progress) but invoice milestones have not yet been met and/or (2) contract claims and pending change orders, including Requests for Equitable Adjustments ("REAs") when work has been performed and collection of revenue is reasonably assured.

Inventories

Inventories consist of treatment chemicals, saleable 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, asset lives 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.

In accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 360, "Property, Plant, and Equipment", 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 are 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.

Our PFSG subsidiary is within our discontinued operations and is held for sale. On August 14, 2013, our PFSG facility incurred fire damage which has left it non-operational. The Company has recorded \$723,000 and \$130,000 in impairment charges for fixed assets related to the fire for the years ended December 31, 2014 and 2013, respectively.

Our depreciation expense totaled approximately \$3,602,000 and \$3,381,000 in 2014 and 2013, respectively.

Intangible Assets

Intangible assets consist primarily of the recognized value of the permits required to operate our business and goodwill (as in previous years), or the cost of purchased businesses in excess of the estimated fair value of net identifiable assets acquired. As of December 31, 2014, we have no goodwill remaining. In connection with the sale of our SYA subsidiary on July 29, 2014, the Company recorded a goodwill impairment charge of \$380,000 during the second quarter of 2014 for the SYA reporting unit. The Company fully impaired the goodwill for each of our Treatment, SEC, and CH Plateau Remediation Company ("CHPRC") reporting units totaling approximately \$27,856,000 during 2013. We continually reevaluate the propriety of the carrying amount of permits and goodwill (when applicable) to determine whether current events and circumstances warrant adjustments to the carrying value.

Indefinite-lived intangible assets are not amortized but are reviewed for impairment annually as of October 1, or when events or changes in the business environment indicate that the carrying value may be impaired. If the fair value of the asset is less than the carrying amount, we perform a quantitative test to determine the fair value. The impairment loss, if any, is measured as the excess of the carrying value of the asset over its fair value. Significant judgments are inherent in these analyses and include assumptions for, among others factors, forecasted revenue, gross margin, growth rate, operating income, timing of expected future cash flows, and the determination of appropriate long term discount rates.

We performed impairment testing of our permits related to our Treatment reporting unit as of October 1, 2014 and 2013 and determined no impairment existed.

Intangible assets that have definite useful lives are amortized using the straight-line method over the estimated useful lives (with the exception of customer relationships which are amortized using an accelerated method) and are excluded from our annual intangible asset valuation review conducted as of October 1. The Company has one definite-lived permit which was excluded from our annual impairment review as noted above. The net carrying value of this one definite-lived permit as of December 31, 2014, was approximately \$227,000. Definite-lived intangible assets are also tested for impairment whenever events or changes in circumstances suggest impairment might exist.

Research and Development ("R&D")

Operational innovation and technical know-how 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 and to develop new company service offerings. The Company conducts research internally and also through collaborations with other third parties. Research and development costs consist primarily of employee salaries and benefits, laboratory costs, third party fees, and other related costs associated with the development and enhancement of new potential waste treatment processes and are charged to expense when incurred in accordance with FASB ASC Topic 730, "Research and Development." The Company's R&D costs include R&D costs for our Perma-Fix Medical S.A., which primarily is to provide a financing vehicle for the development and marketing of its medical isotope (Tc-99m) technology used in medical diagnostic testing.

Accrued Closure Costs and Asset Retirement Obligations ("ARO")

Accrued closure costs represent our estimated environmental liability to clean up our facilities as required by our permits, in the event of closure. ASC 410, "Asset Retirement and Environmental Obligations" requires that the discounted fair value of a liability for an ARO be recognized in the period in which it is incurred with the associated ARO capitalized as part of the carrying cost of the asset. The recognition of an ARO requires that management make numerous estimates, assumptions and judgments regarding such factors as estimated probabilities, timing of settlements, material and service costs, current technology, laws and regulations, and credit adjusted risk-free rate to be used. This estimate is inflated, using an inflation rate, to the expected time at which the closure will occur, and then discounted back, using a credit adjusted risk free rate, to the present value. ARO's are included within buildings as part of property and equipment and are depreciated over the estimated useful life of the property. In periods subsequent to initial measurement of the ARO, the Company must recognize period-to-period changes in the liability resulting from the passage of time and revisions to either the timing or the amount of the original estimate of undiscounted cash flow. Increases in the ARO liability due to passage of time impact net income as accretion expense, which is included in cost of goods sold. Changes in costs resulting from changes or expansion at the facilities require adjustment to the ARO liability calculated and are capitalized and charged as depreciation expense, in accordance with the Company's depreciation policy.

Income Taxes

Income taxes are accounted for in accordance with ASC 740, "Income Taxes." Under ASC 740, the provision for income taxes is comprised of taxes that are currently payable and deferred taxes that relate to the temporary differences between financial reporting carrying values and tax bases of assets and liabilities. 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.

ASC 740 requires that deferred income tax assets be reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred income tax assets will not be realized. The Company evaluates the realizability of its deferred income tax assets, primarily resulting from impairment loss and net operating loss carryforwards, and adjusts its valuation allowance, if necessary. Once the Company utilizes its net operating loss carryforwards or reverses the related valuation allowance it has recorded on these deferred tax assets, the Company would expect its provision for income tax expense in future periods to reflect an effective tax rate that will be significantly higher than past periods.

ASC 740 sets out a consistent framework for preparers to use to determine the appropriate recognition and measurement of uncertain tax positions. ASC 740 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. ASC 740 also sets out disclosure requirements to enhance transparency of an entity's tax reserves. The Company recognizes accrued interest and income tax penalties related to unrecognized tax benefits as a component of income tax expense.

The Company reassesses the validity of our conclusions regarding uncertain income tax positions on a quarterly basis to determine if facts or circumstances have arisen that might cause us to change our judgment regarding the likelihood of a tax position's sustainability under audit.

Foreign Currency

The Company's foreign subsidiaries include Perma-Fix Environmental Services UK Limited ("Perma-Fix UK Limited"), Perma-Fix Canada, Inc. and Perma-Fix Medical S.A. Assets and liabilities are translated to U.S. dollars at the exchange rate in effect at the balance sheet date and revenue and expenses at the average exchange rate for the period. Foreign currency translation adjustments for these subsidiaries are accumulated as a separate component of accumulated other comprehensive income (loss) in stockholders' equity. Gains and losses resulting from foreign currency transactions are recognized in the consolidated statements of operations.

Concentration Risk

The Company performed services relating to waste generated by the federal government, either directly as a prime contractor or indirectly as a subcontractor to the federal government, representing approximately \$34,780,000 or 60.9% of total revenue from continuing operations during 2014, as compared to \$47,557,000 or 63.9% of total revenue from continuing operations during 2013.

The following customers accounted for 10% or more of the total revenues generated from continuing operations for twelve months ended December 31, 2014 and 2013:

		Total	% of Total
Customer	Year	 Revenue	Revenue
United States Enrichment Corporation ("USEC")	2014	\$ 10,272,000	18.0%
	2013	\$ 2,037,000	2.7%
CH Plateau Remediation Company ("CHPRC")	2014	\$ 5,762,000	10.1%
	2013	\$ 19,922,000	26.8%

As revenues are event/project based where the completion of one contract with a specific customer may be replaced by another contract with a different customer from year to year, the Company does not believe the loss of one specific customer from one year to the next will generally have a material adverse effect on operations and financial condition.

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and cash equivalents and accounts receivable. The Company maintains cash and cash equivalents with high quality financial institutions, which may exceed Federal Deposit Insurance Corporation ("FDIC") insured amounts from time to time. Concentration of credit risk with respect to accounts receivable is limited due to the Company's large number of customers and their dispersion throughout the United States as well as with the significant amount of work that we perform for the federal government as discussed above.

The Company has one customer whose net oustanding net receivable balance represented 13.4% and 13.9% of the Company's total consolidated net accounts receivable at December 31, 2014 and 2013, respectively.

Gross Receipts Taxes and Other Charges

ASC 605-45, "Revenue Recognition – Principal Agent Consideration" 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 its revenue and expenses, the Company assesses, among other things, whether it is the primary obligor or principal taxpayer for the taxes assessed in each jurisdiction where the Company does business. As the Company is merely a collection agent for the government authority in certain of our facilities, the Company records the taxes on a net bases and excludes them from revenue and cost of services.

Revenue Recognition

Treatment Segment revenues. The processing of mixed waste is complex and may take several months or more to complete; as such, the Treatment Segment recognizes revenues using a performance based methodology with its measure of progress towards completion determined based on output measures consisting of milestones achieved and completed. The Treatment Segment has waste tracking capabilities, which it continues to enhance, to allow for better matching of 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 sometimes they are completed concurrently. As major processing phases are completed and the costs incurred, the Treatment Segment recognizes the corresponding percentage of revenue utilizing a proportional performance model. The Treatment Segment experiences 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 the waste is processed waste but prior to our release of the waste for disposal. As the waste moves through these processing phases and revenues are recognized, the correlating costs are expensed as incurred. Although the Treatment Segment uses its 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 customer, the related receivables could be uncollectible; however, historical experience has not indicated this to be a material uncertainty.

Services Segment revenues. Revenue includes services performed under time and material, fixed price, and cost-reimbursement contracts. Revenues and costs associated with fixed price contracts are recognized using the percentage of completion (efforts expended) method. The Services Segment estimates its percentage of completion based on attainment of project milestones. Revenues and costs associated with time and material contracts are recognized as revenue when earned and costs are incurred.

Under cost reimbursement contracts, the Services Segment is reimbursed for costs incurred plus a certain percentage markup for indirect costs, in accordance with contract provisions. Costs incurred in excess of contract funding may be renegotiated for reimbursement. The Services Segment also earns a fee based on the approved costs to complete the contract. The Services Segment recognizes this fee using the proportion of costs incurred to total estimated contract costs.

Contract costs include all direct labor, material and other non-labor costs and those indirect costs related to contract support, such as depreciation, fringe benefits, overhead labor, supplies, tools, repairs and equipment rental. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined. Changes in job performance, job conditions and estimated profitability, including those arising from contract penalty provisions and final contract settlements, may result in revisions to costs and income and are recognized in the period in which the revisions are determined.

Self-Insurance

The Company is 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, 2014, the Company believes it has provided adequate reserves for our self-insurance exposure. As of December 31, 2014 and 2013, self-insurance reserves were \$397,000 and \$473,000, respectively, and were included in Accrued expenses in the accompanying consolidated balance sheets. The total amounts expensed for self-insurance during 2014 and 2013 were \$2,697,000, and \$2,906,000, respectively, for our continuing operations.

Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with ASC 718, "Compensation – Stock Compensation". ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. The Company uses the Black-Scholes option-pricing model to determine the fair-value of stock-based awards which requires subjective assumptions. 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 Company recognizes stock-based compensation expense using a straight-line amortization method over the requisite service period, which is the vesting period of the stock option grant. As ASC 718 requires that stock-based compensation expense be based on options that are ultimately expected to vest, our stock-based compensation expense is reduced by 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.

Comprehensive Income

The components of comprehensive income are net income and the effects of foreign currency translation adjustments.

Earnings Per Share

Basic earnings per share is calculated based on the weighted-average number of outstanding common shares during the applicable period. Diluted earnings per share is based on the weighted-average number of outstanding common shares plus the weighted-average number of potential outstanding common shares. Earnings per share is computed separately for each period presented.

The diluted loss per share calculations exclude options to purchase approximately 201,000 and 339,000 shares of common stock for the years ended December 31, 2014 and 2013, respectively, because their effect would have been antidilutive as a result of the net losses recorded in these periods.

Fair Value of Financial Instruments

Certain assets and liabilities are required to be recorded at fair value on a recurring basis, while other assets and liabilities are recorded at fair value on a nonrecurring basis. Fair value is determined based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. The three-tier value hierarchy, which prioritizes the inputs used in the valuation methodologies, is:

Level 1—Valuations based on quoted prices for identical assets and liabilities in active markets.

Level 2—Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3—Valuations based on unobservable inputs reflecting the Company's own assumptions, consistent with reasonably available assumptions made by other market participants.

Financial instruments include cash and restricted cash (Level 1), accounts receivable, accounts payable, and debt obligations (Level 3). Credit is extended to customers based on an evaluation of a customer's financial condition and, generally, collateral is not required. At December 31, 2014 and December 31, 2013, the fair value of the Company's financial instruments approximated their carrying values. The fair value of the Company's revolving credit facility approximates its carrying value due to the variable interest rate. The carrying value of our subsidiary's preferred stock is not significantly different than its fair value.

Recently Adopted Accounting Standards

In April 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-08, "Presentation of Financial Statements (Topic 205) and Property, Plant, and Equipment (Topic 360): Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity." ASU 2014-08, among other things, raises the threshold for disposals to qualify as discontinued operations. Under ASU 2014-08, a discontinued operation is (1) a component of an entity or group of components that has been disposed of by sale, disposed of other than by sale or is classified as held for sale that represents a strategic shift that has or will have a major effect on an entity's operations and financial results or (2) an acquired business or nonprofit activity that is classified as held for sale on the date of the acquisition. ASU 2014-08 also requires additional disclosures for discontinued operations and new disclosures for individually material disposal transactions that do not meet the definition of a discontinued operation. This ASU is effective for annual periods beginning on or after December 15, 2014 and interim periods within that year. Early adoption of ASU 2014-08 was permitted but only for disposals (or classifications as held for sale) that were not reported in financial statements previously issued or available for issue. The Company early adopted ASU 2014-08 during the second quarter of 2014. On April 3, 2014, the Company's Board of Directors ("Board") approved management to pursue the sale of our wholly owned subsidiary, SYA. On July 29, 2014, the Company completed the divestiture of SYA. In accordance with ASU 2014-08, the divestiture of SYA is presented within our continuing operations. The sale of SYA did not represent a strategic shift that has had a major effect on the Company's operations and financial results as defined by ASU 2014-08.

In November 2014, the FASB issued ASU 2014-17, "Pushdown Accounting". ASU 2014-17 provides companies with the option to apply pushdown accounting in its separate financial statements upon occurrence of an event in which an acquirer obtains control of the acquired entity. The election to apply pushdown accounting can be made either in the period in which the change of control occurred, or in a subsequent period. This ASU is effective as of November 18, 2014. The adoption of this ASU did not have an impact on the Company's results of operations, cash flows or financial position

Recently Issued Accounting Standards - Not Yet Adopted

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)." ASU 2014-09 provides a single, comprehensive revenue recognition model for all contracts with customers. The revenue guidance contains principles that an entity will apply to determine the measurement of revenue and timing of when it is recognized. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. The standard will be effective for the first interim period within annual reporting periods beginning after December 15, 2016 for public entities, with no early adoption permitted, and allows for either full retrospective adoption or modified retrospective adoption. The Company is still evaluating the potential impact of adopting this guidance on our financial statements.

In June 2014, the FASB issued ASU 2014-12, "Compensation Stock – Compensation (Topic 718)." ASU 2014-12 applies to all reporting entities that grant their employees share-based payments in which the terms of the award provide that a performance target that affects vesting could be achieved after the requisite service period. It requires that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition and follows existing accounting guidance for the treatment of performance conditions. The standard is effective for annual periods and interim periods within those annual periods beginning after December 15, 2015, with early adoption permitted. The Company is still evaluating the potential impact of adopting this guidance on our financial statements.

In August 2014, the FASB issued ASU No. 2014-15, "Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern." ASU 2014-15 requires management to assess an entity's ability to continue as a going concern, and to provide related footnote disclosure in certain circumstances. The new standard will be effective for all entities in the first annual period ending after December 15, 2016. The Company is still evaluating the potential impact of adopting this guidance on our financial statements.

In November 2014, the FASB issued ASU, 2014-16, "Determining Whether the Host Contract in a Hybrid Financial Instrument Issued in the Form of a Share Is More Akin to Debt or to Equity." ASU 2014-06 clarifies how current guidance should be interpreted in evaluating the economic characteristics and risks of a host contract in a hybrid financial instrument that is issued in the form of a share. Specifically, the amendments clarify that an entity should consider all relevant terms and features, including the embedded derivative feature being evaluated for bifurcation, in evaluating the nature of a host contract. The ASU is effective for fiscal years and interim periods beginning after December 15, 2015. The Company is still evaluating the potential impact of adopting this guidance on our financial statements.

NOTE 3 REVISION OF PRIOR PERIOD FINANCIAL STATEMENTS

During the Company's preparation of the 2014 income tax provision, the Company determined that certain deferred tax liabilities related to acquired indefinite-lived permits from the Company's acquisition of our DSSI subsidiary in 2000 and our M&EC subsidiary in 2001 were not recorded. Upon adoption of Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets" by the Company in 2002 (now ASC 350, "Intangibles-Goodwill and Others"), the acquired permits were determined to be indefinite-lived intangible assets. As a result, deferred tax liabilities should have been established for these indefinite-lived intangible assets on January 1, 2002, with the offset being expense. Further, as these deferred tax liabilities relate to indefinite lived intangible assets, they cannot be utilized for purposes of offsetting deferred tax assets in evaluating the need for a deferred tax asset valuation allowance.

In order to correct these errors, we recorded an adjustment to increase the 2013 opening balance of accumulated deficit in our Consolidated Statements of Stockholders' Equity by \$3,455,000. Due to rules requiring an allocation of valuation allowance to deferred tax assets, the correction of this error also resulted in an increase to deferred tax liabilities (long-term) of \$3,915,000 and an increase to deferred tax assets (current) of \$460,000 for a net deferred tax liability of \$3,455,000 as of December 31, 2013.

The Company considered the guidance in ASC 250, "Accounting Changes and Error Corrections; Staff Accounting Bulletin Topic 1:M, Materiality; and Topic 1:N, Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements," and concluded that the error was not material to previously issued financial statements. The resulting revision had no impact on the Company's previously reported cash, Consolidated Statement of Operations, Consolidated Statement of Comprehensive Loss, and Consolidated Statements of Cash Flows as of and for the year ended December 31, 2013.

The following table summarizes the impact of the revision on each affected line of the Company's Consolidated Balance Sheet as of December 31, 2013:

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	December 31, 2013					
	As Previously					
(Amounts in Thousands)	Reported	Adjustment	As Revised			
Deferred tax assets - current	_	\$ 460	\$ 460			
Total current assets	20,109	460	20,569			
Total assets	91,600	460	92,060			
Deferred tax liabilities	1,012	3,915	4,927			
Total long-term liabilities	18,947	3,915	22,862			
Total liabilities	42,014	3,915	45,929			
Accumulated deficit	(55,078)	(3,455)	(58,533)			
Total Perma-Fix Environmental Services, Inc.						
stockholders' equity	48,301	(3,455)	44,846			
Total stockholders' equity	48,301	(3,455)	44,846			
Total liabilities and stockholders' equity	91,600	460	92,060			

NOTE 4 PERMA-FIX MEDICAL S.A.

On April 4, 2014, the Company completed the acquisition of a controlling interest in a Polish Company, a publicly traded shell company on the NewConnect (alternative share market run by the Warsaw Stock Exchange) in Poland and sold to the Polish shell all of the shares of Perma-Fix Medical Corporation, a Delaware corporation ("PF Medical") organized by the Company (incorporated in January 2014). PF Medical's only asset was and is a worldwide license granted by the Company to use, develop and market the new process and technology developed by the Company in the production of Technetium-99 or "Tc-99m" for medical diagnostic applications. Since the acquired shell company (now named as Perma-Fix Medical S.A.) does not meet the definition of a business under ASC 805, "Business Combinations", the transaction was accounted for as a capital transaction. The primary purpose of PF Medical S.A. (which we own 64%) is to provide a financing vehicle for the development and marketing of its medical isotope ("Tc-99m") technology used in medical diagnostic testing for potential use throughout the world.

During August, 2014, PF Medical S.A. executed stock subscription agreements totaling approximately \$2,357,000 for 250,000 shares of its Series E Common Stock to non-U.S. persons in an offshore private placement under Regulation S promulgated under the Securities Act of 1933, as amended ("Securities Act"). In connection with this transaction, as of December 31, 2014, PF Medical S.A. has received approximately \$1,478,000 for 155,839 shares (before deduction for commissions and legal expenses relating to this offering of approximately \$242,000). PF Medical S.A. further expects to receive approximately \$636,000, prior to any commission, on or prior to July 31, 2015, for payment of 68,161 of such shares and another \$243,000 by December 2015, for payment of the remaining 26,000 of such shares. The unpaid shares as of December 31, 2014 in this transaction were accounted for as subscription receivables and are offset against non-controlling interest. If PF Medical S.A. is not paid for the 68,161 shares on or prior to July 31, 2015, PF Medical S.A. has the option to have the purchaser of such shares transfer all of its rights, title and interest in such shares to PF Medical S.A. or for PF Medical S.A. be paid for the 68,161 shares with shares in another publicly traded company.

NOTE 5 GOODWILL AND OTHER INTANGIBLE ASSETS

The following summarizes changes in the carrying amount of goodwill by reporting segments:

Goodwill (amounts in thousands)	 Treatment	Services	 Total
Balance as of December 31, 2012	\$ 13,691	\$ 15,495	\$ 29,186
Goodwill impairment	 (13,691)	 (14,165)	(27,856)
Balance as of December 31, 2013	 <u> </u>	 1,330	\$ 1,330
Goodwill impairment	_	(380)	(380)
Sale of SYA subsidary	<u> </u>	(950)	(950)
Balance as of December 31, 2014	\$ 	\$ _	\$

In 2014, the Company recorded an impairment charge of \$380,000 in connection with the sale of our SYA subsidiary on July 29, 2014, in accordance with ASC Topic 350 "Intangible – Goodwill and Other" ("ASC 350"). In 2013, we recorded a total goodwill impairment charge of \$27,856,000, which represented the total goodwill for each of the Treatment, SEC, and CHPRC reporting units of \$13,691,000 (Treatment Segment), \$13,016,000 (Services Segment) and \$1,149,000 (Services Segment), respectively, in accordance with ASC 350. The impairment charges recorded were non-cash in nature and did not affect our liquidity or cash flows from operating activities. Additionally, the goodwill impairment had no effect on our borrowing availability or covenants under our credit facility agreement.

The following table summarizes changes in the carrying amount of permits. No permit exists at our Services Segment.

Permit (amount in thousands)	Treatment
Balance as of December 31, 2012	\$ 16,799
PCB permit amortized (1)	(55)
Balance as of December 31, 2013	16,744
PCB permit amortized (1)	(55)
Permit in progress	20
Balance as of December 31, 2014	<u>\$ 16,709</u>

(1) Amortization for the one definite-lived permit capitalized in 2009 in connection with the authorization issued by the U.S. EPA to our DSSI facility to commercially store and dispose of radioactive Polychlorinated Biphenyles or "PCBs." This permit is being amortized over a ten year period in accordance with its estimated useful life. Net carrying value of this permit was approximately \$227,000 as of December 31, 2014.

The following table summarizes information relating to the Company's other intangible assets:

		December 31, 2014						December 31, 2013					
	Useful	Gr	oss				Net		Gross			N	Vet
	Lives	Carı	rying	Acc	umulated	Ca	arrying	C	arrying	Αc	cumulated	Carı	rying
	(Years)	Am	ount	Amortization		Amount		Amount		Amortization		Amount	
Intangibles (amount in thousands)													
Patent	8-18	\$	512	\$	(168)	\$	344	\$	514	\$	(155)	\$	359
Software	3		375		(319)		56		379		(258)		121
Non-compete agreement	1.2		265		(265)				265		(174)		91
Customer contracts	0.5		790		(790)		_		790		(790)		_
Customer relationships	12		3,370		(1,335)		2,035		3,370		(961)		2,409
Total		\$	5,312	\$	(2,877)	\$	2,435	\$	5,318	\$	(2,338)	\$	2,980

The intangible assets are amortized on a straight-line basis over their useful lives with the exception of customer relationships which are being amortized using an accelerated method.

The following table summarizes the expected amortization over the next five years for our definite-lived intangible assets (including the one definite-lived permit) discussed above:

Year	Amount (In thousands)					
2015	\$ 510					
2016	425					
2017	391					
2018	361					
2019	 280					
	\$ 1,967					

Amortization expense relating to intangible assets for the Company was approximately \$638,000 and \$745,000, for the years ended December 31, 2014 and 2013, respectively.

NOTE 6 CAPITAL STOCK, STOCK PLANS, WARRANTS, AND STOCK BASED COMPENSATION

Stock Option Plans

Effective July 29, 2003, the Company adopted the 2003 Outside Directors Stock Plan (the "2003 Plan"), which was approved by our stockholders at the Annual Meeting of Stockholders on such date. 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 re-election. The options granted generally have a vesting period of six months from the date of grant, with an 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% (based on option elected by each director) 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. At the Company's Annual Meeting of Stockholders held on September 18, 2014, the Company's stockholders approved the Third Amendment to the 2003 Outside Directors Stock Plan which increased the number of shares of our Common Stock authorized for issuance under the 2003 Plan from 600,000 to 800,000; (b) reduced proportionately the number of shares of Common Stock subject to the automatic option grant made to each eligible director upon initial election from 30,000 to 6,000 and the number of shares of Common Stock subject to automatic option grant made to each eligible director upon re-election from 12,000 to 2,400; and (c) allowed for such shares to be adjusted proportionally upon future stock splits or other share adjustment applicable to our Common Stock, On October 15, 2013, the Company effected a reverse stock split at a ratio of 1-for-5 of the Company's then outstanding Common Stock and shares of Common Stock issuable upon exercise of the then outstanding stock options and warrants; however, pursuant the terms of the 2003 Plan, the number of shares of Common Stock which each Eligible Director can purchase under the automatic option granted upon initial election or re-election was not adjusted proportionately to give effect to the reverse stock split.

Effective July 28, 2004, the Company 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 400,000 (as automatically adjusted to the reverse stock split on October 15, 2013, pursuant to the plan) shares of our Common Stock are authorized for issuance under this plan in the form of either Incentive or Non-Qualified Stock Options ("ISOs" or "NQSOs", respectively). 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. On July 28, 2014, the plan expired. No new options will be issued under this plan, but the options issued under this plan prior to the expiration date will remain in effect until their respectively maturity dates (which will be February 26, 2015).

On April 28, 2010, the Company adopted the 2010 Stock Option Plan, which was approved by our stockholders at the Company's Annual Meeting of Stockholders on September 29, 2010. The Plan authorizes an aggregate grant of 200,000 NQSOs and ISOs to officers and employees of the Company for the purchase of up to 200,000 shares of the Company's Common Stock (as automatically adjusted to the reverse stock split on October 15, 2013, pursuant to the plan). The term of each stock option granted will be fixed by the Compensation Committee, but no stock option will be exercisable more than ten years after the grant date, or in the case of an incentive stock option granted to a 10% stockholder, five years after the grant date. The exercise price of any incentive stock option granted under the Plan to an individual who is not a 10% stockholder at the time of the grant will not be less than the fair market value of the shares at the time of the grant, and the exercise price of any incentive stock option granted to a 10% stockholder shall not be less than 110% of the fair market value at the time of grant. The exercise price of any NQSOs granted under the Plan will not be less than the fair market value of the shares at the time of grant.

No employees exercised options during 2014 and 2013. During 2014, we issued a total of 2,577 shares of our Common Stock upon exercise of 2,577 NQSOs by an outside director from the 2003 Outside Director Stock Plan, at exercise price of \$2.79 per share which resulted in total proceeds of approximately \$7,200.

We issued a total of 67,335 and 69,041 shares of our Common Stock in 2014 and 2013, respectively, under our 2003 Outside Directors Stock Plan to our outside directors as compensation for serving on our Board of Directors ("Board"). As a member of the Board, each director elects to receive either 65% or 100% of the director's fee in shares of our Common Stock. The number of shares received is calculated based on 75% of the fair market value of our Common Stock determined on the business day immediately preceding the date that the quarterly fee is due. The balance of each director's fee, if any, is payable in cash.

Summary of the status of options under the Company's Stock Option Plans as of December 31, 2014 and 2013, and changes during the years ending on those dates is presented below:

			2014			2013				
		7	Veighted				7	Weighted		
			Average					Average		
]	Exercise]	Intrinsic			Exercise	I	ntrinsic
	Shares		Price		Value (a)	Shares		Price	V	Value (a)
2003 Outside Directors Stock Plan										
Balance at beginning of year	169,200	\$	9.18			163,200	\$	10.19		
Granted	16,800		3.70			24,000		2.89		
Exercised	(2,577)		2.79	\$	3,705	<u> </u>		_		
Forfeited/Expired	(14,400)		8.50			(18,000)		9.95		
Balance at end of year	169,023		8.79	\$	41,957	169,200		9.18	\$	5,850
Options exercisable at year end	152,223		9.35	\$	_	145,200		10.22	\$	_
2004 Stock Option Plan										
Balance at beginning of year	133,600	\$	10.73			182,100	\$	10.55		
Forfeited/Expired	(118,600)		11.19			(48,500)		10.05		
Balance at end of year	15,000		7.10	\$	_	133,600		10.73	\$	_
Options exercisable at year end	15,000		7.10	\$		133,600		10.73	\$	
2010 Stock Option Plan										
Balance at beginning of year	60,000	\$	7.85			60,000	\$	7.85		
Granted	55,000		5.00			_		_		
Forfeited/Expired	(60,000)		7.85			<u> </u>		_		
Balance at end of year	55,000		5.00	\$	_	60,000		7.85	\$	_
Options exercisable at year end	_			\$		40,000		7.85	\$	_

⁽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.

The summary of the Company's total Plans (as noted above) as of December 31, 2014, and changes during the period then ended are presented as follows:

			Weighted				
		Average					
			Remaining				
		Weighted	Contractual	Ag	gregate		
		Average	Term	In	trinsic		
	Shares	Exercise Price	(years)		Value		
Options outstanding January 1, 2014	362,800	\$ 9.53					
Granted	71,800	4.70					
Exercised	(2,577)	2.79		\$	3,705		
Forfeited/Expired	(193,000)	9.95					
Options outstanding End of Period (1)	239,023	\$ 7.81	4.9	\$	41,957		
Options Exercisable at December 31, 2014 ⁽¹⁾	167,223	\$ 9.15	4.2	\$	31,037		
Options Vested and expected to be vested at December 31, 2014	230,223	\$ 7.92	4.9	\$	41,957		

⁽¹⁾ Options with exercise prices ranging from \$2.79 to \$14.75

The summary of the Company's nonvested shares as of December 31, 2014, and changes during the period then ended are presented as follows:

		eighted Average Grant-Date Fair Value
Nonvested options January 1, 2014	44,000 \$	3.14
Granted	71,800	2.85
Vested	(24,000)	2.06
Forfeited	(20,000)	4.43
Nonvested at December 31, 2014	71,800 \$	2.85

Preferred Share Rights Plan

In May 2008, the Company 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.

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 initial purchase price of each Right was \$13.00, subject to adjustment and adjustment for the reverse stock split.

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 expire on May 2, 2018.

Warrants and Capital Stock Issuance for Debt

As of December 31, 2014, we have two Warrants outstanding which provide for the purchase of up to an aggregate of 70,000 shares of the Company's Common Stock at \$2.23 per share. The two Warrants were issued on August 2, 2013, as consideration of a \$3,000,000 loan received by the Company from Messrs. William N. Lampson and Robert L. Ferguson (the "Lenders"). Each Warrant provides for the Lender to purchase up to 35,000 shares of the Company's Common Stock at an exercise price of \$2.23 per share. The Warrants are exercisable six months from August 2, 2013 and expire on August 2, 2016. The Company also issued 90,000 shares of the Company's Common Stock to the Lenders. See Note 9 – "Long-Term Debt – Promissory Note and Installment Agreement" for further information and accounting treatment of the Warrants and Common Stock.

Shares Reserved

At December 31, 2014, we have reserved approximately 309,023 shares of Common Stock for future issuance under all of the option and warrant arrangements.

Stock Based Compensation

We follow ASC 718 to account for stock-based compensation. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values.

As discussed above, the Company has certain stock option plans which it awards NQSOs and ISOs to employees, officers, and outside directors. Stock options granted to employees have 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 July 10, 2014, the Company granted an aggregate of 55,000 ISOs from the Company's 2010 Stock Option Plan to certain employees, of which 45,000 ISOs were granted to the Company's Chief Operating Officer (who was appointed March 20, 2014). The 55,000 ISOs granted were for a contractual term of six years with one-third yearly vesting over a three year period. The exercise price of the ISOs was \$5.00 per share, which was equal to our closing stock price as reported on Nasdaq on the date of grant.

On September 18, 2014, the Company granted an aggregate of 16,800 NQSOs from the Company's 2003 Outside Directors Stock Plan to our seven re-elected directors at our Annual Meeting of Stockholders held on September 18, 2014. The NQSOs granted were for a contractual term of ten years with a vesting period of six months. The exercise price of the NQSOs was \$3.70 per share, which was equal to our closing stock price the day preceding the grant date, pursuant to the 2003 Outside Directors Stock Plan.

As of December 31, 2014, the Company had an aggregate of 70,000 employee stock options outstanding (from the 2004 and 2010 Stock Option Plans), of which 15,000 are vested. The weighted average exercise price of the 15,000 outstanding and fully vested employee stock options is \$7.10 with a remaining weighted contractual life of 0.2 years. Additionally, the Company had an aggregate of 169,023 outstanding director stock options (from the 2003 Outside Directors Stock Plans), of which 152,223 are vested. The weighted average exercise price of the 152,223 outstanding and fully vested director stock options is \$9.35 with a remaining weighted contractual life of 4.6 years.

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 options granted during in 2014 and 2013 and the related assumptions used in the Black-Scholes option model used to value the options granted were as follows (No options were granted to employees during 2013):

	Empio	yee Stock
	Option	n Granted
	For Ye	ear Ended
	2	014
Weighted-average fair value per share	\$	2.88
Risk -free interest rate (1)		1.91%
Expected volatility of stock (2)		61.84%
Dividend yield		None
Expected option life (years) (3)		6.0

	Outside	outside Director Stock Options Granted					
		For Year Ended					
	2	2014		2013			
Weighted-average fair value per share	\$	2.73	\$	2.06			
Risk -free interest rate (1)		2.63%		2.66% - 2.92%			
Expected volatility of stock (2)		59.59%		58.88% - 59.76%			
Dividend yield		None		None			
Expected option life (in years) (3)		10.0		10.0			

- (1) 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.
- (2) The expected volatility is based on historical volatility from our traded Common Stock over the expected term of the option.
- (3) The expected option life is based on historical exercises and post-vesting data.

The following table summarizes stock-based compensation recognized for the fiscal year 2014 and 2013.

		Year Ended					
	2014			2013			
Employee Stock Options	\$	(14,000)	\$	80,000			
Director Stock Options		48,000		45,000			
Total	\$	34,000	\$	125,000			

The Company recognized stock-based compensation expense using a straight-line amortization method over the requisite service period, which is the vesting period of the stock option grant. ASC 718 requires that stock based compensation expense be based on options that are ultimately expected to vest. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company has generally estimated forfeiture rates based on historical trends of actual forfeitures. When actual forfeitures vary from our estimates, the Company recognizes the difference in compensation expense in the period the actual forfeitures occur or when options vest. The total stock-based compensation expense for the twelve months ended December 31, 2014 included a reduction in expense of approximately \$54,000 resulting from the forfeiture of options by Mr. Jim Blankenhorn, our previous COO, who voluntarily resigned from the Company effective March 28, 2014. The COO was granted an option from the Company's 2010 Stock Option Plan on July 25, 2011, which provided for the purchase of up to 60,000 shares of the Company's Common Stock at \$7.85 per share. The options had a six year contractual term with one-third yearly vesting over a three year period. As of December 31, 2014, the Company has approximately \$145,000 of total unrecognized compensation cost related to unvested options, of which \$73,000 is expected to be recognized in 2015, \$53,000 in 2016, with the remaining \$19,000 in 2017.

NOTE 7

PREFERRED STOCK ISSUANCE AND CONVERSION

Series B Preferred Stock

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 the former stockholders of M&EC at any time for the per share price of \$1.00. 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 \$803,000 since July 2002, of which \$64,000 was accrued in each of the years ended December 31, 2003 to 2014 and is included within Other long term liabilities of the Consolidated Balance Sheet.

NOTE 8

DIVESTITURES AND DISCONTINUED OPERATIONS

Divestiture of SYA

On July 29, 2014, the Company completed the sale of our wholly-owned subsidiary, SYA. SYA was a professional engineering and environmental consulting services company and was included in the Company's Services Segment. In accordance with ASU 2014-08, the divestiture of SYA has been reported in continuing operations for all periods presented. The purchaser of SYA paid approximately \$1,300,000 for 100% of the capital stock and \$60,000 as an adjustment to the purchase price for excess working capital with \$50,000 of such consideration placed in escrow for a period of one year to cover any claims by the purchaser for indemnification for certain limited types of losses incurred by the purchaser following the closing. The proceeds received were used to pay down our revolver and used for working capital. As of December 31, 2014, expenses related to the sale of SYA totaled approximately \$96,000. The Company recorded a loss on the sale of SYA of approximately \$53,000 (net of taxes of \$0), which included a final excess working capital adjustment of approximately \$42,000. The loss on the sale of \$53,000 was included in "other" expense on our Consolidated Statements of Operations. In 2013, SYA had net revenues of \$2,564,736 and a net loss of \$621,288.

Discontinued Operations

The Company's discontinued operations consist of all our subsidiaries included in our Industrial Segment: (1) subsidiaries divested in 2011 and prior, (2) two previously closed locations, and (3) our PFSG facility.

On August 14, 2013, our PFSG facility incurred fire damage which left it non-operational. Certain equipment and portions of the building structures were damaged, which resulted in the Company recognizing an impairment charge of fixed assets for approximately \$130,000. The Company carries general liability, pollution, property and business interruption, and workers compensation insurance with a maximum deductible of approximately \$300,000. Total incurred costs through December 31, 2013 relating to the fire, inclusive of the impairment charge, was \$6,859,000. For the year ended December 31, 2013, the Company had received \$3,664,000 of insurance proceeds and recorded an insurance recovery receivable of \$2,995,000 as we had determined that receipt of reimbursement of these expenses from our insurer was probable in accordance with its insurance policies.

On June 20, 2014, the Company entered into a settlement agreement and release with one of its insurance carriers, resulting in receipt of approximately \$3,850,000 in insurance settlement proceeds, which was used to pay down the Company's Revolving Credit facility. On November 10, 2014, the Company received approximately \$391,000 from another insurance carrier. Additionally, \$1,500,000 of insurance proceeds were paid directly to the vendors working on the clean-up of the facility.

The table below shows the total costs incurred and insurance proceeds received through December 31, 2014 relating to the fire:

	Business				
	Property &	Int	terruption and		
	Equipment		Other		Total
Costs incurred through December 31, 2014	\$ 4,507,000	\$	4,096,000	\$	8,603,000
Insurance proceeds through December 31, 2014 (1)	7,477,000		4,968,000		12,445,000
Gain on insurance recoveries	\$ 2,970,000	\$	872,000	\$	3,842,000

(1) Inclusive of \$1,500,000 paid directly to vendors

In 2014, the Company elected not to rebuild the PFSG facility, which resulted in a triggering event under ASC 360. Based on our long-lived asset impairment test, the Company concluded that tangible asset impairments existed for PFSG and therefore recorded approximately \$723,000 of asset impairment charges for the twelve months ended December 31, 2014, which is included in "Income (loss) from discontinued operations, net of taxes" in the Consolidated Statements of Operations. No remaining intangible assets exist at PFSG at December 31, 2014. The Company continues to market our PFSG facility for sale.

The following table summarizes the results of discontinued operations for the years ended December 31, 2014 and 2013. Income tax expense for 2013 included a charge to tax expense of approximately \$1,164,000 to provide a full valuation allowance on our net deferred tax assets.

Amount in Thousands	2	014	2013
Net revenue	\$	— \$	1,789
Interest expense		(6)	(27)
Operating (loss) income from discontinued operations		(2,108)	59
Gain on insurance settlement of discontinued operations		3,842	_
Income tax expense		46	1,627
Income (loss) from discontinued operations		1,688	(1,568)

Assets related to discontinued operations totaled \$701,000 and \$4,481,000 as of December 31, 2014, and 2013, respectively, and liabilities related to discontinued operations totaled \$2,727,000 and \$4,596,000 as of December 31, 2014 and 2013, respectively.

The following table presents the major classes of assets and liabilities of discontinued operations that are classified as held for sale as of December 31, 2014 and December 31, 2013. The held for sale assets and liabilities may differ at the closing of a sale transaction from the reported balances as of December 31, 2014:

	Dece	mber 31,	December 31,		
(Amounts in Thousands)	2	2014	2013		
Current assets					
Accounts receivable, net (1)	\$	_	\$ 20		
Inventories		_	37		
Other assets		6	3,018		
Total current assets		6	3,075		
Long-term assets					
Property, plant and equipment, net (2)		644	1,330		
Total long-term assets		644	1,330		
Total assets held for sale	\$	650	\$ 4,405		
Current liabilities					
Accounts payable	\$	932	\$ 2,716		
Accrued expenses and other liabilities		193	237		
Note payable			35		
Total current liabilities		1,125	2,988		
Total liabilities held for sale	\$	1,125	\$ 2,988		

⁽¹⁾ net of allowance for doubtful accounts of \$0 and \$13,000 as of December 31, 2014 and December 31, 2013, respectively.

⁽²⁾ net of accumulated depreciation of \$0 and \$45,000 as of December 31, 2014 and 2013, respectively.

The following table presents the major classes of assets and liabilities of discontinued operations that are not held for sale as of December 31, 2014 and December 31, 2013:

(Amounts in Thousands)		ember 31, 2014	D	ecember 31, 2013
Current assets		2014		2013
Other assets	\$	14		39
Total current assets	-	14		39
Long-term assets				
Property, plant and equipment, net (1)		37		37
Total long-term assets		37		37
Total assets not held for sale	\$	51	\$	76
Current liabilities				
Accounts payable	\$	15	\$	15
Accrued expenses and other liabilities		269		342
Environmental liabilities		728		649
Total current liabilities		1,012		1,006
Long-term liabilities				
Closure liabilities		302		220
Environmental liabilities		288		382
Total long-term liabilities		590		602
Total liabilities not held for sale	\$	1,602	\$	1,608

⁽¹⁾ net of accumulated depreciation of \$10,000 and \$10,000 as of December 31, 2014 and 2013, respectively

Environmental Liabilities

We have four remediation projects, which are currently in progress at our Perma-Fix of Dayton, Inc. ("PFD"), Perma-Fix of Memphis, Inc. ("PFM" – closed location), PFSG, and Perma-Fix of Michigan, Inc. ("PFMI" – closed location) subsidiaries. The Company divested PFD in 2008; however, the environmental liability of PFD was retained by the Company upon the divestiture of PFD. These remediation projects principally entail the removal/remediation of contaminated soil and, in most 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 Resource Conservation and Recovery Act ("RCRA") permitted facilities, and as a result, the remediation activities are closely reviewed and monitored by the applicable state regulators.

At December 31, 2014, we had total accrued environmental remediation liabilities of \$1,016,000, of which \$728,000 is recorded as a current liability, which reflects a decrease of \$15,000 from the December 31, 2013 balance of \$1,031,000. The net decrease of \$15,000 represents payments on remediation projects at the PFSG location. The December 31, 2014 current and long-term accrued environmental liabilities at December 31, 2014 are summarized as follows (in thousands):

	Current Accrual		Long-term Accrual		Total	
PFD	\$ 3	\$	66	\$	69	
PFM	30		15		45	
PFSG	618		207		825	
PFMI	 77				77	
Total Liability	\$ 728	\$	288	\$	1,016	

NOTE 9 LONG-TERM DEBT

Long-term debt consists of the following at December 31, 2014 and 2013:

(Amounts in Thousands)		December 31, 2014		December 31, 2013	
Revolving Credit facility dated October 31, 2011, borrowings based upon eligible					
accounts receivable, subject to monthly borrowing base calculation, variable interest					
paid monthly at our option of prime rate (3.25% at December 31, 2014) plus 2.0% or					
London Interbank Offer Rate ("LIBOR") plus 3.0%, balance due October 31, 2016.					
Effective interest rate for 2014 and 2013 was 4.1% and 3.7%, respectively. (1)	\$	_	\$	_	
Term Loan dated October 31, 2011, payable in equal monthly installments of principal					
of \$190, balance due 0n October 31, 2016, variable interest paid monthly at option of					
prime rate plus 2.5% or LIBOR plus 3.5%. Effective interest rate for 2014 and 2013					
was 3.7% and 3.9%, respectively. (1)		8,952		11,238	
Promissory Note dated February 12, 2013, payable in monthly installments of \$10,					
which includes interest and principal, starting February 28, 2013, interest accrues at					
annual rate of 6.0%, balance due January 31, 2015. (2)		10		127	
Promissory Note dated August 2, 2013, payable in twelve monthly installments of					
interest only, starting September 1, 2013 and twenty-four monthly installments of					
\$125 in principal plus accrued interest. Interest accrues at annual rate of 2.99%. (2) (3)		2,363		2,777	
Capital leases		47 (4)		141 (5)	
		11,372		14,283	
Less current portion of long-term debt		3,733		2,876	
Less long-term debt related to assets held for sale				35	
	\$	7,639	\$	11,372	

⁽¹⁾ Our Revolving Credit facility is collateralized by our accounts receivable and our Term Loan is collateralized by our property, plant, and equipment.

Revolving Credit and Term Loan Agreement

The Company entered into an Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated October 31, 2011, ("Agreement"), with PNC Bank, National Association ("PNC"), acting as agent and lender. The Agreement, as amended ("Amended Loan Agreement"), provides us with the following Credit Facility: (a) up to \$12,000,000 revolving credit facility (which was reduced from \$18,000,000 pursuant to Amendment 4, dated April 14, 2014.) ("Revolving Credit"), subject to the amount of borrowings based on a percentage of eligible receivables (as defined) and (b) a term loan ("Term Loan") of \$16,000,000, which requires monthly installments of approximately \$190,000 (based on a seven-year amortization). As a result of the reduction in the maximum borrowing Revolving Credit noted above, the Company recorded approximately \$37,000 in loss on debt modification (included in interest expense) during the second quarter of 2014 in accordance with ASC 470-50, "Debt – Modification and Extinguishment."

In addition to the reduction to our Revolving Credit facility, Amendment 4 also waived the Company's fixed charge coverage ratio testing requirement for the first quarter of 2014, revised the methodology in calculating the Company's quarterly fixed charge coverage ratio for the second to fourth quarters of 2014 and changed the minimum quarterly fixed charge coverage ratio requirement of 1:25 to 1:00 to 1:15 to 1:00 in 2014, among other things. As a condition of the Amendment 4, we agreed to pay PNC a fee of \$30,000 which is being amortized over the remaining term of the Amended Loan Agreement.

⁽²⁾ Uncollateralized note.

⁽³⁾ Net of debt discount of (\$137,000) and (\$223,000) for December 31, 2014 and December 31, 2013, respectively. See "Promissory Notes" below for additional information.

⁽⁴⁾ One capital lease payable through November 2016, interest at rate of 6.0%.

⁽⁵⁾ Capital leases payable 2014 to 2016, interest at rates ranging from 5.3% to 7.1%.

On July 25, 2014, the Company entered into Amendment 5 to the Amended Loan Agreement with PNC. This Amendment added our Perma-Fix of Canada, Inc. subsidiary as a guarantor under our credit facility. On July 28, 2014, the Company entered into Amendment 6 to the Amended Loan Agreement. This Amendment authorized the Company to sell our SYA subsidiary, released a hold by PNC which allows the Company to use the \$3,850,000 insurance settlement proceeds received on June 30, 2014 by our PFSG subsidiary for working capital purposes but placed an indefinite reduction on our borrowing availability by \$1,500,000. As a condition of Amendment 6, we agreed to pay PNC a fee of \$15,000, which is being amortized over the term of the Amended Loan Agreement. All other terms of the Amended Loan Agreement remain principally unchanged.

The Amended Loan Agreement terminates as of October 31, 2016, unless sooner terminated. We may terminate the Amended Loan Agreement upon 90 days' prior written notice and upon payment in full of our obligations under the Amended Loan Agreement. No early termination fee shall apply if we pay off our obligations under the Amended Loan Agreement after October 31, 2013.

Our Credit Facility with PNC contains certain financial covenants, along with customary representations and warranties. A breach of any of these financial covenants, unless waived by PNC, could result in a default under our credit facility allowing our lender to immediately require the repayment of all outstanding debt under our credit facility and terminate all commitments to extend further credit. Our Amended Loan Agreement prohibits us to declare, pay, or make any dividend distribution on any shares of our Common Stock or Preferred Stock. As discussed above, the fixed charge coverage ratio requirement for the first quarter of 2014 was waived by PNC. The Company met its fixed charge coverage ratio in each of the second to fourth quarters of 2014; however, if the Company fails to meet the minimum quarterly fixed charge coverage ratio requirement in any of the quarters in 2015 and PNC does not waive the non-compliance or further revise our covenant so that the Company is 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 borrowings, the Company may not have sufficient liquidity to repay our debt under our Credit Facility and other indebtedness.

As of December 31, 2014, the availability under our revolving credit was \$7,402,000, based on our eligible receivables and includes the indefinite reduction of borrowing availability of \$1,500,000 as discussed above.

Promissory Notes and Installment Agreements

On February 12, 2013, the Company entered into an unsecured promissory note ("the new note") with Timios National Corporation ("TNC" and formerly known as Homeland Security Capital Corporation) in the principal amount of approximately \$230,000 as a result of a settlement with TNC in connection with certain claims that the Company asserted against TNC for breach of certain representations and covenant subsequent to our acquisition of Safety & Ecology Holdings Corporation and its subsidiaries (collectively known as Safety and Ecology Corporation or "SEC") from TNC on October 31, 2011 (See payment terms of this promissory note in the table above). The new note was entered into as a result of the settlement in which a previously issued promissory note (with principal balance of \$1,460,000 at February 12, 2013) that the Company entered into with TNC as partial consideration of the purchase price of SEC was cancelled and terminated and replaced with the new note. The new note provides the Company the right to prepay such at any time without interest or penalty.

In the event of default of the new note payable to TNC by the Company, TNC has the option to convert the unpaid portion of the new note into a number of whole shares of the Company's restricted Common Stock. The number of shares of the Company's restricted Common Stock issuable is determined by the principal amount owing under the new note at the time of default plus all accrued and unpaid interest and expenses (as defined) divided by the average of the closing price per share of the Company's Common Stock as reported by the primary national securities exchange on which the Company's Common Stock is traded during the 30 consecutive trading day period ending on the trading day immediately prior to receipt by the Company of TNC's written notice of its election to receive the Company's restricted Common Stock as a result of the event of default by the Company, with the number of shares of the Company's Common Stock issuable upon such default subject to certain limitations.

On August 2, 2013, the Company completed a lending transaction with Messrs. Robert Ferguson and William Lampson ("collectively, the "Lenders"), whereby the Company borrowed from the Lenders the sum of \$3,000,000 pursuant to the terms of a Loan and Security Purchase Agreement and promissory note (the "Loan") (See payment terms of this promissory note in the table above). The Lenders are stockholders of the Company, having received shares of our Common Stock in connection with the acquisition of our PFNWR subsidiary in June 2007. The proceeds from the Loan were used for general working capital purposes. In connection with this Loan, the Lenders entered into a Subordination Agreement dated August 2, 2013, with the Company's Credit Facility lender, whereby the Lenders agreed to subordinate payment under the Loan, and agreed that the Loan will be junior in right of payment to the Credit Facility in the event of default or bankruptcy or other insolvency proceeding by the Company. As consideration for the Company receiving the Loan, the Company issued a Warrant to each Lender to purchase up to 35,000 shares of the Company's Common Stock at an exercise price based on the closing price of the Company's Common Stock at the closing of the transaction which was determined to be \$2.23. The Warrants are exercisable six months from August 2, 2013 and expire on August 2, 2016. The fair value of the Warrants was estimated to be approximately \$59,000 using the Black-Scholes option pricing model with the following assumptions: 55.54% volatility, risk free interest rate of .59%, an expected life of three years and no dividends. As further consideration for the Loan, the Company also issued an aggregate 90,000 shares of the Company's Common Stock, with each Lender receiving 45,000 shares. The Company determined the fair value of the 90,000 shares of Common Stock to be approximately \$200,000 which was based on the closing price of the stock of \$2.23 per share on August 2, 2013. The fair value of the Warrants and Common Stock and the related closing fees incurred from the transaction were recorded as a debt discount, which is being amortized using the effective interest method over the term of the loan as interest expense - financing fees. Mr. Robert Ferguson serves as an advisor to the Company's Board of Directors (see Note 16 - "Related Party Transaction - Mr. Robert Ferguson" for further information on Mr. Ferguson).

In the event of default of the promissory note by the Company, the Lenders have the option to receive a cash payment equal to the amount of the unpaid principal balance plus all accrued and unpaid interest ("Payoff Amount"), or the number of whole shares of the Company's Common Stock equal to the Payoff Amount divided by the closing bid price of the Company's Common Stock on the date immediately prior to the date of default of the promissory note, as reported by the primary national securities exchange on which the Company's Common Stock is traded. The maximum number of payoff shares is restricted to less than 20% of the outstanding equity.

The following table approximates amount of the maturities of long-term debt maturing in future years as of December 31, 2014 of our continuing operations (excludes debt discount of \$137,000) (in thousands):

Year ending December 31:		
2015	\$	3,819
2016		7,690
Total	\$ 1	1,509

NOTE 10 ACCRUED EXPENSES

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

	2014		 2013
Salaries and employee benefits	\$	2,935	\$ 3,473
Accrued sales, property and other tax		410	370
Interest payable		22	27
Insurance payable		546	726
Other		627	 605
Total accrued expenses	<u>\$</u>	4,540	\$ 5,201

The Company has an individual Management Incentive Plan ("MIP") for each of our Chief Executive Officer, Chief Financial Officer and new Chief Operating Officer ("COO" - appointed on March 20, 2014) which awards cash compensation based on achievement of certain performance targets for fiscal year 2014. No compensation was accrued for in 2014 under each MIP as no amount was payable under each of the MIPs. No performance incentive payments were made under any of the MIPs in 2013.

NOTE 11 ACCRUED CLOSURE COSTS AND ASSET RETIREMENT OBLIGATIONS ("ARO")

Accrued closure costs represent our estimated environmental liability to clean up our fixed-based regulated facilities as required by our permits, in the event of closure. Changes to reported closure liabilities for the years ended December 31, 2014 and 2013, were as follows:

Amounts in thousands	
Balance as of December 31, 2012	\$ 11,349
Accretion expense	272
Adjustment to closure liability	(6,399)
Balance as of December 31, 2013	5,222
Accretion expense	286
Balance as of December 31, 2014	\$ 5,508

The adjustment in 2013 was made principally to record the obligation using appropriate discount rates. The obligations were previously based on undiscounted values. The associated assets were also adjusted to reflect this change. The net impact of the adjustment to pre-tax loss from operations was approximately (\$448,000) in 2013.

The reported closure asset or ARO, is reported as a component of "Net Property and equipment" in the Consolidated Balance Sheet for the years ended December 31, 2014 and 2013 as follows:

Amounts in thousands		
Balance as of December 31, 2012	\$	9,080
Adjustment to closure and post-closure asset		(5,830)
Amortization of closure and post-closure asset		(289)
Balance as of December 31, 2013		2,961
Amortization of closure and post-closure asset		(91)
Balance as of December 31, 2014	<u>\$</u>	2,870

The adjustment to the ARO for 2013 was due to the adjustment made to our closure accrual as discussed above.

NOTE 12 INCOME TAXES

The components of current and deferred federal and state income tax expense (benefit) for continuing operations for the years ended December 31, consisted of the following (in thousands):

	20)14	2013
Federal income tax (benefit) expense - current	\$	(121) \$	(144)
Federal income tax expense (benefit) - deferred		530	(1,989)
State income tax (benefit) expense - current		(1)	158
State income tax expense - deferred		9	1,350
Total income tax expense (benefit)	\$	417 \$	(625)

We had temporary differences and net operating loss carry forwards from both our continuing and discontinued operations, which gave rise to deferred tax assets and liabilities at December 31, 2014 and 2013 as follows (in thousands):

		(Revised)
Deferred tax assets:	2014	2013
Net operating losses	\$ 4,611	\$ 6,001
Environmental and closure reserves	2,520	2,387
Other	3,129	3,626
Deferred tax liabilities:		
Depreciation and amortization	(2,322	(3,762)
Goodwill and indefinite lived intangible assets	(5,006	(4,467)
Investment	(25	(50)
Prepaid expenses	(17	(20)
	2,890	3,715
Valuation allowance	(7,896	(8,182)
Net deferred income tax liabilities	(5,006	(4,467)

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

	2014		2013	
Tax benefit at statutory rate	\$	(864)	\$ ((11,880)
State tax benefit, net of federal benefit		(66)		(102)
Permanent items		137		166
Non-deductible Goodwill		129		9,471
Difference in foreign rate		98		
Reversal of deferred tax assets for divested facility (SYA)		99		_
Reversal of deferred tax assets on stock compensation		593		
Other		75		125
Reserve for uncertain tax positions		_		180
Increase in valuation allowance		216		1,415
Income tax expense (benefit)	\$	417	\$	(625)

The provision for income taxes is determined in accordance with ASC 740, "Income Taxes". Deferred income 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 income 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 income tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

The Company regularly assesses the likelihood that the deferred tax asset will be recovered from future taxable income. The Company considers projected future taxable income and ongoing tax planning strategies, then records a valuation allowance to reduce the carrying value of the net deferred income taxes to an amount that is more likely than not to be realized. In 2014 and 2013, we determined that it was more likely than not that approximately \$7,896,000 and \$8,182,000, respectively, of deferred income tax assets would not be realized, and as such, a full valuation allowance was applied against those deferred income tax assets. Our valuation allowance increased by \$216,000 and \$1,415,000 for the years ended December 31, 2014 and 2013, respectively.

We have estimated net operating loss carryforwards (NOLs) for federal and state income tax purposes of approximately \$5,553,000 and \$50,224,000, respectively, as of December 31, 2014. These net operating losses can be carried forward and applied against future taxable income, if any, and expire in various amounts starting in 2021. However, as a result of various stock offerings and certain acquisitions, which in the aggregate constitute a change in control, the use of these NOLs will be limited under the provisions of Section 382 of the Internal Revenue Code of 1986, as amended. Additionally, NOLs may be further limited under the provisions of Treasury Regulation 1.1502-21 regarding Separate Return Limitation Years.

The Company accounts for uncertainties in income taxes pursuant to ASC 740. A reconciliation of the beginning and ending amount of our unrecognized tax expense is summarized as follows (in thousands):

	2	2014	2013
Balances at beginning of year	\$	180	_
(Reduction) addition related to prior year tax position		(180)(1)	180 (1)
Balances at end of the year		<u> </u>	180

(1) Includes \$26,000 in interest and penalties.

The tax years 2012 and 2013 remain open to examination by taxing authorities in the jurisdictions in which the Company operates.

As of December 31, 2014 and 2013, the Company had approximately \$85,000 and \$183,000 of federal income tax payable, respectively.

NOTE 13

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

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

Insurance

The Company has a 25-year finite risk insurance policy entered into in June 2003 with American International Group, Inc. ("AIG"), which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. The policy, as amended, provides for a maximum allowable coverage of \$39,000,000 and has available capacity to allow for annual inflation and other performance and surety bond requirements. All of the required payments for this finite risk insurance policy, as amended, were made by 2012. As of December 31, 2014, our financial assurance coverage amount under this policy totaled approximately \$38,675,000. The Company has recorded \$15,429,000 in our sinking fund related to the policy noted above in other long term assets on the accompanying consolidated balance sheets, which includes interest earned of \$958,000 on the sinking fund as of December 31, 2014. Interest income for twelve months ended December 31, 2014, was approximately \$20,000. If the Company so elects, AIG is obligated to pay us an amount equal to 100% of the sinking fund account balance in return for complete release 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, the Company entered into a second finite risk insurance policy for our PFNWR facility with AIG. The policy provided an initial \$7,800,000 of financial assurance coverage with an annual growth rate of 1.5%, which at the end of the four year term policy, provides maximum coverage of \$8,200,000. The Company has made all of the required payments on this policy. As of December 31, 2014, the Company has recorded \$5,905,000 in our sinking fund related to this policy in other long term assets on the accompanying consolidated balance sheets, which includes interest earned of \$205,000 on the sinking fund as of December 31, 2014. Interest income for the twelve months ended December 31, 2014 was approximately \$7,000. This policy is renewed annually at the end of the four year term with a nominal fee for the variance between the coverage requirement and the sinking fund balance. The Company has renewed this policy annually from 2011 to 2014 (with fees ranging from \$41,000 to \$46,000 annually). All other terms of the policy remain substantially unchanged.

Operating Leases

The Company leases certain facilities and equipment under operating leases. The following table lists future minimum rental payments as of December 31, 2014 under these leases for our continuing operations (in thousands):

Year ending December 31:					
2015		679			
2016		680			
2017		670			
2018		194			
beyond 2018		<u> </u>			
Total	\$	2,223			

Total rent expense was \$1,158,000 and \$1,381,000 for the years ended 2014 and 2013, respectively, for our continuing operations. These amounts included payments on non-cancelable operating leases of approximately \$826,000 and \$913,000 for the years ended 2014 and 2013, respectively. The remaining rent expense was for non-contractual monthly and daily rentals of specific use vehicles, machinery and equipment.

NOTE 14 PROFIT SHARING PLAN

We adopted a 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 four quarterly open periods of January 1, April 1, July 1, and October 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. The Company, at its discretion, may make matching contributions of 25% based on the employee's elective contributions. Company contributions vest over a period of five years. Effective June 15, 2012, the Company suspended its matching contribution in an effort to reduce costs in light of the economic environment. The Company intends to contribute matching funds again effective January 1, 2015.

NOTE 15 BUSINESS ACQUISITION (SETTLEMENT AND RELEASE AGREEMENT)

On February 12, 2013, the Company entered into a Settlement and Release Agreement ("Settlement Agreement") with Timios National Corporation ("TNC" – formerly known as Homeland Security Capital Corporation) (the Company and TNC are collectively known as the "Parties"), in connection with the settlement of certain claims the Company made against TNC, subsequent to the acquisition of Safety and Ecology Holdings Corporation ("SEHC") and its subsidiaries (collectively known as Safety and Ecology Corporation or "SEC") on October 31, 2011 from TNC. The Settlement Agreement resolved (collectively, the "Subject Claims"): (a) the Disputed Claims, and (b) any other claim arising under the Stock Purchase Agreement, dated July 15, 2011 ("Purchase Agreement") with respect to a breach of (i) the representations and warranties of the Parties contained in the Purchase Agreement, and (ii) certain covenants contained in the Purchase Agreement. Pursuant to the Settlement Agreement, the Parties agreed as follows:

- a promissory note issued to TNC ("October Note" with original principal balance of \$2,500,000 which was part consideration of the acquisition), with a principal balance of approximately \$1,460,000 (at February 12, 2013), was cancelled, terminated and rendered null and void;
- the Company issued to TNC a new, two-year, non-negotiable, unsecured promissory note in the principal amount of approximately \$230,000 (the "New Note") in replacement of the October Note. The New Note bears an annual interest rate of 6%, payable in 24 monthly installments of principal and interest of approximately \$10,000, with first payment due February 28, 2013;
- the remaining escrow balance of \$500,000 was released to TNC. \$2,000,000 was deposited into an escrow account as partial consideration of the purchase price and was established to satisfy any claims that we may have against TNC for indemnification pursuant to the Purchase Agreement. TNC and SEHC further agreed that if certain conditions were not met by December 31, 2011, relating to a certain contract, then the Company could withdraw \$1,500,000 from the amount deposited into the escrow. On January 10, 2012, we received \$1,500,000 from the escrow as certain conditions were not met under this certain contract as of December 31, 2011;
- the Parties terminated all of their rights and obligations to indemnification under the Purchase Agreement, except with respect to TNC's covenants relating to non-compete, non-solicitation of customers and employees, confidentiality, and related remedies which will continue in full force and effect in accordance with the terms of the Purchase Agreement (the "Continuing Covenants");
- the Parties terminated their rights and obligations with respect to (i) the representations, warranties, and covenants contained in the Purchase Agreement, except for the Continuing Covenants; and
- the Company terminated its contractual right to offset amounts owing to TNC under the Purchase Agreement to satisfy claims against TNC.

In connection with the resolution of the Disputed Claims, we also entered into a Settlement and Release Agreement and Amendment to Employment Agreement ("Leichtweis Settlement") with Christopher Leichtweis, our President of SEC, who voluntarily terminated and retired from all positions of the Company, effective May 24, 2013 (see discussion under Note 16 – "Related Party Transactions – Christopher Leichtweis" for a discussion of the Leichtweis Settlement and his voluntary termination and retirement).

NOTE 16 RELATED PARTY TRANSACTIONS

Related Party Transactions

Mr. Robert Schreiber, Jr.

During March 2011, the Company entered into a five-year lease with Lawrence Properties LLC for certain office and warehouse space used and occupied by SYA, a wholly owned subsidiary of the Company until its sale by the Company on July 29, 2014. Lawrence Properties is owned by Robert Schreiber, Jr., the President of SYA until his resignation on July 29, 2014, and Mr. Schreiber's spouse. Under the lease, which commenced June 1, 2011, the Company paid monthly rent of approximately \$11,400. Rent payment under this lease was approximately \$124,000 and \$72,000 for the years ended December 31, 2014 and 2013, respectively. In connection with the Company's sale of SYA, the lease was terminated on July 29, 2014.

Mr. David Centofanti

Mr. David Centofanti serves as our Director of Information Services. For such services, he received yearly compensation of \$163,000 in 2014 and 2013. Mr. David Centofanti is the son of our Chief Executive Officer, President and a Board member, Dr. Louis F. Centofanti.

Mr. Robert L. Ferguson

Mr. Robert L. Ferguson serves as an advisor to the Company's Board of Directors ("Board"). Mr. Ferguson previously served as a Board member from June 2007 to February 2010 and again from August 2011 to September 2012. As an advisor to the Company's Board, Mr. Ferguson is paid \$4,000 monthly plus reasonable expenses. For such services, Mr. Ferguson received compensation of approximately \$56,000 and \$52,000 for the years ended December 31, 2014 and 2013, respectively. On August 2, 2013, the Company completed a lending transaction with Messrs. Robert Ferguson and William Lampson ("collectively, the "Lenders"), whereby the Company borrowed from the Lenders the sum of \$3,000,000 pursuant to the terms of a Loan and Security Purchase Agreement and promissory note (the "Loan") (see Note 9 – "Long Term Debt – Promissory Notes and Installment Agreements" for further details and terms of this Loan).

Mr. John Climaco

On October 17, 2014, the Company's Compensation Committee and the Board of Directors, with Mr. Climaco abstaining, approved a consulting agreement with John Climaco (a director of the Company). The Company and Mr. Climaco entered into the consulting agreement on October 17, 2014. Mr. Climaco is also is a member of the Strategic Advisory Committee of the Board of Directors.

Pursuant to the consulting agreement, the services to be provided by the Consultant shall include, among other things, the following:

- Review the Company's operations to restructure costs to render the Company more competitive;
- Evaluate all functions, including but not limited to sales, marketing, accounting, operations, and executive management as well as cost structures for each facility;
- Assist in the development of the Company's strategy opportunity and other initiatives, including but not limited to the development of the Company's medical isotope technology; and
- Other assignments as determined by the Board.

In his capacity as a consultant under the consulting agreement, Mr. Climaco shall be paid \$22,000 per month (starting September 2014) plus reasonable expenses. The agreement shall continue unless terminated by either party for any reason or no reason by providing thirty (30) days written notice to the other party. For his services under the consulting agreement, Mr. Climaco received approximately \$107,000 in 2014.

Christopher Leichtweis

The Company is obligated to make lease payments of approximately \$29,000 per month through June 2018, pursuant to a Lease Agreement, dated June 1, 2008 (the "Lease"), between Leichtweis Enterprises, LLC, as lessor, and Safety and Ecology Holdings Corporation ("SEHC"), as lessee. Leichtweis Enterprises, LLC, is owned by Mr. Christopher Leichtweis ("Leichtweis"), who was a Senior Vice President of the Company and President of SEC, prior to his voluntary termination and retirement from the Company effective May 24, 2013. The Lease covers SEC's principal offices in Knoxville, Tennessee.

Under an agreement of indemnity ("Indemnification Agreement"), SEC, Leichtweis and his spouse ("Leichtweis Parties"), jointly and severally, agreed to indemnify the individual surety with respect to contingent liabilities that may be incurred by the individual surety under certain of SEC's bonded projects. In addition, SEC agreed to indemnify Leichtweis Parties against judgments, penalties, fines, and expense associated with those SEC performance bonds that Leichtweis Parties have agreed to indemnify in the event SEC cannot perform, which has an aggregate bonded amount of approximately \$10,900,000 (which has been released/expired). The Indemnification Agreement provided by SEC to the Leichtweis Parties also provides for compensating the Leichtweis Parties at a rate of 0.75% of the value of bonds (60% having been paid previously and the balance at substantial completion of the contract). On February 14, 2013, the Company entered into a Settlement and Release Agreement and Amendment to Employment Agreement (the "Leichtweis Settlement"), in final settlement of certain claims made by us against Leichtweis in connection with the certain claims asserted by the Company against TNC subsequent to our acquisition of SEC on October 31, 2011. The Leichtweis Settlement terminated our obligation to pay the Leichtweis Parties a fee under the Indemnification Agreement.

Employment Agreements

We have an employment agreement (each dated July 10, 2014) with each of Dr. Centofanti (our President and CEO), Ben Naccarato (our CFO), and John Lash (our COO – hired on March 20, 2014). Each employment agreement provides for annual base salaries, bonuses, and other benefits commonly found in such agreements. In addition, each employment agreement provides that in the event of termination of such officer without cause or termination by the officer for good reason (as such terms are defined in the employment agreement), the terminated officer shall receive payments of an amount equal to benefits that have accrued as of the termination but had not yet been paid, plus an amount equal to one year's base salary at the time of termination. In addition, the employment agreements provide that in the event of a change in control (as defined in the employment agreements), all outstanding stock options to purchase our Common Stock granted to, and held by, the officer covered by the employment agreement will be immediately vested and exercisable. The Company had an employment agreement dated August 24, 2011 with Mr. James A. Blankenhorn. On March 20, 2014, the Company accepted the resignation of Mr. James A. Blankenhorn, as Vice President and COO of the Company. The resignation was effective March 28, 2014. When Mr. Blankenhorn's resignation as the COO became effective, his employment agreement also terminated. Each Dr. Centofanti and Ben Naccarato also had an employment agreement dated August 24, 2011 which were terminated upon execution of the employment agreement dated July 10, 2014.

The Company also had an employment agreement with Christopher Leichtweis, dated October 31, 2011, as amended. On May 14, 2013, the Company entered into a Separation and Release Agreement ("Agreement") with Mr. Leichtweis, which terminated Mr. Leichtweis' employment with the Company and his position as Senior Vice President of the Company and President of SEC effective May 24, 2013, and voided his employment agreement dated October 31, 2011, as amended. In connection with the Agreement, the Company also entered into a Consulting Services Agreement ("Consulting Agreement") with Leichtweis, dated May 24, 2013 and terminating on July 23, 2014, unless sooner terminated by either party with prior 30 days' written notice. The Consulting Agreement provides for compensation at an hourly rate of \$135 and reasonable travel and other expenses. Pursuant to the Consulting Agreement, Leichtweis will be subject to a fourteen months confidentiality and non-compete agreement (as defined) from date of execution of the Consulting Agreement. On June 1, 2013, Leichtweis provided the Company with written notice of termination of the Consulting Agreement.

NOTE 17 SEGMENT REPORTING

In accordance with ASC 280, "Segment Reporting", 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 Chief Operating Officer (our Chief Operating Decision Maker) 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 two reporting segments, Treatment and Services Segments, which are based on a service offering approach. This, however, excludes corporate headquarters, which do not generate revenue, our discontinued operations (see "Note 8 – Divestitures and Discontinued Operations"), and PF Medical S.A, a developmental entity whose primary purpose at this time is the R&D and marketing of medical isotope technology used in the medical diagnostic testing and is not generating any revenues (see Note 4 – "Perma-Fix Medical S.A." for further information of this entity).

The table below shows certain financial information of our reporting segments for 2014 and 2013 (in thousands).

Segment Reporting as of and for the year ended December 31, 2014

			Segments	Corporate (2)	Consolidated
	Treatment	Services	Total	And Other	Total
Revenue from external customers	\$ 42,343	\$ 14,722	\$ 57,065 (3) \$	\$ 57,065
Intercompany revenues	12	70	82	_	_
Gross profit	10,480	1,428	11,908	_	11,908
Interest income	_	_	_	27	27
Interest expense	38	1	39	577	616
Interest expense-financing fees	_	(2)	(2)	194	192
Depreciation and amortization	3,281	910	4,191	49	4,240
Segment income (loss)	5,545	(1,993)	(6) 3,552	(6,544)	(2,992)
Segment assets ⁽¹⁾	50,226	8,920	59,146	29,490 (4)	88,636
Expenditures for segment assets	399	64	463	1	464
Total debt	47	_	47	11,325 (5)	11,372

Segment Reporting as of and for the year ended December 31, 2013

					S	Segments	Corporate (2)	Co	nsolidated
	Ti	reatment		Services		Total	And Other		Total
Revenue from external customers	\$	35,540	\$	38,873	\$	74,413 (3)	\$ —	\$	74,413
Intercompany revenues		1,179		77		1,256			_
Gross profit		5,574		4,242		9,816	_		9,816
Interest income		_		_		_	35		35
Interest expense		42		(3)		39	723		762
Interest expense-financing fees		_		_		_	132		132
Depreciation and amortization		3,045		990		4,035	91		4,126
Segment loss		$(8,198)^{(6)}$)	$(20,042)^{(6)}$		(28,240)	(6,231)		(34,471)
Segment assets ⁽¹⁾ (Revised)		49,978		11,951		61,929	30,131 (4)		92,060
Expenditures for segment assets		477		466		943	1		944
Total debt		106		_		106	14,142 (5)		14,248

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

⁽³⁾ The consolidated revenues included the United States Enrichment Corporation ("USEC") revenues of \$10,272,000 or 18.0% and \$2,037,000 or 2.7% for the years ended 2014 and 2013, respectively, of our total consolidated revenue from continuing operations and CH Plateau Remediation Company ("CHPRC") revenue of \$5,762,000 or 10.1% and \$19,922,000 or 26.8%, for the years ended 2014 and 2013, respectively, of our total consolidated revenue from continuing operations. The following table reflects the revenue generated by each of our reportable segment from USEC and CHPRC:

	USEC					CHPRC			
	2014 2013 2014				2013				
Treatment	\$ 9,309,000		\$	2,037,000	\$	5,594,000	\$	2,268,000	
Services		963,000				168,000		17,654,000	
Total	\$	10,272,000	\$	2,037,000	\$	5,762,000	\$	19,922,000	

⁽⁴⁾ Amount includes assets from our discontinued operations of \$701,000 and \$4,481,000, as of December 31, 2014 and 2013, respectively and assets from PF Medical S.A of \$1,213,000 and \$0 as of December 31, 2014 and 2013, respectively.

⁽²⁾ Amounts reflect the activity for corporate headquarters and PF Medical S.A. not included in the segment information.

⁽⁵⁾ Net of debt discount of (\$137,000) and (\$223,000) for 2014 and 2013, respectively, based on the estimated fair value at issuance of two Warrants and 90,000 shares of the Company's Common Stock issued on August 2, 2013 in connection with a \$3,000,000 promissory note entered into by the Company and Messrs. William Lampson and Robert L. Ferguson. See Note 9 – "Long-Term Debt – Promissory Note and Installment Agreement" for additional information.

⁽⁶⁾ For 2014, included goodwill impairment charge of \$380,000 recorded for the Company's SYA subsidiary (Services Segment) which was divested on July 29, 2014. For 2013, included goodwill impairment charge of \$13,691,000 recorded for the Treatment Segment and \$14,165,000 recorded for the Services Segment.

NOTE 18 SUBSEQUENT EVENTS

Perma-Fix Medical S.A.

During January 2015, Perma-Fix Medical, S.A. entered into a preliminary Letter of Intent ("LOI") to form a strategic partnership and secure investment from a U.S company which is one of the largest national providers of in-office nuclear cardiology imaging services. This company uses Tc-99m in its nuclear imaging services business and provides imaging expertise to the medical community. Under the LOI, this company would, if the LOI is completed and definitive agreements are executed, invest \$1,000,000 into Perma-Fix Medical S.A. The investment, when completed, would constitute approximately 5.4% of the outstanding common shares of Perma-Fix Medical S.A. When completed, this company will have the right to appoint one member to Perma-Fix Medical S.A.'s Supervisory Board, and a second appointee to either the Supervisory Board or the management team. The investment and agreements with this company are subject to numerous conditions, including, but not limited to, entering into definitive supply, stock purchase and other agreements, approval by each of the parties Boards and obtaining required approvals by Polish regulatory authorities as to issuance of the shares to this company.

During January 2015, a consortium led by Perma-Fix Medical S.A. received an official notification from the National Centre for Research and Development in Poland for grant funding to further develop and commercialize a novel prototype generator for the production of Tc-99m for use in cancer and cardiac imaging ("Generator Project"). The total Generator Project budget is approximately \$3,700,000, of which, Generator Project grant subsidies allocated to the project team will be approximately \$2,800,000. Of the \$2,800,000 grant allocation, Perma-Fix Medical S.A. will directly receive approximately \$800,000 and the remaining amount will be allocated to other members of the Generator Project team to support technology development and testing. The Generator Project team will be under the leadership and supervision of Perma-Fix Medical S.A. and consists of four additional entities from Poland, including: the National Centre for Nuclear Research -Radioisotope Centre POLATOM in Otwock; the Institute for Biopolymers and Chemical Fibers - Department of Biopolymers in ŁódŹ; Warsaw Medical University - Department of Nuclear Administration; and the Institute of Industrial Organic Chemistry Branch in Pszczyna. The goal of the Generator Project is to develop a novel prototype generator utilizing Perma-Fix Medical S.A.'s microporous resin to produce molybdenum-derived Tc-99m, test the chemical and radionuclide purities of Tc-99m eluent and verify the performance of the final product, which will be the cancer and cardiac pharmaceutical kits used during animal and human imaging to fulfill both Polish and European Pharmacopoeia standards. The funding of this grant is subject to execution of agreements by Perma-Fix Medical S.A. with the project team partners and formal acceptance of the grant by Perma-Fix Medical S.A, which is expected to occur during the second quarter of 2015.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

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 (the "Commission") is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Commission and that such information is accumulated and communicated to our management, including the Chief Executive Officer ("CEO") (Principal Executive Officer), and Chief Financial Officer ("CFO") (Principal Financial Officer), as appropriate to allow timely decisions regarding the required disclosure. In designing and assessing 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 their stated 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. Our management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 and 15d-15 of the Securities Exchange Act of 1934, as amended. Based upon this assessment, our CEO and CFO have concluded that our disclosure controls and procedures were not effective as of December 31, 2014 due to the material weakness in internal control over financial reporting as described 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. 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 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.

Management, with the participation of our CEO and CFO, conducted an assessment of the effectiveness of internal control over financial reporting as of December 31, 2014 based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management, with the participation of our CEO and CFO, concluded that the Company's internal control over financial reporting was not effective as of December 31, 2014 due to a material weakness in the operational effectiveness of controls in the accounting for income taxes, as described below.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's financial statements will not be prevented, or detected and corrected on a timely basis by the company's internal controls. We identified a material weakness over financial reporting in income taxes due to our limited in-house tax expertise and our over-reliance on a third party tax professional firm.

Management has concluded that the deficiency in the Company's operational effectiveness constitutes a material weakness in internal control over financial reporting.

Remediation of Material Weakness in Internal Control Over Financial Reporting.

We are making every effort to address and remediate this material weakness. We will be focusing our attention on validating and ensuring that our third-party tax professional firm has all relevant information to correct this deficiency.

Changes in Internal Control over Financial Reporting There have been no change in our internal controls over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934) during the fiscal quarter ended December 31, 2014, that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

DIRECTORS

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

<u>NAME</u>	<u>AGE</u>	<u>POSITION</u>
Dr. Louis F. Centofanti	71	Director, President and Chief Executive Officer
Mr. Jack Lahav	66	Director
Honorable Joe R. Reeder	67	Director
Mr. Larry M. Shelton	61	Chairman of the Board
Dr. Charles E. Young	83	Director
Mr. Mark A. Zwecker	64	Director
Dr. Gary Kugler	74	Director
John M. Climaco	46	Director

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

Director Information

Dr. Louis F. Centofanti

Dr. Centofanti served as Chairman of the Board from February 1991 (when he joined the Company) to until December 16, 2014, at which time Mr. Larry M. Shelton, a current independent member of the Board, was appointed to the position of Chairman of the Board. Dr. Centofanti served as Company President and Chief Executive Officer (February 1991 to September 1995) and again in March 1996 was elected Company President and Chief Executive Officer. In January 2015, Dr. Centofanti was appointed by the U.S Secretary of Commerce Penny Prizker to serve on the U.S. Department of Commerce's Civil Nuclear Trade Advisory Committee ("CINTAC"). The CINTAC is composed of industry representatives from the civil nuclear industry and meets periodically throughout the year to discuss the most pressing trade issues facing the U.S. civil nuclear sector. 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. (later sold to USPCI), a hazardous waste management company specializing in treating PCB contaminated oils. 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.

As founder of Perma-Fix, PPM, Inc., and senior executive leader at USPCI, Dr. Centofanti combines extensive business experience in the waste management industry with a drive for innovative technology which is critical for a waste management company. In addition, his service in the government sector provides a solid foundation for the continuing growth of the Company, particularly within the Company's Nuclear business. Dr. Centofanti's comprehensive understanding of the Company and his extensive knowledge of its history, coupled with his drive for innovation and excellence, positions our Board, President and Chief Executive Officer, to optimize our role in this competitive, evolving market.

Mr. Jack Lahav

Jack Lahav, a director since September 2001, is a private investor and entrepreneur, specializing in launching and growing sophisticated technological businesses. Mr. Lahav is a philanthropist, devoting much of his time to charitable activities, serving as president as well as board member of several charities. Mr. Lahav currently serves as Chairman of several companies, among them Docsera, a company that develops fast digitations capability for the education market; Buzzilla, an Israeli company that delivers the conversation on the internet a client seeks to follow about its organization or company; and Phoenix Audio Technologies, a company that provides better audio communication solutions for Voice over Internet Protocol (VoIP) and other internet applications. Previously, Mr. Lahav founded Remarkable Products Inc. and served as its president from 1980 to 1993. Mr. Lahav co-founded Lamar Signal Processing, Inc., a digital signal processing company, and was president of Advanced Technologies, Inc., a robotics company that was acquired by a leading U.S manufacturing company. Mr. Lahav served as a director of Vocaltec Communications, Ltd., the company that pioneered VoIP, and helping it to complete initial public offering on NASDAQ. From 2001 to 2004, Mr. Lahav served as Chairman of Quigo Technologies, Inc., a search-engine company acquired by AOL in December 2007.

Having launched a number of successful businesses, Mr. Lahav has established a record of success in developing and growing many businesses. His "know how" enables him to provide important perspectives to the Board relating to a variety of business challenges. His commitment to charitable organizations provides a unique component of a well-rounded Board.

Honorable Joe R. Reeder

Mr. Reeder, a director since April 2003, served as the Shareholder-in-Charge of the Mid-Atlantic Region (1999-2008) for Greenberg Traurig LLP, one of the nation's largest law firms, with 57 offices and over 1,800 attorneys worldwide. Currently, a principal shareholder in the law firm, 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, and, for the past fourteen years has served on the International Advisory Board of the Panama Canal. He serves on the boards of the National Defense Industry Association (NDIA) (and chairs NDIA's Ethics Committee), the Armed Services YMCA, and many other private companies and charitable organizations. Following successive appointments by Governors Mark Warner and Tim Kaine, Mr. Reeder served seven years as Chairman of two Commonwealth of Virginia military boards and served ten years on the National USO board. Mr. Reeder was appointed by governor Terry McCauliffe to the Virginia Military Institute's (VMI's) Board of Visitors (2014). Mr. Reeder is also a television commentator on legal and national security issues. Among other corporate positions, he has been a director since September 2005 for ELBIT Systems of America, LLC, a NASDAQ company that provides product and system solutions focusing on defense, homeland security, and commercial aviation. Mr. Reeder also serves as a board member for Washington First Bank (since April 2004). A graduate of West Point who served in the 82nd Airborne Division following Ranger School, Mr. Reeder earned his J.D. from the University of Texas and his L.L.M. from Georgetown University.

Mr. Reeder has a distinguished career in solving and overseeing solutions to complex issues involving both domestic and international concerns. His extensive knowledge and problem-solving experience has enhanced the Board's ability to address significant challenges in the nuclear market.

Mr. Larry M. Shelton

Mr. Shelton, a director since July 2006, was appointed to the position of Chairman of the Board of the Company on December 16, 2014, replacing Dr. Louis Centofanti, who held that position since February 1991. Mr. Shelton currently is the Chief Financial Officer (since 1999) of S K Hart Management, LC, an investment holding company. In January 2013, Mr. Shelton was elected President of Pony Express Land Development, Inc. (an affiliate of SK Hart Management, LC), a privately-held land development company, for which he has served on the Board of Directors since December 2005. In March 2012, he was appointed Director and Chief Financial Officer of S K Hart Ranches (PTY) Ltd, a private South African Company involved in agriculture business, and in April 2014, Mr. Shelton was appointed to the Supervisory Board of Directors of Perma-Fix Medical S.A., a Polish subsidiary of the Company involved in the research, development and manufacturing of medical isotopes. Mr. Shelton has over 18 years of experience as an executive financial officer for several waste management companies. He was Chief Financial Officer of Envirocare of Utah, Inc. (1995–1999), and Chief Financial Officer of USPCI, Inc. (1982–1987), a New York Stock Exchange listed company. Since July 1989, Mr. Shelton has served on the Board of Directors of Subsurface Technologies, Inc., a privately-held company specializing in providing environmentally sound innovative solutions for water well rehabilitation and development. Mr. Shelton has a B.A. in accounting from the University of Oklahoma.

With his years of accounting experience as Chief Financial Officer for various companies, including a number of waste management companies, Mr. Shelton combines extensive knowledge and understanding of accounting principles, financial reporting requirements, evaluating and overseeing financial reporting processes and business matters.

Dr. Charles E. Young

Dr. Charles E. Young, a director since July 2003, currently serves as a director (since September 2011) of SteriMed, Inc., a privately held company in the medical waste business. He was president of the University of Florida from November 1999 to January 2004 and chancellor of the University of California, Los Angeles (UCLA) for 29 years until his retirement in 1997. He also was the President of Qatar Foundation from 2004 to November 2005. In addition, from December 2009 to June 2010, he served as the Chief Executive Officer of the Los Angeles Museum of Contemporary Art. Dr. Young has chaired 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 served on the Board of Directors of I-MARK, Inc., a privately held software and professional services company from 1997 to 2012. He previously served on the Board of Directors of Intel Corp. and Nicholas-Applegate Growth Equity Fund, Inc., as well as Fiberspace, Inc., a privately-held company that designs and manufacturers stabilized laser products, Student Advantage, Inc., an integrated media and commerce company, and AAFL Enterprises, a sports development company. 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.

Having presided over two major universities with multi-billion budgets, a major educational foundation, a world-renowned museum, and as a board member for a publicly-held multi-billion dollar corporation, Dr. Young brings unique perspectives and extensive experience to our Board. His savvy in the process of policy making and long-term leadership development provides a valuable component of a well-rounded Board.

Mr. Mark A. Zwecker

Mark Zwecker, a director since the Company's inception in January 1991, currently serves as the Chief Financial Officer and a board member for JCI US Inc., a telecommunications company providing cellular service for machine to machine applications. From 2006 to 2013, Mr. Zwecker served as Director of Finance for Communications Security and Compliance Technologies, Inc., a software company developing security products for the mobile workforce. From 1997 to 2006, Mr. Zwecker served as president of ACI Technology, LLC, an IT services provider, and from 1986 to 1998, he served as vice president of finance and administration for American Combustion, Inc., a combustion technology solution provider. In 1983, with Dr. Centofanti, Mr. Zwecker co-founded a start-up, PPM, Inc., a hazardous waste management company. 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.

As a director since our inception, Mr. Zwecker's understanding of our business provides valuable insight to the Board. With years of experience in operations and finance for various companies, including a number of waste management companies, Mr. Zwecker combines extensive knowledge of accounting principles, financial reporting rules and regulations, the ability to evaluate financial results, and understanding of financial reporting processes. He has an extensive background in operating complex organizations. Mr. Zwecker's experience and background position him well to serve as a member of our Board.

Dr. Gary G. Kugler

Dr. Gary Kugler, a director since September 2013, served as the Chairman of the Board of Directors of Nuclear Waste Management Organization ("NWMO") from 2006 to June 2014, where he led its oversight of NWMO through the work of four committees including an Audit-Finance-Risk Committee. NWMO was established under the Nuclear Fuel Waste Act (2002) to investigate and implement approaches for managing Canada's used nuclear fuel. Dr. Kugler also served on the Board of Directors of Ontario Power Generation, Inc. ("OPG") from 2004 to March 2014 where he served as a member on four different committees, including the Audit, Finance, and Risk Committee from 2004 to 2008. OPG is one of Canada's largest electricity generation companies. Dr. Kugler has had an extensive career in the nuclear industry, both nationally and internationally. He retired from Atomic Energy of Canada Limited ("AECL") as Senior Vice President, Nuclear Products & Services, in 2004, where he was responsible for all of AECL's commercial operations, including nuclear power plant sales and services world-wide. During his 34 years with AECL, he held various technical, project management, business development, and executive positions. Prior to joining AECL, Dr. Kugler served as a pilot in the Canadian air force. He holds a PH.D. in nuclear physics from McMaster University and is a graduate of the Directors Education Program of the Institute of Corporate Directors. Dr. Kugler's extensive career in the nuclear industry, both nationally and internationally, brings valuable insight and knowledge to the Company as it expands its business internationally.

John M. Climaco

Mr. Climaco, a director since October 2013, is a consultant to a variety of healthcare companies. From 2003 to 2012, Mr. Climaco served as President and Chief Executive Officer, as well as a member of the Board of Directors of Axial Biotech, Inc., a venture-backed molecular diagnostics company specializing in spine disorders, which he cofounded in 2003. From 2001 to 2007, he practiced law for the firm of Fabian and Clendenin, specializing in corporate and tax legal strategies for diverse clients across the U.S. and Europe, as well as joint venture, corporate and securities transactions. Since 2012, Mr. Climaco has served as a member of the Board of Directors for Digirad Corporation, a NASDAQ-listed company that manufactures cameras for nuclear imaging applications and provides for in-office nuclear cardiology imaging. Mr. Climaco has also served as a board member for PDI, Inc., a provider of outsourced commercial services to pharmaceutical, biotechnology, and healthcare companies. He has also served as a board member for InfuSystem Holdings, Inc., a NASDAQ-listed company that is a leading supplier of infusion services to oncologists and other out-patient treatment settings. Mr. Climaco earned his B.A. in Philosophy from Middlebury College and holds a J.D. from the University of California Hasting College of the Law.

Mr. Climaco's extensive legal and operational experience, including strategic planning and business development, provides valuable asset to the Company's immediate and future growth in our industry.

BOARD LEADERSHIP STRUCTURE

The Board recognizes that it is responsible for evaluating and determining its most effective leadership structure for the Company. As a result, in December 2014, the Board considered whether its leadership structure was optimal in light of the competitive environment in the Company operates, and whether an alternate structure would be preferred to provide effective Board leadership and oversight of management by the Board. Based on these considerations, on December 16, 2014, the Board decided to separate the positions of Chairman of the Board and CEO, and appointed Larry M. Shelton, a current independent director of the Company, to serve as the Chairman of the Board, with Dr. Louis Centofanti continuing to serve as CEO. Prior to that time, both such positions were held by Dr. Centofanti.

Our directors continue to have increasingly more oversight responsibilities, and the Company believes that an independent Chairman, whose sole responsibility is leading the Board, will enable our CEO to focus primarily on the Company's business goals and implementing our growth strategies for the benefit of the Company and its shareholders. As noted, the Board recognizes that there is no "one structure fits all" model for providing corporate leadership, and the Company's leadership structure may change in the future as circumstances may dictate.

Mr. Mark Zwecker, a current member of our Board of Directors, will continue to serve as the Independent Lead Director, a position he has held since February 2010. The Lead Director's role includes:

- convening and chairing meetings of the non-employee directors as necessary from time to time and Board meetings in the absence of the Chairman of the Board;
- acting as liaison between directors, committee chairs and management;
- serving as information sources for directors and management; and
- carrying out responsibilities as the Board may delegate from time to time.

AUDIT COMMITTEE

We have a separately designated standing Audit Committee of our Board of Directors established in accordance with Section 3(a)(58)(A) of the Exchange Act. The members of the Audit Committee are Mark A. Zwecker (Chairperson), Larry M. Shelton, and Dr. Gary Kugler, who replaced John Climaco as a member of the Audit Committee effective September 18, 2014.

Our Board of Directors has determined that each of our Audit Committee members is and was independent within the meaning of the rules of NASDAQ and was 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 Audit Committee has also received from, and discussed with, Grant Thornton, LLP, the Company's independent registered accounting firm, the matters required to be discussed by Public Company Accounting Oversight Board ("PCAOB") Auditing Standard No. 16 (Communications with Audit Committee).

BOARD INDEPENDENCE

The Board has determined that each director, other than Dr. Centofanti and John Climaco, is "independent" within the meaning of the applicable rules of the NASDAQ Stock Market, Inc. ("NASDAQ") on which the Company's Common Stock is listed. Dr. Centofanti is not deemed to be an "independent director" because of his employment as a senior executive of the Company. The Board determined that Mr. Climaco does not currently qualify as an "independent director" because of his services performed for the Company under a consulting agreement (see "John Climaco" under "Certain Relationships and Related Transactions and Director Independence" for a description of the Consulting Agreement, dated October 17, 2014, between the Company and John Climaco).

COMPENSATION AND STOCK OPTION COMMITTEE

The Compensation and Stock Option Committee ("Compensation Committee") reviews and recommends to the Board of Directors the compensation and benefits of all of the Company's officers and reviews general policy matters relating to compensation and benefits of the Company's employees. The Compensation Committee also administers the Company's stock option plans. The Compensation Committee has the sole authority to retain and terminate a compensation consultant, as well as to approve the consultant's fees and other terms of engagement. It also has the authority to obtain advice and assistance from internal or external legal, accounting or other advisors. No compensation consultant was employed during 2014. Members of the Compensation Committee during 2014 were Larry M. Shelton (Chairman), Joe R. Reeder, Dr. Charles E. Young, and Mark A. Zwecker. None of the members of the Compensation Committee has been an officer or employee of the Company or has had any relationship with the Company requiring disclosure under applicable Securities and Exchange Commission regulations.

CORPORATE GOVERNANCE AND NOMINATING COMMITTEE

We have a separately-designated standing Corporate Governance and Nominating Committee (the "Nominating Committee"). Members of the Nominating Committee are Joe R. Reeder (Chairperson), Jack Lahav, Dr. Gary G. Kugler and Dr. Charles E. Young. All members of the Corporate Governance and Nominating Committee are and were "independent" as that term is defined by current NASDAQ listing standards.

The Nominating Committee recommends to the Board of Directors candidates to fill vacancies on the Board and the nominees for election as the directors at each annual meeting of stockholders. In making such recommendation, the Nominating Committee takes into account information provided to them from the candidate, as well as the Nominating Committee's own knowledge and information obtained through inquiries to third parties to the extent the Nominating Committee deems appropriate. The Company's Amended and Restated Bylaws sets forth certain minimum director qualifications to qualify for nomination for elections as a Director. To qualify for nomination or election as a director, an individual must:

- be an individual at least 21 years of age who is not under legal disability;
- have the ability to be present, in person, at all regular and special meetings of the Board of Directors;
- not serve on the boards of more than three other publicly held companies;
- satisfy the director qualification requirements of all environmental and nuclear commissions, boards or similar regulatory or law
 enforcement authorities to which the Corporation is subject so as not to cause the Corporation to fail to satisfy any of the licensing
 requirements imposed by any such authority;
- not be affiliated with, employed by or a representative of, or have or acquire a material personal involvement with, or material financial interest in, any "Business Competitor" (as defined);
- not have been convicted of a felony or of any misdemeanor involving moral turpitude; and
- have been nominated for election to the Board of Directors in accordance with the terms of the Amended and Restated Bylaws.

In addition to the minimum director qualifications as mentioned above, each candidate's qualifications are also reviewed to include:

- standards of integrity, personal ethics and value, commitment, and independence of thought and judgment;
- ability to represent the interests of the Company's stockholders;
- ability to dedicate sufficient time, energy and attention to fulfill the requirements of the position; and
- diversity of skills and experience with respect to accounting and finance, management and leadership, business acumen, vision and strategy, charitable causes, business operations, and industry knowledge.

The Nominating Committee does not assign specific weight to any particular criteria and no particular criterion is necessarily applicable to all prospective nominees. The Nominating Committee does not have a formal policy for the consideration of diversity in identifying nominees for directors. However, the Company believes that the backgrounds and qualifications of the directors, considered as a group, should provide a significant composite mix of experience, knowledge, and abilities that will allow the Board to fulfill its responsibilities.

Stockholder Nominees

The Nominating Committee will consider properly submitted stockholder nominations for candidates for membership on the Board of Directors from stockholders who meet each of the requirements set forth in the Amended and Restated Bylaws, including, but not limited to, the requirements that any such stockholder own at least 1% of the Company's shares of the Common Stock entitled to vote at the meeting on such election, has held such shares continuously for at least one full year, and continuously holds such shares through and including the time of the annual or special meeting. Nominations of persons for election to the Board of Directors may be made at any Annual Meeting of Stockholders, or at any Special Meeting of Stockholders called for the purpose of electing directors. Any stockholder nomination ("Proposed Nominee") must comply with the requirements of the Company's Amended and Restated Bylaws and the Proposed Nominee must meet the minimum qualification requirements as discussed above. For a nomination to be made by a stockholder, such stockholder must provide advance written notice to the Nominating Committee, delivered to the Company's principal executive office address (i) in the case of an Annual Meeting of Stockholders, no later than the 90th day nor earlier than the 120th day prior to the anniversary date of the immediately preceding Annual Meeting of Stockholders; and (ii) in the case of a Special Meeting of Stockholders called for the purpose of electing directors, not later than the 10th day following the day on which public disclosure of the date of the Special Meeting of Stockholders was made.

The Nominating Committee will evaluate the qualification of the Proposed Nominee and the Proposed Nominee's disclosure and compliance requirements in accordance with the Company's Amended and Restated Bylaws. If the Board of Directors, upon the recommendation of the Nominating Committee, determines that a nomination was not made in accordance with the Amended and Restated Bylaws, the Chairman of the Meeting shall declare the nomination defective and it will be disregarded.

RESEARCH AND DEVELOPMENT COMMITTEE

We have a separately-designated standing Research and Development Committee (the "R&D Committee"). Members of the R&D Committee include Dr. Gary G. Kugler and Dr. Louis Centofanti.

The R&D Committee outlines the structures and functions of the Company's research and development strategies, the acquisition and protection of the Company's intellectual property rights and assets, and provides its perspective on such matter to the Board of Directors. The R&D Committee does not have a charter.

STRATEGIC ADVISORY COMMITTEE

We have a separately-designated Strategic Advisory Committee ("Strategic Committee"). The primary functions of the Strategic Committee are to investigate and evaluate strategic alternatives available to the Company and to work with management on long-range strategic planning and identifying potential new business opportunities. The members of the Strategic Advisory Committee are John M. Climaco (Chairperson), Joe R. Reeder, Mark A. Zwecker, and Larry M. Shelton. The Strategic Advisory Committee does not have a charter.

EXECUTIVE OFFICERS OF THE REGISTRANT

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

<u>NAME</u>	<u>AGE</u>	POSITION
Dr. Louis Centofanti	71	President and Chief Executive Officer
Mr. Ben Naccarato	52	Chief Financial Officer, Vice President, and Secretary
Mr. John Lash	52	Chief Operating Officer

Dr. Louis Centofanti

See "Director – Dr. Louis F. Centofanti" in this section for information on Dr. Centofanti.

Mr. Ben Naccarato

Mr. Naccarato has served as the Chief Financial Officer since February 26, 2009. Mr. Naccarato joined the Company in September 2004 and served as Vice President, Finance of the Company's Industrial Segment until May 2006, when he was named Vice President, Corporate Controller/Treasurer. Prior to joining the Company in September 2004, Mr. Naccarato was the Chief Financial Officer 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 graduate of University of Toronto having received a Bachelor of Commerce and Finance Degree and is a Chartered Professional Accountant, Certified Management Accountant.

Mr. John Lash

On April 3, 2014, the Company's Board approved the appointment by the Company on March 20, 2014 of Mr. John Lash as the Chief Operating Officer. Mr. Lash previously served as Senior Vice President of Operations of the Company's Treatment Segment for over ten years. Mr. Lash has over 20 years of experience in the nuclear industry, with specific experience in managing remedial activities, as well as decontamination and disposal of radioactive materials from commercial and government operating facilities. As Senior Vice President of Operations, Mr. Lash was responsible for all treatment and remediation activities. Prior to joining Perma-Fix in 2001, Mr. Lash served as Broad Spectrum Manager for Waste Control Specialists in Dallas, TX where his responsibilities included contract management of DOE nationwide procurement for mixed waste treatment services, business development activities, and technology development. Prior to that, he worked for ten years at Chem-Nuclear Systems where he held various managerial positions including manager of the Chem-Nuclear Consolidation Facility. Mr. Lash received his education and qualification from the U.S. Navy Nuclear Power Program, where he served for 8 years prior to working in the commercial and nuclear industry.

Resignation of Certain Executive Officers

On March 20, 2014, the Company accepted the resignation of Mr. James Blankenhorn, as Vice President and Chief Operating Officer of the Company. The resignation was effective March 28, 2014. Mr. Blankenhorn's resignation was not due to a disagreement with the Company.

On July 29, 2014, in connection with the Company's sale of its wholly owned subsidiary, Schreiber, Yonley & Associates ("SYA"), Robert Schreiber, Jr. resigned from the position of the President of SYA and as an employee of the Company. Mr. Schreiber is a member of the Supervisory Board of Directors of our Perma-Fix Medical S.A. subsidiary.

Certain Relationships

There are no family relationships between any of our executive officers. 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 2014 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 of, 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 256,560 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. 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 or waiver on our website.

ITEM 11. EXECUTIVE COMPENSATION

Summary Compensation

The following table summarizes the total compensation paid or earned by each of the named executive officers ("NEOs") for the fiscal years ended December 31, 2014 and 2013.

Name and Principal Position	Year	Salary	Bonus	Option Awards	Non-Equity Incentive Plan Compensation	All other Compensation	Total Compensation
		(\$)	(\$)	(\$) (6)	(\$) (2)	(\$) (3)	(\$)
Dr. Louis Centofanti	2014	271,115	_	_	_	26,141	297,256
Chairman of the Board,	2013	271,115	_	_	_	26,141	297,256
President and Chief							
Executive Officer							
Ben Naccarato	2014	214,240	_		_	33,135	247,375
Vice President and Chief	2013	214,240	_	_	_	33,135	247,375
Financial Officer							
4)							
John Lash ⁽¹⁾	2014	201,770	25,000 (7)	129,739	_	23,372	379,881
Vice President and Chief	2013	169,766	_	_	_	23,141	192,907
Operating Officer							
Robert Schreiber, Jr. (5)	2014	125,429				15,078	140,507
President of SYA	2013	203,821	_	_	_	31,488	235,309
Y: D1 1 1 (4)	2014					0.000	101.010
Jim Blankenhorn (4)	2014	93,016	-	-	-	8,803	101,819
Vice President and Chief	2013	252,350	_	_	_	33,135	285,485

- Named as Chief Operating Officer ("COO") for the Company effective March 20, 2014. Previously, Mr. Lash served as Senior Vice President ("SVP") of Operations for the Company's Treatment Segment. The salary noted for 2014 reflects prorated amount earned as SVP of Operations for the Treatment Segment and prorated amount earned as the COO.
- (2) Represents performance compensation earned under the Company's Management Incentive Plan ("MIP") with respect to each NEO. The MIP for each NEO is described under the heading "2014 Management Incentive Plans." No compensation was earned by any named executive officer under his respective MIP for 2014. Mr. Blankenhorn and Mr. Schreiber did not have MIP plans for 2014.
- (3) The amount shown includes a monthly automobile allowance of \$750 or the use of a company car and insurance premiums (health, disability and life) paid by the Company, on behalf of the executive. No 401(k) matching contribution was included in such calculation as the Company did not provide matching during 2013 and 2014.

		Insurance	Auto Allowance o	r	
Name		Premium	Company Car		Total
Dr. Louis Centofanti	\$	17,141	\$ 9,00	0 \$	26,141
Ben Naccarato	\$	24,135	\$ 9,00	0 \$	33,135
John Lash	\$	17,141	\$ 6,23	1 \$	23,372
Robert Schreiber, Jr.	\$	14,079	\$ 99	9 \$	15,078
Jim Blankenhorn	\$	6,034	\$ 2,76	9 \$	8,803

- (4) On March 20, 2014, resigned as Vice President and COO and as an employee of the Company, effective March 28, 2014. Amount disclosed in "Salary" column for 2014 includes amount paid to Mr. Blankenhorn for his accrued vacation time upon his departure from the Company.
- On July 29, 2014, in connection with the sale of our Schreiber, Yonley, and Associates ("SYA") subsidiary, Mr. Schreiber resigned from the position of President of SYA and as an employee of the Company. Mr. Schreiber is a member of the Supervisory Board of Director of Perma-Fix Medical S.A., a Polish subsidiary which the Company owns 64%. Mr. Schreiber is not compensated as a Board member for Perma-Fix Medical S.A.
- (6) Reflects the aggregate grant date fair value of awards computed in accordance with ASC 718, "Compensation Stock Compensation". Assumptions used in the calculation of this amount are included in Note 6 "Capital Stock, Stock Plans, Warrants and Stock Based Compensation" to "Notes to Consolidated Financial Statement." No options were granted to other named executive officer in 2014 with the exception of Mr. Lash.
- (1) Represents a sign-on bonus upon becoming as the COO of the Company on March 20, 2014.

Outstanding Equity Awards at Fiscal Year

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

Outstanding Equity Awards at December 31, 2014

		O _I	otion Awards		
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) ⁽¹⁾ Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date
Dr. Louis Centofanti	_	_	_	_	_
Ben Naccarato	15,000	_		7.10	2/26/2015
John Lash	45,000	45,000 (2)		5.00	7/10/2020

⁽¹⁾ 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.

⁽²⁾ Incentive stock option granted on July 10, 2014 under the Company's 2010 Stock Option Plan. The option is for a six year term and vests

None of the Company's NEOs exercised options during 2014.

Employment Agreements

The Company entered into employment agreements on July 10, 2014 with our Chief Executive Officer ("CEO"), Chief Operating officer ("COO"), and Chief Financial Officer ("CFO") (each is an named executive officers or "NEO"), which were approved by the Compensation Committee and Board. These agreements provided that (a) Dr. Centofanti, CEO, was entitled to receive an annual base salary of \$271,115; (b) Mr. Lash, COO, was entitled to receive an annual base salary of \$215,000; and (c) Mr. Naccarato, CFO, was entitled to receive an annual base salary of \$214,240. The base salary is subject to adjustment as determined by the Compensation Committee. In addition to base salary, each of these executive officers is entitled to participate in the Company's benefits plans and to any performance compensation payable under an individual Management Incentive Plan ("MIP") for the CEO, CFO, and COO (see further detail of each MIP below under the heading "2014 Management Incentive Plans ("MIPs")"). The employment agreements dated July 10, 2014 with our CEO, COO, and CFO are collectively referred to as the "New Employment Agreements."

The Company had previously entered into employment agreement on August 24, 2011 with each Dr. Centofanti, Ben Naccarato, and James Blankenhorn, our previous COO. On March 20, 2014, the Company accepted the resignation of Mr. Blankenhorn, as Vice President and COO of the Company. The resignation was effective March 28, 2014. When Mr. Blankenhorn's resignation as the COO became effective, his employment agreement, dated August 24, 2011 also terminated. Mr. Blankenhorn's employment agreement provided for an annual base salary and eligibility to participate in the Company's benefits plans and any performance compensation payable under an individual MIP for the COO. Upon Mr. Blankenhorn's resignation, he was paid all his accrued salary, vacation, and any benefits under the employee's benefit plan to March 28, 2014. Both of the August 24, 2011 employment agreements with Dr. Centofanti and Ben Naccarato were terminated effective July 10, 2014, upon execution of the New Employment Agreements.

Each of the New Employment Agreements is effective for three years. Each New Employment Agreement may be terminated prior to its expiration by the Company with or without "cause" (as defined below) or by the executive officer for "good reason" (as defined below) or any other reason. If the NEO's employment is terminated due to death, disability or for cause, we will pay to the NEO or to his estate a lump sum equal to the sum of any unpaid base salary through the date of termination and any benefits otherwise due at that time under any employee benefit plan, excluding any severance program or policy (the "Accrued Amounts").

If the NEO terminates his employment for "good reason" or is terminated without cause, we will pay the NEO a sum equal to the total Accrued Amounts, plus one year of full base salary. If the NEO terminates his employment for a reason other than for good reason, we will pay to him the amount equal to the Accrued Amounts. If there is a Change in Control (as defined below), all outstanding stock options to purchase common stock held by the NEO will immediately become vested and exercisable in full. The amounts payable with respect to a termination (other than base salary and amounts otherwise payable under any Company employee benefit plan) are payable only if the termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)).

"Cause" is generally defined in each of the New Employment Agreements as follows:

- the ultimate conviction (after all appeals have been decided) of the executive by a court of competent jurisdiction, or a plea of nolo contendrere or a plea of guilty by the executive, to a felony involving a moral practice or act;
- willful or gross misconduct or gross neglect of duties by the executive, which is injurious to the Company. Failure of the executive
 to perform his duties due to disability shall not be considered gross misconduct or gross neglect of duties;
- act of fraud or embezzlement against the Company; and
- willful breach of any material provision of the employment agreement.

"Good reason" is generally defined in each of the New Employment Agreements as follows:

- assignment to the executive of duties inconsistent with his responsibilities as they existed during the 90-day period preceding the
 date of the employment agreement, including status, office, title, and reporting requirement;
- any other action by the Company which results in a reduction in (i) the compensation payable to the executive, or (ii) the executive's
 position, authority, duties, or other responsibilities without the executive's prior approval;
- the relocation of the executive from his base location on the date of the employment agreement, excluding travel required in order to perform the executive's job responsibilities;
- any purported termination by the Company of the executive's employment otherwise than as permitted by the agreement; and
- any material breach by the Company of any provision of the employment agreement, except that an insubstantial or inadvertent
 breach by the Company which is promptly remedied by the Company after receipt of notice by the executive is not considered a
 material breach.

"Change in Control" is generally defined in each of the Employment Agreements as follows:

- a transaction in which any person, entity, corporation, or group (as such terms are defined in Sections 13(d)(3) and 14(d)(2) of the Exchange (other than the Company, or a profit sharing, employee ownership or other employee benefit plan sponsored by the Company or any subsidiary of the Company): (i) will purchase any of the Company's voting securities (or securities convertible into such voting securities) for cash, securities or other consideration pursuant to a tender offer, or (ii) will become the "beneficial owner" (as such term is defined in Rule 13d-3 under the Exchange Act, directly or indirectly (in one transaction or a series of transactions), of securities of the Company representing 50% or more of the total voting power of the then outstanding securities of the Company ordinarily having the right to vote in the election of directors; or
- a change, without the approval of at least two-thirds of the Board of Directors then in office, of a majority of the Company's Board of Directors; or
- the Company's execution of an agreement for the sale of all or substantially all of the Company's assets to a purchaser which is not a subsidiary of the Company; or
- the Company's adoption of a plan of dissolution or liquidation; or
- the Company's closure of the facility where the executive works; or
- the Company's execution of an agreement for a merger or consolidation or other business combination involving the Company in which the Company is not the surviving corporation, or, if immediately following such merger or consolidation or other business combination, less than fifty percent (50%) of the surviving corporation's outstanding voting stock is held by persons who are stockholders of the Company immediately prior to such merger or consolidation or other business combination; or
- such event that is of a nature that is required to be reported in response to Item 5.01 of Form 8-K.

Potential Payments

The following table sets forth the potential (estimated) payments and benefits to which our NEOs, Dr. Centofanti, Mr. Lash, and Mr. Naccarato, would be entitled upon termination of employment or following a Change in Control of the Company, as specified under each employment agreement with the Company, assuming each circumstance described below occurred on December 31, 2014, the last day of our fiscal year.

			ermination by cutive for Good		
	Disability,		Reason or by		
Name and Principal Position	Death,	Coı	mpany Without	Ch	ange in Control
Potential Payment/Benefit	 or For Cause		Cause	01	f the Company
Dr. Louis Centofanti					
President, Chief Executive and Director					
Severance	\$ _	\$	271,115	\$	_
Stock Options	\$ (1)	\$	(1)	\$	(1)
Ben Naccarato					
Chief Financial Officer					
Severance	\$ 	\$	214,240	\$	
Stock Options	\$ (2)	\$	(2)	\$	(3)
John Lash ⁽³⁾					
Chief Operating Officer					
Severance	\$ _	\$	215,000	\$	_
Stock Options	\$ (2)	\$	(2)	\$	(3)

- (1) No stock option outstanding as of 12/31/2014.
- Benefit is estimated to be zero since the number of stock options vested that were in-the-money as of December 31, 2014 (as reported on NASDAQ) was zero.
- (3) Benefit is estimated to be zero since the number of stock options outstanding that were in-the-money as of December 31, 2014 (as reported on NASDAQ) was zero.

No performance compensation under the NEO's MIP would have been payable at December 31, 2014 under any of the circumstances described in the table above. Pursuant to each MIP, if the participant's employment with the Company is voluntarily or involuntarily terminated prior to the annual payment of the MIP compensation payment period, no MIP payment is payable. The payment is otherwise payable under each MIP on or about 90 days after year-end, or sooner, based on finalization of our financial statements for year-end. See "2014 Management Incentive Plans ("MIPs")" below.

The amounts payable with respect to a termination (other than base salary and amounts otherwise payable under any Company employee benefit plan) are payable only if the termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)).

2014 Executive Compensation Components

For the fiscal year ended December 31, 2014, 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.

Based on the amounts set forth in the Summary Compensation Table, during 2014, salary accounted for 77.6% of the total compensation of our NEOs, while equity option awards, bonus, MIP compensation, and other compensation accounted for approximately 22.4% of the total compensation of the NEOs.

Base Salary

The NEOs, other executive 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 Compensation 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 Compensation Committee's assessment of the individual's performance. The base salary and potential annual base salary adjustments for the CEO, COO, and CFO are set forth in their respective New Employment Agreements.

Performance-Based Incentive Compensation

The Compensation 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 NEOs, encourage the growth of stockholder value and enable employees to participate in our long-term growth and profitability. The Compensation Committee may grant stock options and/or performance bonuses. In granting these awards, the Compensation Committee may establish any conditions or restrictions it deems appropriate. In addition, the CEO has discretionary authority to grant stock options to certain high-performing executives or officers, subject to the approval of the Compensation Committee. The exercise price for each stock options granted is at or above the market price of our common stock on the date of grant. Stock options may be awarded to newly hired or promoted executives at the discretion of the Compensation Committee. Grants of stock options to eligible newly hired executive officers are generally made at the next regularly scheduled Compensation Committee meeting following the hire date.

2014 Management Incentive Plans ("MIPs")

On July 10, 2014, the Compensation Committee approved individual MIPs for our CEO, COO, and CFO. The MIPs are effective as of January 1, 2014. Each MIP provides guidelines for the calculation of annual cash incentive based compensation, subject to Compensation Committee oversight and modification. Each MIP awards cash compensation based on achievement of performance thresholds, with the amount of such compensation established as a percentage of base salary. The potential target performance compensation ranges from 50% to 87% or \$135,558 to \$237,224 of the 2014 base salary for the CEO, 50% to 87% or \$107,500 to \$188,127 of the 2014 base salary for the COO, and 50% to 87% or \$107,120 to \$187,458 of the 2014 base salary for the CFO.

Performance compensation is to be paid on or about 90 days after year-end, or sooner, based on finalization of our audited financial statements for 2014. If the MIP participant's employment with the Company is voluntarily or involuntarily terminated prior to a regularly scheduled MIP compensation payment date, no MIP payment will be payable for and after such period.

The Compensation Committee retains the right to modify, change or terminate each MIP and may adjust the various target amounts described below, at any time and for any reason.

The total performance compensation payable to the CEO, COO, and CFO as a group is not to exceed 50% of the Company's pretax net income prior to the calculation of the performance compensation.

The following describes the principal terms of each MIP:

CEO:

2014 CEO performance compensation was based upon meeting corporate revenue, earnings before interest, taxes, depreciation and amortization ("EBITDA"), health, safety, and environmental compliance objectives during fiscal year 2014 from our continuing operations. Of the total potential performance compensation, 55% was based on EBITDA goal, 15% on revenue goal, 15% on the number of health and safety claim incidents that occurred during fiscal year 2014, and the remaining 15% on the number of notices alleging environmental, health or safety violations under our permits or licenses that occurred during the fiscal year 2014. Each of the revenue and EBITDA components was based on our board approved Revenue Target and EBITDA Target. The 2014 target compensation for our CEO was as follows:

Annualized Base Pay:	\$ 271,115
Performance Incentive Compensation Target (at 100% of MIP):	\$ 135,558
Total Annual Target Compensation (at 100% of MIP):	\$ 406,673

The Performance Incentive Compensation Target was based on the schedule below.

Target Objectives	_														
			Performance Target Thresholds												
	Weights	85-100%		101- 120%		121- 130%		131- 140%		141- 150%		151- 160%		161%+	
Revenue	15%	\$	20,334	\$	24,400	\$	26,434	\$	28,467	\$	30,500	\$	32,534	\$	35,584
EBITDA	55%		74,556		89,467		96,922		104,378		111,833		119,289		130,472
Health & Safety	15%		20,334		24,400		26,434		28,467		30,500		32,534		35,584
Permit & License Violations	15%		20,334		24,400		26,434		28,467	_	30,500		32,534		35,584
		\$	135,558	\$	162,667	\$	176,224	\$	189,779	\$	203,333	\$	216,891	\$	237,224

- 1) Revenue was defined as the total consolidated third party top line revenue from continuing operations as publicly reported in the Company's financial statements. The percentage achieved was determined by comparing the actual consolidated revenue from continuing operations to the Board approved Revenue Target from continuing operations, which was \$68,757,000. The Board reserved the right to modify or change the Revenue Targets as defined herein in the event of the sale or disposition of any of the assets of the Company or in the event of an acquisition.
- 2) EBITDA was defined as earnings before interest, taxes, depreciation, and amortization from continuing operations. The percentage achieved was determined by comparing the actual EBITDA to the Board approved EBITDA Target, which was \$5,647,000. The Board reserved the right to make adjustments to the EBITDA Target as defined herein in the event of the sale or disposition of any of the assets of the Company or in the event of an acquisition.
- 3) The Health and Safety Incentive Target was based upon the actual number of Worker's Compensation Lost Time Accidents, as provided by the Company's Worker's Compensation carrier. The Corporate Treasurer submitted a report on a quarterly basis documenting and confirming the number of Worker's Compensation Lost Time Accidents, supported by the AIG Worker's Compensation Lost Report. Such claims were identified on the loss report as "indemnity claims." The following number of Worker's Compensation Lost Time Accidents and corresponding Performance Target Thresholds were established for the annual Incentive Compensation Plan calculation for 2014.

Worker's Compensation	Performance			
Claim Number	Target			
	<u> </u>			
7	85%-100%			
6	101%-120%			
5	121%-130%			
4	131%-140%			
3	141%-150%			
2	151%-160%			
1	161% Plus			

4) Permits or License Violations incentive was earned/determined according to the scale set forth below: An "official notice of non-compliance" was defined as an official communication from a local, state, or federal regulatory authority alleging one or more violations of an otherwise applicable Environmental, Health or Safety requirement or permit provision, which resulted in a facility's implementation of corrective action(s).

Permit and License Violations	Performance Target
7	85%-100%
6	101%-120%
5	121%-130%
4 3	131%-140% 141%-150%
2	151%-160%
1	161% Plus

5) No performance incentive compensation was payable for achieving the health and safety, permit and license violation, and revenue targets unless a minimum of 70% of the EBITDA Target was achieved.

COO:

2014 COO performance compensation was based upon meeting corporate revenue, EBITDA, health, safety, and environmental compliance objectives during fiscal year 2014 from our continuing operations. Of the total potential performance compensation, 55% was based on EBITDA goal, 15% on revenue goal, 15% on the number of health and safety claim incidents that occurred during fiscal year 2014, and the remaining 15% on the number of notices alleging environmental, health or safety violations under our permits or licenses that occurred during the fiscal year 2014. Each of the revenue and EBITDA components was based on our board approved Revenue Target and EBITDA Target. The 2014 target compensation for our COO was as follows:

Annualized Base Pay:	\$ 215,000
Performance Incentive Compensation Target (at 100% of Plan):	\$ 107,500
Total Annual Target Compensation (at 100% of Plan):	\$ 322,500

The Performance Incentive Compensation Target is based on the schedule below.

Target Objectives								
	Performance Target Thresholds							
	Weights	85-100%	101- 120%	121- 130%	131- 140%	141- 150%	151- 160%	161%+
Revenue	15%	\$ 16,125	\$ 19,350	\$ 20,963	\$ 22,575	\$ 24,188	\$ 25,800	\$ 28,219
EBITDA	55%	59,125	70,951	76,863	82,775	88,687	94,600	103,470
Health & Safety	15%	16,125	19,351	20,962	22,576	24,188	25,801	28,219
Permit & License Violations	15%	16,125	19,351	20,962	22,576	24,188	25,801	28,219
		\$ 107,500	129,003	\$ 139,750	\$ 150,502	\$ 161,251	\$ 172,002	\$ 188,127

- 1) Revenue was defined as the total consolidated third party top line revenue from continuing operations as publicly reported in the Company's financial statements. The percentage achieved was determined by comparing the actual consolidated revenue from continuing operations to the Board approved Revenue Target from continuing operations, which was \$68,757,000. The Board reserved the right to modify or change the Revenue Targets as defined herein in the event of the sale or disposition of any of the assets of the Company or in the event of an acquisition.
- 2) EBITDA was defined as earnings before interest, taxes, depreciation, and amortization from continuing operations. The percentage achieved was determined by comparing the actual EBITDA to the Board approved EBITDA Target, which was \$5,647,000. The Board reserved the right to modify or change the EBITDA Targets as defined herein in the event of the sale or disposition of any of the assets of the Company or in the event of an acquisition.
- 3) The Health and Safety Incentive target was based upon the actual number of Worker's Compensation Lost Time Accidents, as provided by the Company's Worker's Compensation carrier. The Corporate Treasurer submitted a report on a quarterly basis documenting and confirming the number of Worker's Compensation Lost Time Accidents, supported by the AIG Worker's Compensation Lost Report. Such claims were identified on the loss report as "indemnity claims." The following number of Worker's Compensation Lost Time Accidents and corresponding Performance Target Thresholds were established for the annual Incentive Compensation Plan calculation for 2014.

Worker's Compensation Claim Number	Performance Target
7	85%-100%
6	101%-120%
5	121%-130%
3	131%-140% 141%-150%
2	151%-160%
1	161% Plus

4) Permits or License Violations incentive was earned/determined according to the scale set forth below: An "official notice of non-compliance" was defined as an official communication from a local, state, or federal regulatory authority alleging one or more violations of an otherwise applicable Environmental, Health or Safety requirement or permit provision, which resulted in a facility's implementation of corrective action(s).

Permit and License Violations	Performance Target
7	85%-100%
6	101%-120%
5	121%-130%
4	131%-140%
3	141%-150%
2	151%-160%
1	161% Plus

5) No performance incentive compensation was payable for achieving the health and safety, permit and license violation, and revenue targets unless a minimum of 70% of the EBITDA Target was achieved.

CFO:

2014 CFO performance compensation was based upon meeting corporate revenue, EBITDA, health, safety, and environmental compliance objectives during fiscal year 2014 from our continuing operations. Of the total potential performance compensation, 55% was based on EBITDA goal, 15% on revenue goal, 15% on the number of health and safety claim incidents that occurred during fiscal year 2014, and the remaining 15% on the number of notices alleging environmental, health or safety violations under our permits or licenses that occurred during the fiscal year 2014. Each of the revenue and EBITDA components was based on our board approved Revenue Target and EBITDA Target. The 2014 target compensation for our CFO was as follows:

Annualized Base Pay:	\$ 214,240
Performance Incentive Compensation Target (at 100% of Plan):	\$ 107,120
Total Annual Target Compensation (at 100% of Plan):	\$ 321,360

The Performance Incentive Compensation Target was based on the schedule below.

Target Objectives															
		Performance Target Thresholds													
	Weights	85-	100%		101- 120%		121- 130%		131- 140%		141- 150%		151- 160%	_	161%+
Revenue	15%	\$	16,068	\$	19,282	\$	20,888	\$	22,495	\$	24,102	\$	25,709	\$	28,119
EBITDA	55%		58,916		70,698		76,592		82,482		88,373		94,266		103,103
Health & Safety	15%		16,068		19,281		20,888		22,495		24,101		25,709		28,118
Permit & License Violations	15%	<u> </u>	16,068		19,281		20,888		22,495	_	24,101		25,709		28,118
		\$ 10	07,120		128,542	\$	139,256	\$	149,967	\$	160,677	\$	171,393	\$	187,458

- 1) Revenue was defined as the total consolidated third party top line revenue from continuing operations as publicly reported in the Company's financial statements. The percentage achieved was determined by comparing the actual consolidated revenue from continuing operations to the Board approved Revenue Target from continuing operations, which was \$68,757,000. The Board reserved the right to modify or change the Revenue Targets as defined herein in the event of the sale or disposition of any of the assets of the Company or in the event of an acquisition.
- 2) EBITDA was defined as earnings before interest, taxes, depreciation, and amortization from continuing operations. The percentage achieved was determined by comparing the actual EBITDA to the Board approved EBITDA Target, which was \$5,647,000. The Board reserved the right to make adjustments to the EBITDA Target as defined herein in the event of the sale or disposition of any of the assets of the Company or in the event of an acquisition.
- 3) The Health and Safety Incentive target was based upon the actual number of Worker's Compensation Lost Time Accidents, as provided by the Company's Worker's Compensation carrier. The Corporate Treasurer submitted a report on a quarterly basis documenting and confirming the number of Worker's Compensation Lost Time Accidents, supported by the AIG Worker's Compensation Loss Report. Such claims were identified on the loss report as "indemnity claims." The following number of Worker's Compensation Lost Time Accidents and corresponding Performance Target Thresholds were established for the annual Incentive Compensation Plan calculation for 2014.

Worker's Compensation Claim Number	Performance Target
7	85%-100%
6	101%-120%
5	121%-130%
4	131%-140%
3	141%-150%
2	151%-160%
1	161% Plus

4) Permits or License Violations incentive was earned/determined according to the scale set forth below: An "official notice of non-compliance" was defined as an official communication from a local, state, or federal regulatory authority alleging one or more violations of an otherwise applicable Environmental, Health or Safety requirement or permit provision, which resulted in a facility's implementation of corrective action(s).

Permit and	Performance				
License Violations	Target				
7	85%-100%				
6	101%-120%				
5	121%-130%				
4	131%-140%				
3	141%-150%				
2	151%-160%				
1	161% Plus				

5) No performance incentive compensation was payable for achieving the health and safety, permit and license violation, and revenue targets unless a minimum of 70% of the EBITDA Target was achieved.

2014 MIP Targets

As discussed above, 2014 MIPs approved for the CEO, COO, and CFO by the Compensation Committee awarded cash compensation based on achievement of performance targets which included Revenue and EBITDA targets as approved by our Board. The Revenue Target of \$68,757,000 and EBITDA Target of \$5,647,000 set forth in the 2014 MIPs were based on our board approved 2014 budget. In formulating the Revenue Target of \$68,757,000, the Board considered 2013 results, current economic conditions, and forecasts for 2014 government (Department of Energy or DOE) spending. The Compensation Committee believed the performance targets were likely to be achieved, but not assured.

No performance incentive compensation was earned under each of the MIPs for the CEO, COO, and CFO for 2014.

Long-Term Incentive Compensation

Employee Stock Option Plans

The 2004 Stock Option Plan (the "2004 Option Plan") and 2010 Stock Option Plan (the "2010 Option Plan") encourage participants to focus on long-term performance and provides an opportunity for executive officers and certain designated key employees to increase their stake in the Company. Stock options succeed by delivering value to the executive only when the value of our stock increases. Both plans authorize the grant of Non-Qualified Stock Options ("NQSOs") and Incentive Stock Options ("ISOs") for the purchase of Common Stock.

The 2004 Option Plan and 2010 Option Plan assist 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 Compensation Committee's regularly scheduled August or September meeting. Newly hired or promoted executive officers who are eligible to receive options are generally awarded such options at the next regularly scheduled Compensation 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 Compensation 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.

On July 10, 2014, the Company granted an aggregate of 55,000 ISOs from the Company's 2010 Stock Option Plan to certain employees of the Company which allows for the purchase of up to 55,000 shares of the Company's Common Stock. The newly named COO, who was appointed March 20, 2014, was granted 45,000 of the 55,000 ISOs which allow for the purchase of up to 45,000 shares of the Company's Common Stock. The ISOs granted were for a contractual term of six years with one-third yearly vesting over a three year period. The exercise price of the ISOs was \$5.00 per share, which was equal to our closing stock price as reported on Nasdaq on the date of grant.

Pursuant to the 2004 Stock Option Plan and the 2010 Stock Option plan, vesting of option awards 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 2004 Stock Option Plan and the 2010 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.

On July 28, 2014, the 2004 Stock Option Plan expired. No new options can be issued under this plan; however, the options issued under the plan prior to the expiration date of the plan will remain in effect until their respective maturity dates. These final options expired on February 26, 2015.

Accounting for Stock-Based Compensation

We account for stock-based compensation in accordance with ASC 718, "Compensation – Stock Compensation." ASC 718 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. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. The Company uses the Black-Scholes option-pricing model to determine the fair-value of stock-based awards which requires subjective assumptions. 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.

We recognize stock-based compensation expense using a straight-line amortization method over the requisite period, which is the vesting period of the stock option grant. As ASC 718 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.

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 four quarterly open periods of January 1, April 1, July 1, and October 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. Effective June 15, 2012, we suspended our matching contribution in an effort to reduce costs in light of the economic environment. The Company commenced contribution matching fund contribution matching funds effective January 1, 2015.

Perquisites and Other Personal Benefits

The Company provides executive officers with limited perquisites and other personal benefits (health/disability/life insurance) that the Company and the Compensation 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 Compensation Committee periodically reviews the levels of perquisites and other personal benefits provided to executive officers. The executive officers are provided an auto allowance.

Consideration of Stockholder Say-On-Pay Advisory Vote.

At our annual meeting of stockholders held in September 2014, our stockholders voted, on a non-binding, advisory basis, on the compensation of our named executive officers for 2013. A substantial majority (approximately 97%) of the total votes cast on our say-on-pay proposal at that meeting approved the compensation of our named officers for 2013 on a non-binding, advisory basis. The Compensation Committee and the Board believes that this affirms our stockholders' support of our approach to executive compensation. The Compensation Committee expects to continue to consider the results of future stockholder say-on-pay advisory votes when making future compensation decisions for our named executive officers. We will hold an advisory vote on the compensation of named executive officers at our 2015 annual meeting of stockholders.

Compensation of Directors

Directors who are employees receive no additional compensation for serving on the Board of Directors or its committees. In 2014, we provided the following annual compensation to directors who are not employees:

- options to purchase 2,400 shares of our Common Stock with each option having a 10 year term and being fully vested after six months from grant date;
- a quarterly director fee of \$8,000;
- an additional quarterly fee of \$5,500 to the chairman of our Audit Committee; and
- a fee of \$1,000 for each board meeting attendance and a \$500 fee for each telephonic conference call attendance.

Each director may elect to have either 65% or 100% of such fees payable in Common Stock under the 2003 Outside Director Plan, with the balance payable in cash.

The table below summarizes the director compensation expenses recognized by the Company for the director option and stock awards (resulting from fees earned) for the year ended December 31, 2014. The terms of the 2003 Outside Directors Plan are further described below under "2003 Outside Directors Plan."

Director Compensation

					Change in		
					Pension Value		
					and		
	Fees				Nonqualified		
	Earned			Non-Equity	Deferred		
	or Paid	Stock	Option	Incentive Plan	Compensation	All Other	
Name	In Cash	Awards	Awards	Compensation	Earnings	Compensation	Total
	(\$) (1)	(\$) (2)	(\$) (3)	(\$)	(\$)	(\$)	(\$)
John M.							
Climaco	13,650	33,799	6,552	_	_	107,000 ⁽⁵⁾	161,001
Dr. Gary G.	·	,	,			,	
Kugler	13,825	34,229	6,552		_		54,606
Jack Lahav	· —	51,335	6,552	_	_	_	57,887
Joe R. Reeder	13,125	32,497	6,552	_	_	_	52,174
Larry M.							
Shelton (4)	14,282	35,360	6,552	_	_	_	56,194
Dr. Charles E.							
Young	13,300	32,934	6,552		_		52,786
Mark A.							
Zwecker	21,525	53,297	6,552	_	_	_	81,374

- 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 above 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 issuable under the award. The amount shown is the fair value of the Common Stock on the date of the award.
- Options granted under the Company's 2003 Outside Director Plan resulting from re-election to the Board of Directors on September 18, 2014. Options are for a 10 year period with an exercise price of \$3.70 per share and are fully vested in six months from grant date. The value of the option award for each outside director is calculated based on the fair value of the option per share (\$2.73) on the date of grant times the number of options granted, which was 2,400 for each director, pursuant to ASC 718, "Compensation Stock Compensation." The following is the aggregate number of outstanding non-qualified stock options held by non-employee directors at December 31, 2014:

	December 31,
Name	2014
John M. Climaco	8,400
Dr. Gary G. Kugler	5,823
Jack Lahav	24,000
Joe R. Reeder	24,000
Larry M. Shelton	25,200
Dr. Charles E. Young	24,000
Mark A. Zwecker	24,000

- (4) Named as Chairman of the Board effective December 16, 2014. Includes additional compensation earned as Chairman of the Board, prorated from effective date of December 16, 2014.
- (5) Reflect amount paid as a consultant pursuant to a consulting agreement dated October 17, 2014 entered into between Mr. Climaco and the Company. The agreement provides for monthly fees of \$22,000 (effective September 2014) plus reasonable expenses.

See "John Climaco" under "Certain Relationships and Related Transactions, and Director Independence" for a description of the Consulting Agreement, dated October 17, 2014, between the Company and John Climaco, a current director of the Company.

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, as amended ("2003 Directors Plan"), each outside director is granted a 10 year option to purchase up to 6,000 shares of Common Stock on the date such director is initially elected to the Board of Directors, and receives on each re-election date an option to purchase up to another 2,400 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. As of December 31, 2014, options to purchase 169,023 shares of Common Stock are outstanding under the 2003 Directors Plan, of which 152,223 were vested as of December 31, 2014.

As a member of the Board of Directors, each director may elect to receive either 65% or 100% of the director's fee in shares of our Common Stock. The number of shares received by each director is calculated based on 75% of the fair market value of the Common Stock determined on the business day immediately proceeding the date that the quarterly fee is due. The balance of each director's fee, if any, is payable in cash. In 2014, the fees earned by our outside directors totaled approximately \$363,000. Reimbursements of expenses for attending meetings of the Board are paid in cash at the time of the applicable Board meeting. As a management director, Dr. Centofanti is not eligible to participate in the 2003 Directors Plan. 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 December 31, 2014, we have issued 359,270 shares of our Common Stock in payment of director fees since the inception of the 2003 Directors Plan.

In the event of a "change of control" (as defined in the 2003 Outside Directors Stock Plan), each outstanding stock option and stock award shall immediately become exercisable in full notwithstanding the vesting or exercise provisions contained in the stock option agreement.

ITEM 12. 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 2, 2015, by each person known by us to be the beneficial owners of more than 5% of any class of our voting securities.

		Amount and	Percent
	Title	Nature of	Of
Name of Beneficial Owner	Of Class	Ownership	Class (1)
Heartland Advisors, Inc. (2)	Common	1,658,472	14.4%
R. Scott Asen (3)	Common	625,000	5.4%

- (1) The number of shares and the percentage of outstanding Common Stock shown as beneficially owned by a person are based upon 11,486,175 shares of Common Stock outstanding on March 2, 2015, 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.
- (2) This information is based on the Schedule 13G, filed with the Securities and Exchange Commission (the "Commission") on February 13, 2015, which provides that Heartland Advisors, Inc., an investment advisor, shares voting power over 1,526,452 of such shares and shares 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, Milwaukee, WI 53202.
- (3) This information is based on Schedule 13G, filed with the Securities and Exchange Commission (the "Commission") on January 27, 2015, which provides that R. Scott Asen, (a) directly owns 400,000 such shares and has sole dispositive and sole voting power over such shares; (b) as a trustee of The Asen Foundation, a not-for-profit foundation, has sole voting and dispositive power over 25,000 of such shares; and (c) as the President of Asen and Company, an investment advisor, has shared voting and dispositive power over 200,000 such shares. The address of Asen and Company is 222 ½ East 49th Street, New York, NY 10017.

Capital Bank represented to us that:

- As of March 2, 2015, Capital Bank holds of record as a nominee for, and as an agent of, certain accredited investors, 1,323,833 shares of our Common Stock;
- All of our shares of Common Stock held in the name of Capital Bank, as agent of and nominee for its investors, that were acquired directly from us in private placement transactions, or as a result of conversions of our preferred stock or exercise of our warrants (collectively, "Private Placement Transactions"), and all of our shares acquired in Private Placement Transactions by Capital Bank were acquired for and on behalf of accredited investors;
- During 2014 and the first two months of 2015, it acquired, as agent for and nominee of, certain of its investors, shares of our Common Stock in open market transactions ("Open Market Transactions");
- None of Capital Bank's investors beneficially own more than 4.9% of our Common Stock and to its best knowledge, as far as stocks held in accounts with Capital Bank, 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;
- 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; and
- 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, (b) Capital Bank has neither voting nor investment power over such shares, and (c) Capital Bank has not nominated or sought to nominate, and does not intend to nominate in the future, any person to serve as a member of our Board of Directors.

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 March 2, 2015.

		Amount and	Percent
Name of	Title	Nature of	Of
Record Owner	Of Class	Ownership	Class (*)
Capital Bank Grawe Gruppe	Common	1,323,833(+)	11.5%

- (*) This calculation is based upon 11,486,175 shares of Common Stock outstanding on March 2, 2015, 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.
- (+) 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. The amount has been amended given the effect of the reverse stock split.

Security Ownership of Management

The following table sets forth information as to the shares of voting securities beneficially owned as of March 2, 2015, 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.

	Amount and	
	Nature	
	of Beneficial	Percent of Class
Name of Beneficial Owner (2)	Owner (1)	(1)
Dr. Louis F. Centofanti (3)	214,225 ⁽³⁾	1.87%
John M. Climaco (4)	18,592 ⁽⁴⁾	*
Dr. Gary Kugler (5)	19,538(5)	1.29%
Jack Lahav ⁽⁶⁾	225,691(6)	1.96%
Joe R. Reeder (7)	129,853 ⁽⁷⁾	1.13%
Larry M. Shelton (8)	68,352(8)	*
Dr. Charles E. Young ⁽⁹⁾	63,752 ⁽⁹⁾	*
Mark A. Zwecker (10)	140,405(10)	1.22%
Ben Naccarato (11)	500(11)	*
John Lash (12)	$1,000^{(12)}$	*
Directors and Executive Officers as a Group (10 persons)	881,908(13)	7.59%

^{*}Indicates beneficial ownership of less than one percent (1%).

- (1) See footnote (1) of the table under "Security Ownership of Certain Beneficial Owners."
- (2) 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.
- (3) These shares include (i) 151,425 shares held of record by Dr. Centofanti, and (iii) 62,800 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.
- ⁽⁴⁾ Mr. Climaco has sole voting and investment power over these shares which include: (i) 10,192 shares of Common Stock held of record by Mr. Climaco, and (ii) options to purchase 8,400 shares, which are immediately exercisable.
- ⁽⁵⁾ Dr. Kugler has sole voting and investment power over these shares which include: (i) 14,972 shares of Common Stock held of record by Dr. Kugler, and (ii) options to purchase 4,566 shares, which are immediately exercisable.
- (6) Mr. Lahav has sole voting and investment power over these shares which include: (i) 201,691 shares of Common Stock held of record by Mr. Lahav, and (ii) options to purchase 24,000 shares, which are immediately exercisable.
- (7) Mr. Reeder has sole voting and investment power over these shares which include: (i) 105,853 shares of Common Stock held of record by Mr. Reeder, and (ii) options to purchase 24,000 shares, which are immediately exercisable.
- (8) Mr. Shelton has sole voting and investment power over these shares which include: (i) 43,152 shares of Common Stock held of record by Mr. Shelton, and (ii) options to purchase 25,200 shares, which are immediately exercisable.
- ⁽⁹⁾ Dr. Young has sole voting and investment power over these shares which include: (i) 39,752 shares held of record by Dr. Young; and (ii) options to purchase 24,000 shares, which are immediately exercisable.
- (10) Mr. Zwecker has sole voting and investment power over these shares which include: (i) 116,405 shares of Common Stock held of record by Mr. Zwecker, and (ii) options to purchase 24,000 shares, which are immediately exercisable.

- (11) Mr. Naccarato has sole voting and investment power over these shares which include: 500 shares held of record by Mr. Naccarato.
- (12) Mr. Lash has sole voting and investment power over these shares which include: 1,000 shares held of record by Mr. Lash.
- (13)Amount includes 134,166 options, which are immediately exercisable to purchase 134,166 shares of Common Stock.

Equity Compensation Plans

The following table sets forth information as of December 31, 2014, with respect to our equity compensation plans.

	Equity Compensation Plan		
			Number of securities
			remaining available
	Number of securities		for
	to		future issuance
	be issued upon	Weighted average	under
	exercise	exercise price of	equity compensation
	of outstanding	outstanding	plans (excluding
	options	options, warrants	securities reflected in
Plan Category	warrants and rights	and rights	column (a)
	(a)	(b)	(c)
Equity compensation plans Approved by stockholders	293,023	7.81	414,130
Equity compensation plans not Approved by stockholders			
Total	293.023	\$ 7.81	414.130

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Review of Related Party Transactions

Our Audit Committee Charter provides for the review by our Audit Committee of any related party transactions, other than transactions involving an employment relationship with the Company, which are reviewed by the Compensation and Stock Option Committee. Although the Company does not have written policies for the review of related party transactions, the Audit Committee reviews transactions between the Company and its directors, executive officers, and their respective immediate family members. In approving or rejecting a proposed transaction, the Audit Committee takes into account, among other factors it deems appropriate: (1) the extent of the related person's interest in the transaction; (2) whether the transaction is on terms generally available to an unaffiliated third-party under the same or similar circumstances; (3) the cost and benefit to the Company; (4) the impact or potential impact on a director's independence in the event the related party is a director, an immediate family member of a director or an entity in which a director is a partner, stockholder or executive officer; (5) the availability of other sources for comparable products or services; (6) the terms of the transaction; and (7) the risks to the Company. Related party transactions are reviewed at Audit Committee Meetings (which is held at least quarterly) prior to the consummation of the transaction. With respect to a related party transaction arising between Audit Committee meetings, the Chief Financial Officer may present it to the Audit Committee Chairman, who will review and may approve the related party transactions subject to ratification by the Audit Committee at the next scheduled meeting. Our Audit Committee shall approve only those transactions that, in light of known circumstances, are not inconsistent with the Company's best interest.

Related Party Transactions

Mr. Robert Schreiber, Jr.

During March 2011, we entered into a five-year lease with Lawrence Properties LLC for certain office and warehouse space used and occupied by Schreiber, Yonley and Associates ("SYA"), a wholly owned subsidiary of the Company until its sale by the Company on July 29, 2014. Lawrence Properties is owned by Robert Schreiber, Jr., the President of SYA until his resignation on July 29, 2014, and Mr. Schreiber's spouse. Under the lease, which commenced June 1, 2011, we paid monthly rent of approximately \$11,400, which we believe was lower than costs charged by unrelated third party landlords. Rent payment under this lease was approximately \$124,000 and \$72,000 for the years ended December 31, 2014 and 2013, respectively. In connection with the Company's sale of SYA, the lease was terminated on July 29, 2014.

Mr. David Centofanti

Mr. David Centofanti serves as our Director of Information Services. For such services, he received yearly compensation of \$163,000 in 2014 and 2013. Mr. David Centofanti is the son of our Chief Executive Officer, President and a Board member, 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

Mr. Robert L. Ferguson serves as an advisor to the Company's Board of Directors ("Board"). Mr. Ferguson previously served as a Board member from June 2007 to February 2010 and again from August 2011to September 2012. As an advisor to the Company's Board, Mr. Ferguson is paid \$4,000 monthly plus reasonable expenses. For such services, Mr. Ferguson received compensation of approximately \$56,000 and \$52,000 for the years ended December 31, 2014 and 2013, respectively. On August 2, 2013, the Company completed a lending transaction with Messrs. Robert Ferguson and William Lampson ("collectively, the "Lenders"), whereby the Company borrowed from the Lenders the sum of \$3,000,000 pursuant to the terms of a Loan and Security Purchase Agreement and promissory note (the "Loan") The proceeds from the Loan were used for general working capital purposes. The promissory note is unsecured, with a term of three years with interest payable at a fixed interest rate of 2.99% per annum. The promissory note provides for monthly payments of accrued interest only during the first year of the Loan with the first interest payment due September 1, 2013 and monthly payments of \$125,000 in principal plus accrued interest for the second and third year of the Loan. As consideration for the Company receiving the Loan, we issued a Warrant to each Lender to purchase up to 35,000 shares of the Company's Common Stock at an exercise price based on the closing price of the Company's Common Stock at the closing of the transaction which was determined to be \$2.23. The Warrants are exercisable six months from August 2, 2013 and expire on August 2, 2016. As further consideration for the Loan, the Company issued an aggregate 90,000 shares of the Company's Common Stock, with each Lender receiving 45,000 shares. The 90,000 shares of Common Stock and 70,000 Common Stock purchase warrants were issued in a private placement and bear a restrictive legend against resale except in a transaction registered under the Securities Act or in a transaction exempt from registration thereunder.

Mr. John Climaco

On October 17, 2014, the Company's Compensation Committee and the Board of Directors, with Mr. Climaco abstaining, approved a consulting agreement with John Climaco (a director of the Company). The Company and Mr. Climaco entered into the consulting agreement on October 17, 2014. Mr. Climaco is also is a member of the Strategic Advisory Committee of the Board of Directors.

Pursuant to the consulting agreement, the services to be provided by the Consultant shall include, among other things, the following:

- Review the Company's operations to restructure costs to render the Company more competitive;
- Evaluate all functions, including but not limited to sales, marketing, accounting, operations, and executive management as well as cost structures for each facility;
- Assist in the development of the Company's strategy opportunity and other initiatives, including but not limited to the development of the Company's medical isotope technology; and
- Other assignments as determined by the Board.

In his capacity as a consultant under the consulting agreement, Mr. Climaco shall be paid \$22,000 per month (starting September 2014) plus reasonable expenses. The agreement shall continue unless terminated by either party for any reason or no reason by providing thirty (30) days written notice to the other party. For his services under the consulting agreement, Mr. Climaco received approximately \$107,000 in 2014.

Employment Agreements

We have an employment agreement (each dated July 10, 2014) with each of Dr. Centofanti (our President and Chief Executive Officer or "CEO"), Ben Naccarato (our Chief Financial Officer or "CFO"), and John Lash (our Chief Operating Officer or "COO" – hired on March 20, 2014). Each employment agreement provides for annual base salaries, bonuses, and other benefits commonly found in such agreements. In addition, each employment agreement provides that in the event of termination of such officer without cause or termination by the officer for good reason (as such terms are defined in the employment agreement), the terminated officer shall receive payments of an amount equal to benefits that have accrued as of the termination but had not yet been paid, plus an amount equal to one year's base salary at the time of termination. In addition, the employment agreements provide that in the event of a change in control (as defined in the employment agreements), all outstanding stock options to purchase our Common Stock granted to, and held by, the officer covered by the employment agreement to be immediately vested and exercisable. The Company had an employment agreement dated August 24, 2011 with Mr. James A. Blankenhorn. On March 20, 2014, the Company accepted the resignation of Mr. James A. Blankenhorn, as Vice President and COO of the Company. The resignation was effective March 28, 2014. When Mr. Blankenhorn's resignation as the COO became effective, his employment agreement also terminated. See "Employment Agreements" under "Executive Compensation" for a description of the employment agreements with our CEO, CFO, and COO.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The Audit Committee of the Company's Board of Directors appointed Grant Thornton, LLP ("Grant Thornton") on July 9, 2014, as the independent registered public accounting firm to audit the consolidated financial statements of the Company for fiscal year 2014.

On June 25, 2014, the Audit Committee approved the dismissal of BDO USA, LLP ("BDO") as the Company's independent registered accounting firm.

The following table shows the aggregate fees for the audit and other services provided by BDO for fiscal year 2013:

Fee Type	2013	_
Audit (1)	\$ 399,00	00
Audit-Related (2)	28,00	00
All Other (3)	69,00	00
Total	\$ 496,00	00

⁽¹⁾ Audit fees consist of audit work performed in connection with the annual financial statements, the reviews of unaudited quarterly financial statements, and work generally only the independent registered accounting firm can reasonable provide, such as consents and review of regulatory documents filed with the Securities and Exchange Commissions.

⁽²⁾ Audit-related fees consist of work performed for the audit of the Company's 401(k) plan.

⁽³⁾ Fees for business interruption consulting services related to insurance claims for our Perma-Fix of South Georgia, Inc. facility, which suffered a fire in August 2013.

The following table shows the aggregate fees for audit and other services provided by Grant Thornton for fiscal year 2014:

Fee Type	2014
Audit (1)	\$ 278,000
	¢ 270,000
Total	\$ 278,000

(1) Audit fees consist of audit work performed in connection with the annual financial statements, the reviews of unaudited quarterly financial statements, and work generally only the independent registered accounting firm can reasonable provide, such as consents and review of regulatory documents filed with the Securities and Exchange Commissions.

The Audit Committee of the Company's Board of Directors has considered whether each BDO's and Grant Thornton's provision of the services described above for the fiscal years 2014 and 2013 was compatible with maintaining its independence.

Engagement of the Independent Auditor

The Audit Committee approves in advance all engagements with the Company's independent accounting firm to perform audit or non-audit services for us. All services under the headings Audit Fees, Audit-Related Fees, Tax Fees, 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 all audits, audit-related, tax and other services, along with acceptable cost levels, to be performed by the independent accounting firm and any member of the independent accounting firm's alliance network of firms, and may revise the pre-approved services during the period based on later 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 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULE

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 Schedule

Schedules are not required, are not applicable or the information is set forth in the consolidated financial statements or notes thereto.

(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.

Ву	/s/ Dr. Louis F. Centofanti Dr. Louis F. Centofanti Chief Executive Officer, President and Principal Executive Officer	Date	March 31, 2015
Ву	/s/ Ben Naccarato Ben Naccarato Chief Financial Officer and Principal Financial Officer	Date	March 31, 2015
	uant to the requirements of the Securities Exchange Act of 1934, the gistrant and in capacities and on the dates indicated.	nis repor	t has been signed below by the following persons on behalf of
Ву	/s/ Dr. Louis F. Centofanti Dr. Louis F. Centofanti, Director	Date	March 31, 2015
Ву	/s/ John M. Climaco John M. Climaco, Director	Date	March 31, 2015
Ву	/s/ Dr. Gary Kugler Dr. Gary Kugler, Director	Date	March 31, 2015
Ву	/s/ Jack Lahav Jack Lahav, Director	Date	March 31, 2015
Ву	/s/ Joe R. Reeder Joe R. Reeder, Director	Date	March 31, 2015
Ву	/s/ Larry M. Shelton Larry M. Shelton, Chairman of the Board	Date	March 31, 2015
Ву	/s/ Dr. Charles E. Young Dr. Charles E. Young, Director	Date	March 31, 2015
Ву	/s/ Mark A. Zwecker Mark A. Zwecker, Director	Date	March 31, 2015
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EXHIBIT INDEX Exhibit Description No. 2.1 Stock Purchase Agreement dated July 15, 2011, by and among Perma-Fix Environmental Services, Inc., Homeland Security Capital Corporation (now known as Timios National Corporation or "TNC"), and Safety and Ecology Holdings Corporation, which is incorporated by references from Exhibit 2.1 to the Company's Form 8-K filed on July 20, 2011. 3(i) Restated Certificate of Incorporation, as amended, of Perma-Fix Environmental Services, Inc. 3(ii) Amended and Restated Bylaws, as amended, of Perma-Fix Environmental Services, Inc., as incorporated by reference from Exhibit 3(ii) to the Company's 2012 Form 10-K/A filed on December 12, 2013. Specimen Common Stock Certificate as incorporated by reference from Exhibit 4.3 to the Company's Registration 4.1 Statement, No. 33-51874. Rights Agreement dated as of May 2, 2008 between the Company and Continental Stock Transfer & Trust Company, as 4.2 Rights Agent. 4.3 Letter Agreement dated September 29, 2008, between the Company and Continental Stock Transfer & Trust Company to

- correct certain subparagraph numbering on the Rights Agreement dated as of May 2, 2008 between the Company and Continental Stock Transfer & Trust Company, as Rights Agent.
- 4.4 Loan and Securities Purchase Agreement, dated August 2, 2013 between William N. Lampson, Robert L. Ferguson, and Perma-Fix Environmental Services, Inc. as incorporated by reference from Exhibit 4.4 to the Company Form 10-Q for quarter ended June 30, 2013, filed on August 8, 2013.
- 4.5 Promissory Note dated August 2, 2013, between William N. Lampson, Robert L. Ferguson, and Perma-Fix Environmental Services, Inc. as incorporated by reference from Exhibit 4.5 to the Company Form 10-Q for quarter ended June 30, 2013, filed on August 8, 2013.
- 4.6 Common Stock Purchase Warrant, dated August 2, 2013, for William N. Lampson, as incorporated by reference from Exhibit 4.6 to the Company Form 10-Q for quarter ended June 30, 2013, filed on August 8, 2013.
- Common Stock Purchase Warrant, dated August 2, 2013, for Robert L. Ferguson, as incorporated by reference from 4.7 Exhibit 4.7 to the Company Form 10-Q for quarter ended June 30, 2013, filed on August 8, 2013.
- Amended and Restated Revolving Credit, Term Loan and Security Agreement between Perma-Fix Environmental 4.8 Services, Inc. and PNC Bank, National Association (as Lender and as Agent), dated October 31, 2011, which was filed as Exhibit 99.4 to the Company's 8-K filed on November 4, 2011.
- 4.9 First Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated November 7, 2012, between the Company and PNC Bank, National Association, as incorporated by reference from exhibit 4.1 to the Company's Form 10-Q for the quarter ended September 30, 2012, filed on November 8, 2012.
- 4.10 Second Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement and Waiver, dated May 9, 2013, between the Company and PNC Bank, National Association, as incorporated by reference from Exhibit 4.1 to the Company's Form 10-O for the guarter ended March 31, 2013, filed on May 10, 2013.
- 4.11 Third Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement between PNC Bank, National Association and Perma-Fix Environmental Services, Inc., dated August 2, 2013, as incorporated by reference from Exhibit 4.1 to the Company's Form 10-Q for the quarter ended June 30, 2013, filed on August 8, 2013.
- 4.12 Third Amended, Restated and Substituted Revolving Credit Note between PNC Bank, National Association and Perma-Fix Environmental Services, Inc., dated August 2, 2013, as incorporated by reference from Exhibit 4.2 to the Company's Form 10-Q for the quarter ended June 30, 2013, filed on August 8, 2013.

- 4.13 Fourth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement and Waiver between PNC Bank, National Association and Perma-Fix Environmental Services, Inc., dated April 14, 2014, as incorporated by reference from Exhibit 4.17 to the Company's 2013 Form 10-K.
- 4.14 Fifth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement between PNC Bank, National Association and Perma-Fix Environmental Services, Inc., dated July 25, 2014, as incorporated by reference from Exhibit 4.1 to the Company's 8-K filed on July 31, 2014.
- 4.15 Sixth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement between PNC Bank, National Association and Perma-Fix Environmental Services, Inc., dated July 28, 2014, as incorporated by reference from Exhibit 4.2 to the Company's 8-K filed on July 31, 2014.
- 4.16 Subordination Agreement dated August 2, 2013 by and among William Lampson and Robert Ferguson and PNC Bank, National Association, as incorporated by reference from Exhibit 4.3 to the Company's Form 10-Q for the quarter ended June 30, 2013, filed on August 8, 2013.
- 10.1 401(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.
- 10.2 2003 Outside Directors' Stock Plan of the Company.
- 10.3 First Amendment to 2003 Outside Directors Stock Plan.
- Second Amendment to 2003 Outside Directors Stock Plan, as incorporated by reference from Appendix "A" to the Company' 2012 Proxy Statement dated August 6, 2012.
- 10.5 Third Amendment to 2003 Outside Directors Stock Plan, as incorporated by reference from Exhibit "B" to the Company' 2014 Proxy Statement dated August 11, 2014.
- 10.6 2004 Stock Option Plan of the Company as incorporated by reference from "Exhibit A" to the Company's Proxy Statement dated June 21, 2004. See SEC file number 1-11596.
- 10.7 Consent Decree, dated December 12, 2007, between United States of America and Perma-Fix of Dayton, Inc.
- Subcontract between CH2M Hill Plateau Remediation Company, Inc. ("CHPRC") and East Tennessee Materials & Energy Corporation, dated May 27, 2008., as incorporated by reference from Exhibit 10.4 to the company's Form 10-Q for the quarter ended June 30, 2010 filed on August 6, 2010.
- 10.9 2010 Stock Option Plan of the Company as incorporated by reference from "Appendix A" to the Company's 2010 Proxy Statement dated August 20, 2010. See SEC file number 1-11596.
- 10.10 Employment Agreement dated July 10, 2014 between Louis Centofanti, Chief Executive Officer, and Perma-Fix Environmental Services, Inc., which is incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on July 15, 2014.
- 10.11 Employment Agreement dated July 10, 2014 between John Lash, Chief Operating Officer, and Perma-Fix Environmental Services, Inc., which is incorporated by reference from Exhibit 10.2 to the Company's Form 8-K filed on July 15, 2014.
- 10.12 Employment Agreement dated July 10, 2014 between Ben Naccarato, Chief Financial Officer, and Perma-Fix Environmental Services, Inc., which is incorporated by reference from Exhibit 10.3 to the Company's Form 8-K filed on July 15, 2014.
- 10.13 Contract and Amendments entered into between Safety and Ecology Corporation and U.S. Department of Energy (Oak Ridge) dated March 30, 2010, incorporated by reference from Exhibit 10.38 to the Company's Form 10-K for the year ended December 31, 2011. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN OMITTED AS A REQUEST BY THE COMPANY FOR AN EXTENSION FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION UNDER THE FREEDOM OF INFORMATION ACT WAS GRANTED ON APRIL 7, 2014.

- 10.14 Contract and Purchase Order between United States Enrichment Corporation (now known as Centrus) and Perma-Fix Environmental Services Inc. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN OMITTED PURSUANT TO A REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION UNDER THE FREEDOM OF INFORMATION ACT.
- 10.15 Settlement and Release Agreement dated as of February 12, 2013, by and between Perma-Fix Environmental Services, Inc. and Safety & Ecology Holdings Corporation, on the one hand, and Timios National Corporation, on the other hand, as incorporated by reference from Exhibit 99.1 to the Company's 8-K filed on February 15, 2013.
- 10.16 Settlement and Release Agreement and Amendment to Employment Agreement dated as of February 14, 2013 by and between Perma-Fix Environmental Services, Inc., Safety & Ecology Holdings Corporation and Safety and Ecology Corporation, on the one hand, and Christopher P. Leichtweis and Myra Leichtweis, on the other hand, as incorporated by reference from Exhibit 99.2 to the Company's 8-K filed on February 15, 2013.
- 10.17 Separation and Release Agreement dated May 14, 2013 by and between Christopher Leichtweis and Perma-Fix Environmental Services, Inc., incorporated by reference from Exhibit 99.1 to the Company's Form 8-K filed on May 17, 2013.
- 10.18 Consulting Services Agreeemtn dated May 14, 2013 by and between Christopher Leichtweis and Perma-Fix Environmental Services, Inc. incorporated by reference from Exhibit 99.2 to the Company's Form 8-K filed on May 17, 2013.
- 10.19 Incentive Stock Option Agreement between Perma-Fix Environmental Services, Inc. and Mr. John Lash, as incorporated by reference from Exhibit 10.7 to the Company's 8-K filed on July 15, 2014.
- 10.20 2013 Incentive Compensation Plan for Chief Executive Officer, effective January 1, 2013, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on June 12, 2013.
- 10.21 2013 Incentive Compensation Plan for Chief Financial Officer, effective January 1, 2013, as incorporated by reference from Exhibit 10.2 to the Company's Form 8-K filed on June 12, 2013.
- 10.22 2013 Incentive Compensation Plan for Chief Operating Officer, effective January 1, 2013, as incorporated by reference from Exhibit 10.3 to the Company's Form 8-K filed on June 12, 2013.
- 10.23 2014 Incentive Compensation Plan for Chief Executive Officer, effective January 1, 2014, as incorporated by reference from Exhibit 10.4 to the Company's Form 8-K filed on July 15, 2014.
- 10.24 2014 Incentive Compensation Plan for Chief Operating Officer, effective January 1, 2014, as incorporated by reference from Exhibit 10.5 to the Company's Form 8-K filed on July 15, 2014.
- 10.25 2014 Incentive Compensation Plan for Chief Financial Officer, effective January 1, 2014, as incorporated by reference from Exhibit 10.6 to the Company's Form 8-K filed on July 15, 2014.
- 10.26 Consulting Agreement dated October 17, 2014, between Perma-Fix Environmental Services, Inc. and John Climaco, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on October 23, 2014.
- Letter from BDO USA, LLP to the Securities and Exchange Commission, dated June 30, 2014, as incorporated by reference from Exhibit 16.1 to the Company's 8-K filed on July 1, 2014.
- 21.1 List of Subsidiaries
- 23.1 Consent of Grant Thornton, LLP
- 23.2 Consent of BDO USA, LLP
- 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 and Chief Accounting 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 and Chief Accounting Officer of the Company furnished
	pursuant to 18 U.S.C. Section 1350.
101.INS	XBRL Instance Document*
101.SCH	XBRL Taxonomy Extension Schema Document*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document*
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document*
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document*

^{*}Pursuant to Rule 406T of Regulation S-T, the Interactive Data File in Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purpose of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.



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.

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You may verify this certificate online at corp.delaware.gov/authver.shtml

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Jeffrey W. Bullock, Secretary of State *AUTHENTICATION:* 7162972

DATE: 03-03-09



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 SIXTENTH 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 1:31 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 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.

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Jeffrey W. Bullock, Secretary of State *AUTHENTICATION:* 7162972

DATE: 03-03-09



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.

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You may verify this certificate online at corp.delaware.gov/authver.shtml



Jeffrey W. Bullock, Secretary of State **AUTHENTICATION:**

> DATE: 03-03-09



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.

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You may verify this certificate online at corp.delaware.gov/authver.shtml



Jeffrey W. Bullock, Secretary of State *AUTHENTICATION:* 7162972

DATE: 03-03-09

SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 09:00 AM 12/19/1990
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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 & Ballon40 West 57th StreetNew 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 bylaws 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 reorganisation 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

SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 10:00 AM 11/26/1991 913305254 - 2249849

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."

Louis F. antofant

ATTEST:

Secretary

STATE OF DELAMARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 04:30 PM 12/17/1991
913525113 - 2249849

CERTIFICATED 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 Perma-Fix Environmental services, Inc."

3. The amendment of the Certificate of Incorporation herein certified has been daily 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 these 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 16th day of December, 1991.

Louis Centofanti, President

Attest:

Mark Zwecker, Secretary

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 11:30 AN 09/04/1992 922525072 - 2249849

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:

<u>Fourth</u>: 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 3.0236955, 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: Louis =. Conto fant

Dr. Louis Centofanti

President

ATTEST:

By :_____

STATE OF DELAWARE SECRETARY OF STATE DEVISION OF CORPORATIONS FILED 04:00 PM 02/06/1996 960035778 - 2249849

CERTIFICATE OF DESIGNATIONS OF SERIES I CLASS A 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 Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, said Board of Directors, acting by unanimous written consent in lieu of a meeting dated February 2, 1996, hereby adopted the terms of the Series I Class A Preferred Stock, which resolutions are set forth on the attached page.

Dated: February 2, 1996

PERMA-FIX ENVIRONMENTAL SERVICES,

INC.

Bv:

Dr. Louis P. Centofanti Chairman of the Board

ATTEST:

Mark A. Zwecker, 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, May31, 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 convened 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 convened 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 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 (I) 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, anew 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; <u>provided</u>, <u>however</u>, 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 rateably 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.

STATE DE DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 10:45 AM 02/20/1996 960047351 - 2249849

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 Section151of 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 <u>16</u>, 1996

PERMA-FIX ENVIRONMENTAL SERVICES,

INC

By

Dr. Louis F. Centofanti Chairman of the Board

ATTEST:

Mark A. Zwecker. 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 Z 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 safe 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 Pact 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.

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.

- 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 ease 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; <u>provided</u>, <u>however</u>, 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 rateably 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 of 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 the other, as between the holders of such stock and the holders of shares of this Series 2 Class B Preferred Stock; and.

6.2.3 Junior to shares of this Series 2 Class B Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Shares or if the holders of shares of this Series 2 Class B 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.

7.1 In addition to any requirement for a series vote pursuant to the GCL in respect of any amendment to the Articles that adversely affects the rights, privileges, restrictions and conditions of the Series 2 Class B Preferred Stock, the rights, privileges, restrictions and conditions attaching to the Series 2 Class B 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 2 Class B Preferred Stock or written consent by the holders of a majority of the Series 2 Class B 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 or the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of this Section 7.1.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 12:30 PM 07/19/1996 960210746 - 2249849

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 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.

Ву

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 Right.

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.

- 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 Preference.** 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.
- 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.

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 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 3 Class C Preferred Stock shall be cumulative, and no dividend 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.

<u>Part 4 - Conversion</u>. 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 (1,854) 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 Convention 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 Note) (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.
- 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 <u>Common Stock Duly Issued</u>. 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 <u>Notice of Adjustments</u>. 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 <u>Issue Taxes.</u> 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; <u>provided, however</u>, 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.
- 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 <u>Fractional Shares</u>. 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 <u>Notice</u>. 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.

- 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).
- 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.

- 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 <u>Surrender of Certificates</u>. 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.
- 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 <u>Rateable Participation</u>. 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.

- 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 <u>Authorized</u>. 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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 04:30 PM 12/16/1996 960370767 - 2249849

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 Designation").
- 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 Designation").
- 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 $\underline{4^{\text{th}}}$ day of $\underline{\text{December}}$, 1996, by the President of the Company.

Richard T. Kelecy, Secretary

(SEAL)

ATTEST:

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By

Dr. Louis F. Centofanti, President

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 04:30 PM 01/06/1997 971005393 - 2249849

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 wax 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

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 11:00 AM 06/11/1997 971190682 - 2249849

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.

Bv

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 at follows:

Part 1 - Voting and Preemptive Rights.

Voting Rights. Except at otherwise provided in Pan 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 <u>Liquidation</u>. 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 <u>Payment of Liquidation Preferences</u>. 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.
- 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.

- 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.
- <u>Part 4 Conversion</u>. 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 overthe-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.

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 Use Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares or 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.

4.3

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 cast 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 convened 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.

- 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 <u>Common Stock Duly Issued</u>. 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 <u>Issue Taxes</u>. 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; <u>provided</u>, <u>however</u>, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by toy 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 <u>Fractional Shares</u>. 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 axe required or is permitted to close.

Part 5 - Redemption.

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.

- 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.
- 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.

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 stall 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 <u>Rateable Participation</u>. 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.

- 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 <u>Authorized</u>. 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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 11:15 AM 07/14/1997 971232152 - 2249849

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.

Dr. Louis F. Centofanti Chairman of the Board

ATTEST:

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.

Voting Rights. Except as otherwise provided in Section 242(b)(2) of the General Corporation Law of the State of Delaware (the 1.1 "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 <u>No Preemptive Rights</u>. 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.

- 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 <u>Payment of Liquidation Preferences</u>. 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.

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.

<u>Part 4 - Conversion</u>. 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 overthe-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.

- Mechanics 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 convened 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.
- 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 <u>Common Stock Duly Issued</u>. 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 <u>Notice of Adjustments</u>. 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 <u>Issue Taxes</u>. 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; <u>provided</u>, <u>however</u>, 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 <u>Notices</u>. 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 <u>Business Day</u>. 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.

8.1 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 <u>Rights of Conversion Upon Redemption</u>. 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.

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 5 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 5 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 <u>Authorized</u>. Any shares of Series 5 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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 01:30 PM 11/13/1997 971387107 - 2249849

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 <u>12</u>, 1997

PERMA-F1X ENVIRONMENTAL SERVICES, INC.

Bv

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.

Voting Rights. Except as otherwise provided in Pan 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.

- 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 <u>Payment of Liquidation Preferences</u>. 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.
- Assets Insufficient to pay full 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 clue 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

<u>Part 4-Conversion</u>. 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 lime 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.

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 ail purposes as the record holder or 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.

4.3

- 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 <u>Common Stock Duly Issued.</u> 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 <u>Issue Taxes</u>. 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; <u>Provided</u>, <u>however</u>, 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 lime, 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 <u>Fractional Shares.</u> 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 <u>Notices.</u> 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.

- 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.
- 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.

- 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.
- 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 he 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.
- 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.

- 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 <u>Authorized</u>. 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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 01:31 PM 11/13/1997 971387113 - 2249849

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 <u>12</u>, 1997

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Βv

Dr. Louis F. Centofanti Chairman of the Board

ATTEST.

Richard T. Kelecv, 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.

- 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 <u>Payment of Liquidation Preferences</u>. 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 Pan 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.
- 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"), of 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 Dale (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 Corporations 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.

<u>Part 4 - Conversion</u>. 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 stall 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 on additional one hundred seventy-five (175) shuts 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 dividend, 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 <u>Common Stock Duly Issued</u>. 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 <u>Notice of Adjustments</u>. 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 <u>Issue Taxes</u>. 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; <u>provided, however</u>, 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.
- 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 of 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 <u>Notices</u>. 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.

- 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 state.
- 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.
- 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 <u>Surrender of Certificates</u>. 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.
- 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.

61 <u>Rateable Participation</u>. 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 at 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.

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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 10:00 AM 11/26/1997 971405163 - 2249849

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 bolder 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 $\underline{20t}h$ day of November, 1997 by the President of the Company.

ATTEST:

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Richard T. Kelecy, Secretary

(SEAL)

Dr. Louis F. Contofonti Prosis

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 12:00 PM 07/10/1998 981268436 - 2249849

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:

1. Number or 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 me 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

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.
- 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.

- 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.

- 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 game 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 or 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 34/00 (\$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 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, me 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.

Louis F. Cento fant

Richard T. Kelecy, Secretary on this 30th day of June, 1998

Secretary, Perma-Fix Environmental Services, Inc.

STATE OF DELAWARE SECRETARY OF STATE SECRETARY OF STATE OF CORPORATIONS FILED 01:30 PM 07/16/1998 981277755 - 2249849

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^{th} day of April, 1998, by the President of the Company.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Richard T. Kelecy, Secretary

(SEAL)

Dr. Louis F. Centofanti, President

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 01:31 PM 07/16/1998 981277757 - 2249849

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 <u>30th</u>, 1998

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 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 test 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 <u>Voting Rights</u>. 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 or 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 <u>Payment of Liquidation Preferences</u>. 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.

<u>Part 4 - Conversion</u>. 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 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 data 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 is 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 or 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 mast, 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 B 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 surrendered 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 bolder 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 bolder 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"), end 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 than 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 adjustment 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 <u>Common Stock Duly Issued</u>. 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 <u>Notice of Adjustments</u>. 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 <u>Issue Taxes</u>. 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 8 Class H Preferred Stock pursuant thereto; <u>provided, however</u>, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 8 Class H Preferred Stock in connection with such conversion.
- Reservation of Stock Issuable Upon Conversation. 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 8 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 8 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 8 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 <u>Fractional Shares</u>. No fractional shares shall be issued upon the conversion of any share or shares of Series 8 Class H Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 8 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 <u>Notices</u>. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 8 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.

- 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 year 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.
- 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) instruction for surrender to the Corporation, in the manner and at the place designated, of a share certificates 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.
- 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 name of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

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 B Class H Preferred Stock, either as to dividend 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 holder 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.

- 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 30th, 1998

PERMA-FIX ENVIRONMENTAL SERVICES.

INC

By

Dr. Louis F. Centofanti Chairman of the Board

ATTEST:

Richard T. Kelecy, Secretary

ALT. KLY

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 <u>Voting Rights.</u> 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.

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 semiannual 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 we 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.

- Mechanics of Conversion. Any holder of the Series 9 Class I Preferred Stock who wishes to exercise its Conversion Rights pursuant 4.3 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.
- 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 of 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 <u>Common Stock Duly Issued</u>. 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 <u>Issue Taxes</u>. 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; <u>provided, however</u>, 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 <u>Fractional Shares</u>. 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 <u>Notices</u>. 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 <u>Business Day</u>. 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.
- 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 Pan 4 hereof.
- 5.4 <u>Surrender of Certificates</u>. 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 <u>Rateable Participation</u>. 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 <u>Authorized</u>. 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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 12:30 PM 07/15/1999 991291288 - 2249849

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

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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 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.

Voting Rights. Except as otherwise provided herein, in the Corporation's Certificate of Incorporation (the "Articles") or the 1.1 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.

- 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.
- 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.

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.

<u>Part 4 - Conversion</u>. 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.
- Conversion Price. As used herein, the term Conversion Price shall be the product of (i) the average closing bid quotation of the 4.3 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.

- 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 <u>Common Stock Duly Issued.</u> 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 <u>Notice of Adjustments.</u> 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 <u>Issue Taxes</u>. 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; <u>provided</u>, <u>however</u>, 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.
- 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 <u>Notices</u>. 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.

- 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").
- 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.

- 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.
- 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 <u>Surrender of Certificates.</u> 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.

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 he, in preference or priority to the holders of shares of such class or series.

Part 7 - Amendment and Reissue.

- 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 <u>Authorized</u>. 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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 12:31 PM 07/15/1999 991291289 - 2249849

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

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

Law of the State of Delaware, does hereby certify:

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 <u>Voting Rights</u>. 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.

- 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 <u>Payment of Liquidation Preferences</u>. 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.
- 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.

<u>Part 4 - Conversion</u>. 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 twentyfour (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.
- 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 man 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 <u>Common Stock Duly Issued</u>. 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 <u>Issue Taxes</u>. 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; <u>provided, however</u>, 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.
- 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 <u>Fractional Shares</u>. 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 <u>Notices</u>. 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.

- 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").
- 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.
- 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 <u>Surrender of Certificates</u>. 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 me 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.
- 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 <u>Rateable Participation</u>. 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.

- 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 <u>Authorized</u>. 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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 12:32 PM 07/15/1999 991291291 - 2249849

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.

Вv

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 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:

1. 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.
- 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.

- 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.
- 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.
- 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.

- 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 or 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 Redemptions.

- 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.

- 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.
- 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 from 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. My 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 he 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 34/00 (\$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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 12:33 PM 07/15/1999 991291292 - 2249849

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.
- 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 15th day of July, 1999, by the President of the Company.

ATTEST:

Richard T. Kelecy, Secretary

(SEAL)

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

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Dr. Louis F. Centofanti, President

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 12:30 PM 08/10/1999 991931578 - 2249849

CERTIFICATE OF DESIGNATIONS OF SERIES 14 CLASS N CONVERTIBLE PREFERRED STOCK OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perm-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.

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 ones 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 he 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 he 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.

- 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 <u>Payment of Liquidation Preferences</u>. 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.
- 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.

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 3.1 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 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 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.

<u>Part 4 - Conversion</u>. 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.
- Conversion Price. As used herein, the term Conversion Price shall be the product of (i) the average closing bid quotation of the 4.3 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 he 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 he 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 Corporations 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 convened 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 <u>Common Stock Duly Issued</u>. 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 <u>Issue Taxes</u>. 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; <u>provided however</u>, 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,
- 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 <u>Notices</u>. 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.

- 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").
- 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, (i) 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.
- 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.

- 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 bolder 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 <u>Surrender of Certificates</u>. 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.
- 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, 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.

- 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 14 Class N 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 14 Class N Preferred Stock or written consent by the holders of a majority of the Series 14 Class N 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 <u>Authorized</u>. Any shares of Series 14 Class N 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 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, 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

Dr. Louis F. Centofanti Chairman of the Board

ATTEST:

Richard T. Kelecy, Secretary

STATE OF DELAMARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 12:31 PM 68/10/1999 991331579 - 2249849

PERMA-FIX ENVIRONMENTAL SERVICES, INC. (The "Corporation")

RESOLUTION OF THE BOARD OF DIRECTORS

FIXING THE NUMBER AND DESIGNATING THE RIGHT, 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 <u>Payment of Liquidation Preferences</u>. 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 Right 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 right or claim to any of the remaining assets of the Corporation.
- 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 therefore, 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 semiannual 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 to 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.

<u>Part 4 - Conversion.</u> 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 he 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 overthe-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 twentyfour (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 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.

- 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 therefore 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 the 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 purpose 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 Corporate no later than ten (10) calender 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 <u>Common Stock Duly Issued.</u> 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 <u>Notice of Adjustments.</u> 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 <u>Issue Taxes.</u> 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; <u>provided</u>, <u>however</u>, 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 <u>Notices</u>. 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 form 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 <u>Surrender of Certificates</u>. 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.

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 <u>Rateable Participation</u>. 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.

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 **<u>Authorized</u>**. 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.

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.

Βv

Dr. Louis F. Centofanti Chairman of the Board

ATTEST:

Richard T. Kelecy, 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 he 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 light 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 or 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 Part5 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 authorised 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. ("Liviakas") 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 34/00 (\$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 spilt 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.

CERTIFICATE OF ELIMINATION

OF

SERIES 11 CLASS K CONVERTIBLE PREFERRED STOCK AND

SERIES 12 CLASS L CONVERTIBLE PREFERRED STOCK

SERIES 13 CLASS M 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 11 Class K Convertible Preferred Stock, par value \$.001 per share, of the Corporation (the "Series 11 Preferred") was filed with the Delaware Secretary of State on July 15, 1999 (the "Series 11 Certificate of Designations").
- 2. That all outstanding shares of the Series 11 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 August 3, 1999.
 - 3. That no shares of Series 11 Preferred remain outstanding.
- 4. That all shares of the Series 11 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 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 11 Class K Convertible Preferred Stock, no authorized shares of Series 11 Class K Convertible Preferred Stock will remain outstanding and no shares of Series 11 Class K Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 11 Class K Convertible Preferred Stock.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 12:33 PM 08/10/1999 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 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 an exchanged pursuant to an agreements 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 shared 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 exchanged, 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 to 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 filling 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 18th day of August, 1999, by the President of the Company.

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ATTEST:	PERMA-FIX ENVIRONMENTAL SERVICES, INC.
Att. Key	Louis F. antofant
Richard T. Kelecy, Secretary (SEAL)	Dr. Louis F. Centofanti, President
2	

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 10:00 AM 06/14/2001 010285655 - 2249849

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.

Bv

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:

1. Designation, Number of Shares of Preferred Stock of Series 17 Class O 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.

- 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 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.
- 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.

- 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.
- **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.
- 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 or 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"),
- 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.
- 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 ratal 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 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 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.

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 10:01 AM 06/14/2001 010285660 - 2249849

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^{th} day of May, 2001, by the President of the Company.

MT.KL

ATTEST:

Richard T. Kelecy, Secretary (SEAL)

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By:

Dr. Louis F. Centofanti, Presiden

STATE OF DELAWARE SECRETHAND OF 4STATE 02/20 DIVISION OF CORPORATIONS FILED 10:00 AM 06/20/2002 020398062 - 2249849

CERTIFICATE OF AMENDMENT OF RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED, 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 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:

<u>FOURTH</u>: 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 hi 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 $\underline{19}^{th}$ day of June, 2002.

Perma-Fix Environmental Services, Inc., a Delaware corporation

Зу: <u></u>

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. <u>Designation and Amount.</u> 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. <u>Dividends and Distributions</u>.

- 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); <u>provided</u> 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.
- 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. <u>Voting Rights</u>. 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 number 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. <u>Certain Restrictions.</u>

(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. Required 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.

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 1.00 times the aggregate amount of stock, securities, cash and/or any other properly (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. <u>Amendment</u>. 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 2nd day of May, 2008.

ATTEST:

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Steven Baughman, Secretary

(SEAL)



PAGE

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.", FILED IN THIS OFFICE ON THE ELEVENTH DAY OF OCTOBER, A.D. 2013, AT 10:05 O'CLOCK A.M.

 $A\ FILED\ COPY\ OF\ THIS\ CERTIFICATE\ HAS\ BEEN\ FORWARDED\ TO\ THE\ NEW\ CASTLE\ COUNTY\ RECORDER\ OF\ DEEDS.$

2249849 8100

131187648

You may verify this certificate online at corp.delaware.gov/authver.shtml

Jeffrey W. Bullock, Secretary of State *AUTHENTICATION:* 0807617

DATE: 10-11-13

State of Delaware Secretary of State Division of Corporations Delivered 10:05 AM 10/11/2013 FILED 10:05 AM 10/11/2013 SRV 131187648 - 2249849 FILE

CERTIFICATE OF AMENDMENT OF THE RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED, OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.

PERMA-FIX ENVIRONMENTAL SERVICES, INC., a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

FIRST: The name of the corporation is Perma-Fix Environmental Services, Inc. (the "Corporation").

SECOND: At a meeting of the Board of Directors of the Corporation, resolutions were duly adopted declaring the advisability of an amendment to the Corporation's Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation"), as follows, and providing that:

The first two paragraphs of Article Fourth of the Corporation's Certificate of Incorporation are hereby deleted in their entirety and replaced in their 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").

Upon this Certificate of Amendment of the Certificate of Incorporation of the Corporation becoming effective in accordance with the terms hereof and pursuant to the General Corporation Law of the State of Delaware (the "Amendment Effective Time"), every five (5) shares of the Corporation's Common Stock (the "Old Common Stock"), issued and outstanding immediately prior to the Amendment Effective Time, will be automatically reclassified as and converted into one share of common stock, par value \$.001 per share, of the Corporation (the "New Common Stock")(such formula herein, the "Determined Ratio"). Further, every right, option and warrant to acquire shares of Old Common Stock outstanding immediately prior to the Amendment Effective Time shall, as of the Amendment Effective Time and without any further action, automatically be reclassified into the right to acquire one (1) share of New Common Stock based on the Determined Ratio of shares of Old Common Stock to shares of New Common Stock, but otherwise upon the terms of such right, option or warrant (except that the exercise or purchase price of such right, option or warrant shall be proportionately adjusted).

Notwithstanding the immediately preceding paragraph, the Corporation shall not be required to issue or deliver any fractional shares of New Common Stock. Each holder of such New Common Stock shall be entitled to receive for such fractional interest, and at the Amendment Effective Time any such fractional interest in such shares of New Common Stock shall be converted into the right to receive, an amount in cash, without interest, determined by multiplying (i) such fractional share interest to which the holder would otherwise be entitled by (ii) the closing sale price of the Common Stock (on a post-reverse-split basis as adjusted for the amendment effected hereby) on the trading day immediately prior to the Amendment Effective Time on The NASDAQ Stock Market, or if the principal exchange on which the Common Stock is then traded is other than The NASDAQ Stock Market, such exchange as may be applicable. Shares of Common Stock that were outstanding prior to the Amendment Effective Time and that are not outstanding after the Amendment Effective Time shall resume the status of authorized but unissued shares of Common Stock.

Each stock certificate that, immediately prior to the Amendment Effective Time, represented shares of Old Common Stock shall, from and after the Amendment Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate shall have been reclassified (as well as the right to receive cash in lieu of any fractional shares of New Common Stock as set forth above); provided, however, that each holder of record of a certificate that represented shares of Old Common Stock shall receive, upon surrender of such certificate, a new certificate representing the number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate shall have been reclassified, as well as any cash in lieu of fractional shares of New Common Stock to which such holder may be entitled pursuant to the immediately preceding paragraph."

THIRD: That thereafter, pursuant to resolution of its Board of Directors, a meeting of the stockholders of the Corporation was duly called and held, upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware, at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

FOURTH: This Certificate of Amendment of the Certificate of Incorporation was duly adopted at said meeting of the stockholders in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

FIFTH: In accordance with Section 103(d) of the General Corporation Law of the State of Delaware, this Certificate of Amendment shall be effective as of 12:01 a.m. on October 15, 2013.

IN WITNESS WHEREOF, Perma-Fix Environmental Services, Inc. has caused this Certificate of Amendment to be signed by its Corporate Secretary, this 11th day of October, 2013.

By:

Ben Naccarato, Corporate Secretary

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.", FILED IN THIS OFFICE ON THE NINETEENTH DAY OF SEPTEMBER, A.D. 2014, AT 12:09 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

2249849 8100

141199620

You may verify this certificate online at corp.delaware.gov/authver.shtml

AUTHENTY CATION: 1714196

DATE: 09-19-14

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

AND

CONTINENTAL STOCK TRANSFER & TRUST COMPANY

(Rights Agent)

RIGHTS AGREEMENT

Dated as of May 2, 2008

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Exhibit A — Certificate of Designations for Series A Junior Participating Preferred Stock
Exhibit B — Form of Right Certificate
Exhibit C — Summary of Rights to Purchase Preferred Shares

RIGHTS AGREEMENT

This RIGHTS AGREEMENT, dated as of the 2nd day of May, 2008, between PERMA-FIX ENVIRONMENTAL SERVICES, INC., a Delaware corporation (the "Company"), and CONTINENTAL STOCK TRANSFER & TRUST COMPANY (the "Rights Agent").

WITNESSETH

WHEREAS, on May 2, 2008 (the "Rights Dividend Declaration Date"), the Board of Directors of the Company (the "Board of the Company") authorized and declared a dividend distribution of one Right (as hereinafter defined) for each share of Common Stock (as hereinafter defined) of the Company outstanding as of the close of business on May 12, 2008 (the "Record Date"). The Board of the Company and authorized the issuance of one Right (as such number may hereafter be adjusted pursuant to the provisions of Section 11 hereof) for each share of Common Stock of the Company that shall become outstanding between the Record Date and the earlier of the Distribution Date, the Redemption Date and the Final Expiration Date (as such terms are hereinafter defined), and under the certain circumstances thereafter, each Right initially representing the right to purchase one one-hundredth of a Preferred Share (as hereinafter defined), upon the terms and subject to the conditions herein set forth (the "Rights").

NOW THEREFORE, in consideration of the premises and the mutual agreements hereinafter set forth, the parties hereby agree as follows:

Section 1. <u>Certain Definitions</u>. For purposes of this Agreement, the following terms have the meanings indicated:

(a) "Acquiring Person" means any Person (other than any Excluded Persons) who or which, together with all Affiliates and Associates (as such terms are hereinafter defined) of such Person, shall be the Beneficial Owner (as hereinafter defined) of 20% or more of the shares of Common Stock of the Company then outstanding (other than as a result of a Permitted Offer (as hereafter defined)), but shall not include any of the following Persons (collectively, the "Excluded Persons"); (i) the Company, (ii) any Subsidiary (as hereinafter defined) of the Company, (iii) any employee benefit plan of the Company or any Subsidiary of the Company, and/or (iv) any entity holding Common Stock of the Company for or pursuant to the terms of any such plan. Notwithstanding the foregoing, no Person shall become an "Acquiring Person" solely as the result of the acquisition of Common Stock by the Company and/or any Subsidiary of the Company which, by the Company reducing the number of shares of Common Stock outstanding, increases the proportionate number of shares of Common Stock of the Company then outstanding beneficially owned by such Person to 20% or more; provided, however, that if a Person (other than any of the Excluded Persons) shall become the Beneficial Owner of 20% or more of the Common Stock of the Commany then outstanding by reason of share purchases by the Company and/or any Subsidiary of the Company and shall, after such share purchases by the Company and/or any Subsidiary of the Company, become the Beneficial Owner of additional shares of Common Stock of the Company constituting 1% or more of the then outstanding shares of Common Stock of the Company, then such Person shall be deemed to be an "Acquiring Person." Notwithstanding the foregoing, if the Board of the Company determines (upon approval by a majority of the members of the Board of the Company) in good faith that a Person who would otherwise be an "Acquiring Person," as defined pursuant to the foregoing provisions of this Section 1(a), has become such inadvertently, and such Person divests, within 10 Business Days (as hereinafter defined) from the date of such determination by the Board of the Company, a sufficient number of shares of Common Stock so that such Person would no longer be an "Acquiring Person" (as defined pursuant to the foregoing provisions of this Section 1(a)), then such Person will not be deemed to be an "Acquiring Person" for any purpose of this Agreement.

- (b) "Affiliate" and "Associate" have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as in effect on the date of this Agreement, and to the extent included within the foregoing clause of this Section 1(b), shall also include, with respect to any Person, any other Person (other than an Excluded Person) whose common stock would be deemed constructively owned by such first Person pursuant to the provisions of Section 382 of the Internal Revenue Code (the "Code") or any successor provision or replacement provision, provided, however, that a Person will not be deemed to be an Affiliate or Associate of another Person solely because either or both Persons are or were directors of the Company
 - (c) A Person will be deemed the "Beneficial Owner" of, and will be deemed to "beneficially own", any securities:
 - (i) which such Person or any of such Person's Affiliates or Associates beneficially owns, directly or indirectly;
- (ii) which such Person or any of such Person's Affiliates or Associates has (A) the right to acquire (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities), whether or not in writing, or upon the exercise of conversion rights, exchange rights, rights (other than these Rights), warrants or options, or otherwise; provided, however, that a Person will not be deemed the Beneficial Owner of, or to beneficially own, securities tendered pursuant to a tender or exchange offer made by or on behalf of such Person or any of such Person's Affiliates or Associates until such tendered or exchanged securities are accepted for purchase or exchange; or (B) the right to vote pursuant to any agreement, arrangement or understanding, provided, however, that a Person will not be deemed the Beneficial Owner of, or to beneficially own, any security if the agreement, arrangement or understanding to vote such security (1) arises solely from a revocable proxy or consent given to such Person in response to a public proxy or consent solicitation made pursuant to, and in accordance with, the applicable rules and regulations promulgated under the Exchange Act and (2) is not also then reportable on Schedule 13D under the Exchange Act (or any comparable or successor report); or

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(iii) which are beneficially owned, directly or indirectly, by any other Person with which such Person or any of such Person's Affiliates or Associates has any agreement, arrangement or understanding (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities) for the purpose of acquiring, holding, voting (except to the extent contemplated by the proviso to Section 1(c)(ii)(B)) or disposing of any securities of the Company.

Notwithstanding anything in this definition of Beneficial Ownership to the contrary, the phrase "then outstanding", when used with reference to a Person's Beneficial Ownership of securities of the Company, means the number of such securities then issued and outstanding together with the number of such securities not then actually issued and outstanding which such Person would be deemed to own beneficially hereunder.

(d) "Agreement" shall mean this Rights Agreement as originally executed or as it may from time to time be supplement, amended, renewed, restated or extended pursuant to applicable provisions hereof.

- (e) "Board of the Company" has the meaning ascribed to such term as defined in the WHEREAS clause hereof.
- (f) "Business Day" means any day other than a Saturday, a Sunday, or a day on which banking institutions in the State of New York are authorized or obligated by law or executive order to close.
- (g) "Close of Business" on any given date means 5:00 P.M., Atlanta, Georgia time, on such date; provided, however, that if such date is not a Business Day, Close of Business will mean 5:00 P.M., Atlanta, Georgia time, on the next succeeding Business Day.
- (h) "Common Stock" when used with reference to the Company means the shares of common stock, par value \$.001 per share, of the Company. "Common Stock" when used with reference to any Person other than the Company means the capital stock (or equity interest) with the greatest voting power of such other Person or, if such other Person is a Subsidiary of another Person, the Person or Persons which ultimately control such first-mentioned Person.
 - (i) "Distribution Date" has the meaning set forth in Section 3 hereof.
 - (j) "Excluded Persons" has the meaning set forth in Section 1(a) hereof.
 - (k) "Final Expiration Date" has the meaning set forth in Section 7(a) hereof.
- (I) "Group" has the meaning ascribed to such term in Section 13(d)(3) of the Exchange Act, as in effect on the date of this Agreement.
- (m) "Permitted Offer" means a tender or exchange offer which is for all outstanding shares of Common Stock of the Company at a price and on terms determined, prior to the purchase of shares under such tender or exchange offer, by at least a majority of the members of the Board of the Company who are not officers of the Company and who are not Acquiring Persons or Affiliates, Associates, nominees or representatives of an Acquiring Person, to be adequate (taking into account all factors that such Board of the Company deem relevant including, without limitation, prices that could reasonably be achieved if the Company or its assets were sold on an orderly basis designed to realize maximum value) and otherwise in the best interests of the Company and its stockholders (other than the Person or any Affiliate or Associate thereof on whose behalf the offer is being made) taking into account all factors that such directors may deem relevant.

- (n) "Person" means any individual, firm, corporation, limited liability company, partnership (general or limited) or other entity, and shall include any successor (by merger or otherwise) of such entity.
- (o) "Preferred Shares" means shares of Series A Junior Participating Preferred Stock, par value \$.001, of the Company having the rights and preferences set forth in the Certificate of Designations attached to this Agreement as Exhibit A.
 - (p) "Record Date" has the meaning set forth in the "WHEREAS" clause hereof.
 - (q) "Redemption Date" has the meaning set forth in Section 7 hereof.
- (r) "Shares Acquisition Date" means the first date of public announcement (which includes, without implied limitation, a report filed pursuant to Section 13(d) under the Exchange Act) by the Company or an Acquiring Person that an Acquiring Person has become such.
- (s) "Subsidiary" of any Person means any corporation, partnership (general or limited), limited liability company or other entity of which securities or other ownership interest having ordinary voting power sufficient, in the absence of contingencies, to elect a majority of the board of directors or other persons performing similar functions of such corporation or other entity are at the time directly or indirectly beneficially owned or otherwise controlled by such Person and any Affiliate or Associate of such Person.

- (t) "Transaction" means any merger, consolidation, or sale of assets described in Section 13(a) hereof or any acquisition of Common Stock which would result in a Person becoming an Acquiring Person.
- Section 2. <u>Appointment of Rights Agent</u>. The Company hereby appoints the Rights Agent to act as agent for the Company in accordance with the terms and conditions hereof, and the Rights Agent hereby accepts such appointment. The Company may from time to time appoint such co-Rights Agents as it may deem necessary or desirable.

Section 3. Issue of Right Certificates.

(a) Until the earlier of (i) the Close of Business on the 10^{th} day after the Share Acquisition Date or (ii) the Close of Business on the 10th Business Day (or such later date as may be determined by approval of a majority of the members of the Board of the Company prior to such time as any Person becomes an Acquiring Person) after the date of the commencement by any Person (other than any of the Excluded Persons) of, or after the date of the first public announcement of the intention of any Person (other than any of the Excluded Persons) to commence (which intention to commence remains in effect for 5 Business Days after such announcement) a tender or exchange offer, the consummation of which would result in any Person becoming an Acquiring Person (including, in the case of both (i) and (ii), any such date which is after the date of this Agreement and prior to the issuance of the Rights; the earlier of such dates being herein referred to as the "Distribution Date"), (x) the Rights will be evidenced (subject to the provisions of Section 3(b) hereof) by the certificates for shares of Common Stock registered in the names of the holders thereof (which certificates shall also be deemed to be Right Certificates) and not by separate Right Certificates, and (y) the right to receive Right Certificates will be transferable only in connection with the transfer of shares of Common Stock, subject to the provision of Section11(a)(ii) hereof. As soon as practicable after the Distribution Date, the Company will prepare and execute, the Rights Agent will countersign, and the Company will send or cause to be sent (and the Rights Agent will, if requested, send) by first-class, insured, postage-prepaid mail, to each record holder of shares of Common Stock (subject to Section 11(a)(ii) hereof) as of the Close of Business on the Distribution Date, at the address of such holder shown on the records of the Company, a Right Certificate, in substantially the form of Exhibit B hereto (a "Right Certificate"), evidencing one Right for each share of Common Stock so held. As of the Distribution Date, the Rights will be evidenced solely by such Right Certificates.

(b) On the Record Date, or as soon as practicable thereafter, the Company will send a copy of a Summary of Rights to Purchase Preferred Shares, in substantially the form of Exhibit C hereto (the "Summary of Rights"), by first-class, postage-prepaid mail, to each record holder of shares of Common Stock as of the Close of Business on the Record Date, at the address of such holder shown on the records of the Company. With respect to certificates for shares of Common Stock outstanding as of the Record Date, until the earlier of (i) the Distribution Date or (ii) the Final Expiration Date, or (iii) the Redemption Date, the Rights will be evidenced by such certificates registered in the names of the holders thereof together with a copy of the Summary of Rights attached thereto. Until the Distribution Date (or the earlier of the Redemption Date or the Final Expiration Date), the surrender for transfer of any certificate for shares of Common Stock outstanding on the Record Date, with or without a copy of the Summary of Rights attached thereto, shall also constitute the transfer of the Rights associated with the shares of Common Stock represented thereby, subject to the provision of Section 11(a)(ii) hereof.

(c) Rights shall be issued in respect of all shares of Common Stock of the Company which are issued or transferred by the Company after the Record Date but prior to the earlier of the Distribution Date, the Redemption Date or the Final Expiration Date, subject to the provisions of Section 11(a)(ii) hereof. Certificates for shares of Common Stock which become outstanding (including, without limitation, reacquired shares of Common Stock referred to in the last sentence of this paragraph (c)) after the Record Date but prior to the earliest of the Distribution Date, the Redemption Date or the Final Expiration Date will be deemed also to be Certificates for Rights and will have impressed on, printed on, written on or otherwise affixed to them the following legend:

This certificate also evidences and entitles the holder hereof to certain Rights as set forth in the Rights Agreement between Perma-Fix Environmental Services, Inc. and Continental Stock Transfer & Trust Company, dated May 2, 2008 (the "Rights Agreement"), the terms of which are hereby incorporated herein by reference and a copy of which is on file at the principal executive offices of Perma-Fix Environmental Services, Inc. Under certain circumstances, as set forth in the Rights Agreement, such Rights will be evidenced by separate certificates and will no longer be evidenced by this certificate. Perma-Fix Environmental Services, Inc. will mail to the holder of this certificate a copy of the Rights Agreement without charge after receipt of a written request therefor. Under certain circumstances described in the Rights Agreement, Rights issued to any Person who becomes an Acquiring Person (as defined in the Rights Agreement), whether currently held by or on behalf of such person or by any subsequent holder, shall become null and void.

With respect to such certificates containing the foregoing legend, until the earlier of the Final Expiration Date or the Distribution Date or the Redemption Date, the Rights associated with the shares of Common Stock represented by such certificates will be evidenced by such certificates alone, and the surrender for transfer of any such certificate will also constitute the transfer of the Rights associated with the shares of Common Stock represented thereby, subject to provisions of Section 11(a)(ii) hereof. In the event that the Company purchases or acquires any shares of Common Stock after the Record Date but prior to the Distribution Date, any Rights associated with such shares of Common Stock will be deemed canceled and retired so that the Company shall not be entitled to exercise any Rights associated with the shares of Common Stock which are no longer outstanding.

Section 4. Form of Right Certificates.

(a) The Right Certificates (and the forms of election to purchase Preferred Shares and of assignment to be printed on the reverse thereof) shall be substantially the same as Exhibit B hereto and may have such marks of identification or designation and such legends, summaries or endorsements printed thereon as the Company may deem appropriate and as are not inconsistent with the provisions of this Agreement, or as may be required to comply with any applicable law or with any rule or regulation made pursuant thereto or with any rule or regulation of any stock exchange or transaction reporting system on which the Rights may from time to time be listed or to conform to usage. Subject to the provisions of Section 22 hereof, the Right Certificates shall entitle the holders thereof to purchase such number of one one-hundredth of a Preferred Share as shall be set forth therein at the price per one one-hundredth of a Preferred Share set forth therein (the "Purchase Price"), but the number of such one one-hundredths of a Preferred Share and the Purchase Price shall be subject to adjustment as provided herein.

(b) Any Right Certificate issued pursuant to Section 3(a) or Section 22 hereof that represents a Right or Rights which are null and void pursuant to Section 11(a)(ii) of this Agreement and any Right Certificate issued pursuant to Section 6 or Section 11 hereof upon transfer, exchange, replacement or adjustment of any other Right Certificate referred to in this sentence, shall contain (to the extent feasible) the following legend:

The Rights represented by this Right Certificate are or were beneficially owned by a Person who was or became an Acquiring Person or an Affiliate or Associate of an Acquiring Person (as such terms are defined in the Rights Agreement). Accordingly, this Right Certificate and the Rights represented hereby are null and void.

Provisions of Section 11(a)(ii) of this Agreement shall be operative whether or not the foregoing legend is contained on any such Right Certificate

Section 5. <u>Countersignature and Registration</u>. The Right Certificates will be executed on behalf of the Company by its Chairman of the Board of the Company, its Chief Executive Officer, its President, any of its Vice Presidents, or its Treasurer, either manually or by facsimile signature, will have affixed thereto the Company's seal or a facsimile thereof, and shall be attested by the Secretary or an Assistant Secretary of the Company, either manually or by facsimile signature. The Right Certificates shall be manually countersigned by the Rights Agent and shall not be valid for any purpose unless countersigned. In case any officer of the Company who shall have signed any of the Right Certificates shall cease to be such officer of the Company before countersignature by the Rights Agent and issuance and delivery by the Company, such Right Certificates, nevertheless, may be countersigned by the Rights Agent and issued and delivered by the Company with the same force and effect as though the person who signed such Right Certificates had not ceased to be such officer of the Company; and any Right Certificate may be signed on behalf of the Company by any person who, at the actual date of the execution of such Right Certificate, shall be a proper officer of the Company to sign such Right Certificate, although at the date of the execution of this Rights Agreement any such person was not such an officer.

Following the Distribution Date, the Rights Agent will keep or cause to be kept, at its designated office for such purpose, books for registration and transfer of the Right Certificates issued hereunder. Such books shall show the names and addresses of the respective holders of the Right Certificates, the number of Rights evidenced on its face by each of the Right Certificates and the date of each of the Right Certificates.

Section 6. Transfer, Split Up, Combination and Exchange of Right Certificates; Mutilated, Destroyed, Lost or Stolen Right Certificates. Subject to the provisions of Section 11(a)(ii), 14 and 24 hereof, at any time after the Close of Business on the Distribution Date, and at or prior to the Close of Business on the earlier of the Redemption Date or the Final Expiration Date, any Right Certificate or Right Certificates (other than Right Certificates representing Rights that have become void pursuant to Section 11(a)(ii) hereof or that have been exchanged pursuant to Section 24 hereof) may be transferred, split up, combined or exchanged for another Right Certificate or Right Certificates, entitling the registered holder to purchase a like number of one one-hundredths of a Preferred Share and such other rights as the Right Certificate or Right Certificates surrendered then entitled such holder to purchase. Any registered holder desiring to transfer, split up, combine or exchange any Right Certificate or Right Certificates will make such request in writing delivered to the Rights Agent, and will surrender the Right Certificate or Right Certificates to be transferred, split up, combined or exchanged at the principal office of the Rights Agent designated for such purpose, subject to the provisions of Sections 11(a)(ii), 14 and 24 hereof. Thereupon the Rights Agent will countersign and deliver to the person entitled thereto a Right Certificate or Right Certificates, as the case may be, as so requested, subject to the provisions of Sections 11(a)(ii), 14 and 24 hereof. The Company may require payment of a sum sufficient to cover any tax or governmental charge that may be imposed in connection with any transfer, split up, combination or exchange of Right Certificates.

Upon receipt by the Company and the Rights Agent of evidence reasonably satisfactory to them of the loss, theft, destruction or mutilation of a Right Certificate, and, in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to them, and, at the Company's request, reimbursement to the Company and the Rights Agent of all reasonable expenses incidental thereto, and upon surrender to the Rights Agent and cancellation of the Right Certificate if mutilated, the Company will make and deliver a new Right Certificate of like tenor to the Rights Agent for delivery to the registered holder in lieu of the Right Certificate so lost, stolen, destroyed or mutilated.

Notwithstanding any other provision hereof, the Company and the Rights Agreement may amend this Agreement to provide for uncertificated Rights in addition to or in place of Rights evidenced by the Rights Certificate.

Section 7. Exercise of Rights; Purchase Price; Expiration Date of Rights.

- (a) Subject to Section 11(a)(ii) hereof, the registered holder of any Right Certificate may exercise the Rights evidenced thereby (except as otherwise provided in this Agreement), in whole or in part at any time after the Distribution Date upon surrender of the Right Certificate, with the form of election to purchase and certification on the reverse side thereof duly executed, to the Rights Agent at the office of the Rights Agent designated for such purposes, together with payment of the Purchase Price (as hereinafter defined) for each one one-hundredth of a Preferred Share as to which the Rights are exercised, at or prior to the earliest of (i) the Close of Business on the 10th anniversary of the date of this Agreement (the "Final Expiration Date"), (ii) the time at which the Rights are redeemed as provided in Section 23 hereof (the "Redemption Date"), or (iii) the time at which such Rights are exchanged as provided in Section 24 hereof.
- (b) The Purchase Price for each one one-hundredth of a Preferred Share pursuant to the exercise of a Right shall initially be \$13.00, shall be subject to adjustment from time to time as provided in Sections 11 and 13 hereof and shall be payable in lawful money of the United States of America in accordance with paragraph (c) below.

Upon receipt of a Right Certificate representing exercisable Rights, with the form of election to purchase duly executed, accompanied by payment of the Purchase Price for the Preferred Shares (or other security as the case may be) to be purchased and an amount equal to any applicable transfer tax required to be paid by the holder of such Right Certificate in accordance with Sections 6 and 9 hereof by certified check or cashier's check payable to the order of the Company, the Rights Agent shall thereupon promptly (i) (A) requisition from any transfer agent of the Preferred Shares (or in the case of exercise under Section 11(a)(ii) hereof, any transfer agent of the shares of Common Stock) a certificate or certificates for the number of shares to be purchased and the Company hereby irrevocably authorizes its transfer agent to comply with all such requests, or (B) if the Company in its sole discretion shall have elected to deposit the total number of Preferred Shares issuable upon exercise of the Rights hereunder with a depository agent, requisition from the depositary agent depositary receipts representing such number of one one-hundredths of a Preferred Share (or in the case of exercise under Section 11(a)(ii) such number of shares of Common Stock) as are to be purchased (in which case certificates for the applicable Preferred Shares or shares of Common Stock represented by such receipts shall be deposited by the transfer agent with the depositary agent) and the Company hereby directs the depositary agent to comply with such request, (ii) when appropriate, requisition from the Company the amount of cash to be paid in lieu of issuance of fractional shares in accordance with Section 14 hereof, (iii) after receipt of such certificates or depositary receipts, cause the same to be delivered to or upon the order of the registered holder of such Right Certificate, registered in such name or names as may be designated by such holder and (iv) when appropriate, after receipt, deliver such cash to or upon the order of the registered holder of such Right Certificate. In the event that the Company is obligated to issue securities of the Company other than Preferred Shares (including Common Stock) of the Company pursuant to Section 11(a) hereof, the Company will make all arrangements necessary so that such other securities are available for distribution by the Rights Agent, if and when appropriate.

In addition, in the case of an exercise of the Rights by the holder pursuant to Section 11(a)(ii) hereof, the Rights Agent shall return such Right Certificate to the registered holder thereof after imprinting, stamping or otherwise indicating thereon that the rights represented by such Right Certificate no longer include the rights provided by Section 11(a)(ii) hereof, and, if fewer than all the Rights represented by such Right Certificate were so exercised, the Rights Agent shall indicate on the Right Certificate the number of Rights represented thereby that continue to include the rights provided by Section 11(a)(ii) hereof.

(d) If the registered holder of any Right Certificate exercises less than all the Rights evidenced thereby, a new Right Certificate evidencing Rights equivalent to the Rights remaining unexercised will be issued by the Rights Agent to the registered holder of such Right Certificate or to his duly authorized assigns, subject to the provisions of Sections 6 and 14 hereof. Notwithstanding anything in this Agreement to the contrary, neither the Rights Agent nor the Company will be obligated to undertake any action with respect to a registered holder upon the occurrence of any purported exercise as set forth in this Section 7 unless such registered holder will have (a) completed and signed the certificate contained in the form of election to purchase set forth on the reverse side of the Rights Certificate surrendered for such exercise (b) paid to the Company the Purchase Price for the Preferred Shares (or in the case of exercise under Section 11(a)(ii) hereof, the Common Stock) to be purchased pursuant to such exercise, and (c) provided such additional evidence of the identity of the Beneficial Owner (or former Beneficial Owner) or Affiliates or Associates thereof as the Company will reasonably request.

Section 8. <u>Cancellation and Destruction of Right Certificates</u>. All Right Certificates surrendered for the purpose of exercise, transfer, split up, combination or exchange, shall, if surrendered to the Company or to any of its agents, be delivered to the Rights Agent for cancellation or in cancelled form, or, if surrendered to the Rights Agent, will be cancelled by it, and no Right Certificates will be issued in lieu thereof except as expressly permitted by any of the provisions of this Agreement. The Company will deliver to the Rights Agent for cancellation and retirement, and the Rights Agent shall so cancel and retire any other Right Certificate purchased or acquired by the Company otherwise than upon the exercise thereof. The Rights Agent will deliver all cancelled Right Certificates to the Company, or shall, at the written request of the Company, destroy such cancelled Right Certificates, and in such case shall deliver a certificate of destruction thereof to the Company.

Section 9. <u>Availability of Preferred Shares</u>. The Company covenants and agrees that it will cause to be reserved and kept available out of its authorized and unissued Preferred Shares or any Preferred Shares held in its treasury, the number of Preferred Shares that will be sufficient to permit the exercise in full of all outstanding rights in accordance with Section 7. The Company covenants and agrees that it will take all such action as may be necessary to ensure that all Preferred Shares delivered upon exercise of Rights shall, at the time of delivery of the certificates for such Preferred Shares (subject to payment of the Purchase Price), be duly and validly authorized and issued and fully paid and nonassessable shares.

The Company covenants and agrees that so long as the Preferred Shares (and, after the time a Person becomes an Acquiring Person, Common Shares or any other securities) issuable upon the exercise of the Rights may be listed on any national securities exchange or quotation system, the Company shall use its best efforts to cause, from and after such time as the Rights become exercisable, all shares reserved for such issuance to be listed on such exchange or quotation system upon official notice of issuance upon such exercise.

The Company covenants and agrees that it will take all such action as may be necessary to ensure that all Preferred Shares (or Common Shares and other securities, as the case may be) delivered upon exercise of Rights shall, at the time of delivery of the certificates for such Preferred Shares (subject to payment of the Purchase Price), be duly and validly authorized and issued and fully paid and nonassessable shares or other securities.

The Company further covenants and agrees that it will pay when due and payable any and all federal and state transfer taxes and charges which may be payable in respect of the issuance or delivery of the Right Certificates or of any Preferred Shares upon the exercise of Rights. The Company shall not, however, be required to pay any transfer tax which may be payable in respect of any transfer or delivery of Right Certificates to a person other than, or the issuance or delivery of certificates or depositary receipts for the Preferred Shares in a name other than that of, the registered holder of the Right Certificate evidencing Rights surrendered for exercise or to issue or to deliver any certificates or depositary receipts for Preferred Shares upon the exercise of any Rights until any such tax shall have been paid (any such tax being payable by the holder of such Right Certificate at the time of surrender) or until it has been established to the Company's reasonable satisfaction that no such tax is due.

As soon as practicable after the Distribution Date, the Company shall use its best efforts to:

- (i) prepare and file a registration statement under the Securities Act of 1933, as amended (the "Act"), with respect to the securities purchasable upon exercise of the Rights on an appropriate form, will use reasonable efforts to cause such registration statement to remain effective (with a prospectus at all times meeting the requirements of the Act) until the Final Expiration Date; and
- (ii) use reasonable efforts to qualify or register the Rights and the securities purchasable upon exercise of the Rights under the Blue Sky laws of such jurisdictions as may be necessary or appropriate.

Section 10. Preferred Shares Record Date. Each person in whose name any certificate for Preferred Shares is issued upon the exercise of Rights shall for all purposes be deemed to have become the holder of record of the Preferred Shares represented thereby on, and such certificate shall be dated, the date upon which the Right Certificate evidencing such Rights was duly surrendered and payment of the Purchase Price (and any applicable transfer taxes) was made; provided, however, that if the date of such surrender and payment is a date upon which the Preferred Shares transfer books of the Company are closed, such person shall be deemed to have become the record holder of such shares on, and such certificate shall be dated, the next succeeding Business Day on which the Preferred Shares transfer books of the Company are open. Prior to the exercise of the Rights evidenced thereby, the holder of a Right Certificate shall not be entitled to any rights of a holder of Preferred Shares or other securities for which the Rights shall be exercisable, including, without limitation, the right to vote, to receive dividends or other distributions or to exercise any preemptive rights, and shall not be entitled to receive any notice of any proceedings of the Company, except as provided herein.

Section 11. <u>Adjustment of Purchase Price, Number of Shares or Number of Rights</u>. The Purchase Price, the number of Preferred Shares covered by each Right and the number of Rights outstanding are subject to adjustment from time to time as provided in this Section 11.

(a) (i) In the event the Company shall at any time after the date of this Agreement (A) declare a dividend on the Preferred Shares payable in Preferred Shares, (B) subdivide the outstanding Preferred Shares, (C) combine the outstanding Preferred Shares into a smaller number of Preferred Shares or (D) issue any shares of its capital stock in reclassification of the Preferred Shares (including any such reclassification in connection with a consolidation or merger in which the Company is the continuing or surviving corporation), except as otherwise provided in this Section 11(a), the Purchase Price in effect at the time of the record date for such dividend or of the effective date of such subdivision, combination or reclassification, and the number and kind of shares of capital stock issuable on such date, will be proportionately adjusted so that the holder of any Right exercised after such time will be entitled to receive the aggregate number and kind of shares of capital stock which, if such Right had been exercised immediately prior to such date and at a time when the Preferred Shares transfer books of the Company were open, the holder would have owned upon such exercise and been entitled to receive by virtue of such dividend, subdivision, combination or reclassification; <u>provided</u>, <u>however</u>, that in no event will the consideration to be paid upon the exercise of one Right be less than the aggregate par value of the shares of capital stock of the Company issuable upon exercise of one Right.

(ii) Subject to Section 24 of this Agreement and the provisions of the next paragraph of this Section 11(a)(ii), in the event any Person becomes, alone or with it's Affiliates and Associates, an Acquiring Person, each holder of a Right, from and after the Distribution Date and except as provided below, shall for a period of 60 days after the later of such time any Person becomes an Acquiring Person or the effective date of an appropriate registration statement filed under the Act pursuant to Section 9 hereof (provided, however, that if at any time prior to the expiration or termination of the Rights there shall be a temporary restraining order, a preliminary injunction, an injunction, or temporary suspension by the Board of the Company, or similar obstacle to exercise of the Rights (the "Injunction") that prevents exercise of the Rights, a new 60-day period shall commence on the date the Injunction is removed), have a right to receive, upon exercise thereof at a price equal to the then current Purchase Price multiplied by the number of one one-hundredths of a Preferred Share for which a Right is then exercisable, in accordance with the terms of this Agreement and in lieu of Preferred Shares, such number of shares of Common Stock of the Company (or, in the discretion of the Board of the Company, one one-hundredth of a Preferred Share pursuant to Section 11(a)(iii) hereof) as shall equal the result obtained by (x) multiplying the then current Purchase Price by the number of one onehundredths of a Preferred Share for which a Right is then exercisable and dividing that product by (y) 50% of the then current per share market price of the Company's shares of Common Stock (determined pursuant to Section 11(d) hereof) on the date such Person became an Acquiring Person, (such number of shares being referred to as the "Adjustment Shares"); provided, however, that if the transaction that would otherwise give rise to the foregoing adjustment is also subject to the provisions of Section 13 hereof, then only the provisions of Section 13 hereof shall apply and no adjustment shall be made pursuant to this Section 11(a)(ii); and provided further, that the adjustment set forth in this Section 11(a)(ii) shall be effective only at and after the time at which the authorization of the Board of the Company to redeem the Rights pursuant to Section 23(a), as said Section may be amended pursuant to Section 27, shall have terminated. If any Person shall become an Acquiring Person and the Rights shall then be outstanding, the Company will not take any action which would eliminate or diminish the benefits intended to be afforded by the Rights.

Notwithstanding anything herein to the contrary, from and after the date such Person becomes an Acquiring Person, any Rights that are beneficially owned by (i) any Acquiring Person (or any Associate or Affiliate of such Acquiring Person), (ii) a transferee of any Acquiring Person (or any Affiliate or Associate thereof) who becomes a transferee after the Acquiring Person becomes such, or (iii) any transferee of an Acquiring Person (or of any Affiliate or Associate thereof) who becomes a transferee prior to or concurrently with the Acquiring Person becoming such and receives such Rights pursuant to either (A) a transfer (whether or not for consideration) from the Acquiring Person to holders of equity interests in such Acquiring Person or to any Person with whom such Acquiring Person has a continuing agreement, arrangement or understanding (whether or not in writing) regarding the transferred Rights or (B) a transfer which the Board of the Company has determined is part of a plan, arrangement or understanding which has as a primary purpose or effect the avoidance of this Section 11(a)(ii), shall become null and void without any further action and no holder of such Rights shall have any rights whatsoever with respect to such Rights, whether under any provision of this Agreement or otherwise. No Right Certificate will be issued pursuant to Section 3 that represents Rights beneficially owned by an Acquiring Person whose Rights would be void pursuant to the proceeding sentence or any Associate or Affiliate of such Acquiring Person or to any nominee of such Acquiring Person or Affiliate or Associate thereof or to any transferee of an Acquiring Person (or of any Affiliate or Associate thereof) whose Rights would be void pursuant to the preceding sentence. No Right Certificate will be issued at any time upon the transfer of any Rights to an Acquiring Person whose Rights would be null and void pursuant to the preceding sentence or any Associate or Affiliate thereof or to any nominee or transferee of such Acquiring Person, Associate or Affiliate of such Acquiring Person; and any Right Certificate delivered to the Rights Agent for transfer to an Acquiring Person or any Associate or Affiliate of such Acquiring Person or to any nominee of such Acquiring Person or Affiliate or Associate thereof or to any transferee of an Acquiring Person or any Associate or Affiliate of such Acquiring Person whose Rights would be void pursuant to the preceding sentence will be cancelled. The Company shall use all reasonable efforts to ensure that the provisions of this Section11(a)(ii) and Section 4(b) hereof are complied with but shall have no liability to any holder of Rights Certificates or other Persons as a result of its failure to make any determinations with respect to an Acquiring Person or any of its Affiliates, Associates or transferees hereunder. No Right Certificate shall be issued at any time upon the transfer of any Rights to an Acquiring Person whose Rights would be void pursuant to the preceding sentence or any Associate or Affiliate thereof or to any nominee of such Acquiring Person, Associate or Affiliate; and any Right Certificate delivered to the Rights Agent for transfer to an Acquiring Person whose Rights would be void pursuant to the preceding sentence shall be canceled

In the event that there shall not be sufficient treasury shares or authorized but unissued (and unreserved) shares of Common Stock to permit the exercise in full of the Rights in accordance with the foregoing subparagraph (ii) and the Rights become so exercisable (and the Board of the Company has determined to make the Rights exercisable into fractions of a Preferred Share), notwithstanding any other provision of this Agreement, to the extent necessary and permitted by applicable law, each Right shall thereafter represent the right to receive, upon exercise thereof at the then current Purchase Price in accordance with the terms of this Agreement, (x) a number of (or fractions of) shares of Common Stock (up to the maximum number of shares of Common Stock which may permissibly be issued) and (y) one one-hundredth of a Preferred Share or a number of, or fractions of other equity securities of the Company (or, in the discretion of the Board of the Company, debt) which the Board of the Company has determined to have the same aggregate current market value (determined pursuant to Section 11(d)(i) and (ii) hereof, to the extent applicable,) as one share of Common Stock (such number of, or fractions of, Preferred Shares, debt, or other equity securities or debt of the Company being referred to as a "capital stock equivalent"), equal in the aggregate to the number of Adjustment Shares; provided, however, if sufficient shares of Common Stock and/or capital stock equivalents are unavailable, then the Company shall, to the extent permitted by applicable law, take all such action as may be necessary to authorize additional shares of Common Stock or capital stock equivalents for issuance upon exercise of the Rights, including the calling of a meeting of stockholders; and provided, further, that if the Company is unable to cause sufficient shares of Common Stock and/or capital stock equivalents to be available for issuance upon exercise in full of the Rights, then each Right shall thereafter represent the right to receive the Adjusted Number of Shares upon exercise at the Adjusted Purchase Price (as such terms are hereinafter defined). As used herein, the term "Adjusted Number of Shares" shall be equal to that number of (or fractions of) shares of Common Stock (and/or capital stock equivalents) equal to the product of (x) the number of Adjustment Shares and (y) a fraction, the numerator of which is the number of shares of Common Stock (and/or capital stock equivalents) available for issuance upon exercise of the Rights and the denominator of which is the aggregate number of Adjustment Shares otherwise issuable upon exercise in full of all Rights (assuming there were a sufficient number of shares of Common Stock available) (such fraction being referred to as the "Proration Factor"). The "Adjusted Purchase Price" shall mean the product of the Purchase Price and the Proration Factor. The Board of the Company may, but shall not be required to, establish procedures to allocate the right to receive shares of Common Stock and capital stock equivalents upon exercise of the Rights among holders of Rights.

(b) If the Company sets a record date for the issuance of rights, options or warrants to all holders of Preferred Shares entitling them (for a period expiring within 45 calendar days after such record date) to subscribe for or purchase Preferred Shares (or shares having the same rights, privileges and preferences as the Preferred Shares ("equivalent preferred shares")) or securities convertible into Preferred Shares or equivalent preferred shares at a price per Preferred Share or equivalent preferred share (or having a conversion price per share, if a security convertible into Preferred Shares or equivalent preferred shares) less than the then current per share market price of the Preferred Shares (as determined pursuant to Section 11(d)) on such record date, the Purchase Price to be in effect after such record date shall be determined by multiplying the Purchase Price in effect immediately prior to such record date by a fraction, the numerator of which shall be the number of Preferred Shares outstanding on such record date plus the number of Preferred Shares which the aggregate offering price of the total number of Preferred Shares and/or equivalent preferred shares so to be offered (and/or the aggregate initial conversion price of the convertible securities to be offered) would purchase at such current market price and the denominator of which shall be the number of Preferred Shares outstanding on such record date plus the number of additional Preferred Shares and/or equivalent preferred shares to be offered for subscription or purchase (or into which the convertible securities so to be offered are initially convertible); provided, however, that in no event shall the consideration to be paid upon the exercise of one Right be less than the aggregate par value of the shares of capital stock of the Company issuable upon exercise of one Right. In case such subscription price may be paid in a consideration part or all of which shall be in a form other than cash, the value of such consideration shall be as determined in good faith by the Board of the Company, whose determination shall be described in a statement filed with the Rights Agent. Preferred Shares owned by or held for the account of the Company shall not be deemed outstanding for the purpose of any such computation. Such adjustment shall be made successively whenever such a record date is fixed; and in the event that such rights, options or warrants are not so issued, the Purchase Price shall be adjusted to be the Purchase Price which would then be in effect if such record date had not been fixed.

(c) If the Company sets a record date for the making of a distribution to all holders of the Preferred Shares (including any such distribution made in connection with a consolidation or merger in which the Company is the continuing or surviving corporation) of evidences of indebtedness or assets (other than a regular quarterly cash dividend or a dividend payable in Preferred Shares) or subscription rights or warrants (excluding those referred to in Section 11(b) hereof), the Purchase Price to be in effect after such record date shall be determined by multiplying the Purchase Price in effect immediately prior to such record date by a fraction, the numerator of which shall be the then current per share market price of the Preferred Shares on such record date, less the fair market value (as determined in good faith by the Board of the Company, whose determination will be described in a statement filed with the Rights Agent and will be binding on the Rights Agent and the holder of Rights) of the portion of the assets or evidences of indebtedness so to be distributed or of such subscription rights or warrants applicable to one Preferred Share and the denominator of which shall be such current per share market price of the Preferred Shares; provided, however, that in no event shall the consideration to be paid upon the exercise of one Right be less than the aggregate par value of the shares of capital stock of the Company to be issued upon exercise of one Right. Such adjustments will be made successively whenever such a record date is fixed; and in the event that such distribution is not so made, the Purchase Price shall again be adjusted to be the Purchase Price which would then be in effect if such record date had not been fixed.

For the purpose of any computation hereunder, the "current per share market price" of any security (a "Security") on any date shall be deemed to be the average of the daily closing prices per share of such Security for the 30 consecutive Trading Days (as such term is hereinafter defined) immediately prior to such date; provided, however, that in the event that the current per share market price of the Security is determined during a period following the announcement by the issuer of such Security of (A) a dividend or distribution on such Security payable in shares of such Security or securities convertible into such Security, or (B) any subdivision, combination or reclassification of such Security and prior to the expiration of 30 Trading Days after the ex-dividend date for such dividend or distribution, or the record date for such subdivision, combination or reclassification, then, and in each such case, the current per share market price shall be appropriately adjusted to reflect the current market price per share equivalent of such Security. The closing price for each day shall be the last sale price, regular way, or, in case no such sale takes place on such day, the average of the closing bid and asked prices, regular way, in either case as reported in the principal consolidated transaction reporting system with respect to securities listed or admitted to trading on the New York Stock Exchange or the American Stock Exchange or the National Association of Securities Dealers, Inc. ("NASD"), as reported in the principal consolidated transaction reporting system with respect to securities listed on the principal national securities exchange on which the Security is listed or admitted to trading, or, if the Security is not listed or admitted to trading on any national securities exchange, the last quoted price or, if not so quoted, the average of the high bid and low asked prices in the over-the-counter market, or such other system then in use, or, if on any such date the Security is not quoted by any such organization, the average of the closing bid and asked prices as furnished by a professional market maker making a market in the Security selected by the Board of the Company. If on any such date no market maker is making a market in the Security, the "current per share market price" of such Security on such date will be the price determined in good faith by the Board of the Company. The term "Trading Day" shall mean a day on which the principal national securities exchange on which the Security is listed or admitted to trading is open for the transaction of business or, if the Security is not listed or admitted to trading on any national securities exchange, a Business Day.

- (ii) For the purpose of any computation hereunder, the "current per share market price" of the Preferred Shares will be determined in accordance with the method set forth in Section 11(d)(i). If the Preferred Shares are not publicly traded, the "current per share market price" of the Preferred Shares shall be conclusively deemed to be the current per share market price of the shares of Common Stock as determined pursuant to Section 11(d)(i) (appropriately adjusted to reflect any stock split, stock dividend or similar transaction occurring after the date hereof), multiplied by one hundred. If neither the shares of Common Stock nor the Preferred Shares are publicly held or so listed or traded, "current per share market price" shall mean the fair value per share as determined in good faith by the Board of the Company, whose determination shall be described in a statement filed with the Rights Agent.
- (e) No adjustment in the Purchase Price shall be required unless such adjustment would require an increase or decrease of at least 1% in the Purchase Price; provided, however, that any adjustments which by reason of this Section 11(e) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Section 11 shall be made to the nearest cent or to the nearest one one-millionth of a Preferred Share or one ten-thousandth of any other share or security as the case may be. Notwithstanding the first sentence of this Section 11(e), any adjustment required by this Section 11 shall be made no later than the earlier of (i) three years from the date of the transaction which requires such adjustment or (ii) the date of the expiration of the right to exercise any Rights.
- (f) If as a result of an adjustment made pursuant to Section 11(a) hereof, the holder of any Right thereafter exercised shall become entitled to receive any shares of capital stock of the Company other than Preferred Shares, thereafter the number of such other shares so receivable upon exercise of any Right shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the Preferred Shares contained in Section 11(a) through (c), inclusive, and the provisions of Sections 7, 9, 10 and 13 with respect to the Preferred Shares will apply on like terms to any such other shares.

- (g) All Rights originally issued by the Company subsequent to any adjustment made to the Purchase Price hereunder will evidence the right to purchase, at the adjusted Purchase Price, the number of one one-hundredths of a Preferred Share purchasable from time to time hereunder upon exercise of the Rights, all subject to further adjustment as provided herein.
- (h) Unless the Company shall have exercised its election as provided in Section 11(i) hereof, upon each adjustment of the Purchase Price as a result of the calculations made in Sections 11(b) and (c), each Right outstanding immediately prior to the making of such adjustment shall thereafter evidence the right to purchase, at the adjusted Purchase Price, that number of one one-hundredths of a Preferred Share (calculated to the nearest one one-millionth of a Preferred Share) obtained by (i) multiplying (x) the number of one one-hundredths of a Preferred Share covered by a Right immediately prior to this adjustment by (y) the Purchase Price in effect immediately prior to such adjustment of the Purchase Price and (ii) dividing the product so obtained by the Purchase Price in effect immediately after such adjustment of the Purchase Price.
- (i) The Company may elect on or after the date of any adjustment of the Purchase Price to adjust the number of Rights, in substitution for any adjustment in the number of one one-hundredths of a Preferred Share purchasable upon the exercise of a Right. Each of the Rights outstanding after such adjustment of the number of Rights shall be exercisable for the number of one one-hundredths of a Preferred Share for which a Right was exercisable immediately prior to such adjustment. Each Right held of record prior to such adjustment of the number of Rights will become that number of Rights (calculated to the nearest one ten-thousandth) obtained by dividing the Purchase Price in effect immediately prior to adjustment of the Purchase Price by the Purchase Price in effect immediately after adjustment of the Purchase Price. The Company will make a public announcement of its election to adjust the number of Rights, indicating the record date for the adjustment, and, if known at the time, the amount of the adjustment to be made. This record date may be the date on which the Purchase Price is adjusted or any day thereafter, but, if the Right Certificates have been issued, shall be at least 10 days later than the date of the public announcement. If Right Certificates have been issued, upon each adjustment of the number of Rights pursuant to this Section 11(i), the Company shall, as promptly as practicable, cause to be distributed to holders of record of Right Certificates on such record date Right Certificates evidencing, subject to Section 14 hereof, the additional Rights to which such holders will be entitled as a result of such adjustment, or, at the option of the Company, shall cause to be distributed to such holders of record in substitution and replacement for the Right Certificates held by such holders prior to the date of adjustment, and upon surrender thereof, if required by the Company, new Right Certificates evidencing all the Rights to which such holders will be entitled after such adjustment. Right Certificates so to be distributed shall be issued, executed and countersigned in the manner provided for herein and shall be registered in the names of the holders of record of Right Certificates on the record date specified in the public announcement.

- (j) Irrespective of any adjustment or change in the Purchase Price or the number of one one-hundredths of a Preferred Share issuable upon the exercise of the Rights, the Right Certificates theretofore and thereafter issued may continue to express the Purchase Price and the number of one one-hundredths of a Preferred Share which were expressed in the initial Right Certificates issued hereunder.
- (k) Before taking any action that would cause an adjustment reducing the Purchase Price below one one-hundredth of the then par value, if any, of the Preferred Shares issuable upon exercise of the Rights, the Company shall take any corporate action which may, in the opinion of its counsel, be necessary in order that the Company may validly and legally issue fully paid and nonassessable Preferred Shares at such adjusted Purchase Price.
- (1) In any case in which this Section 11 requires that an adjustment in the Purchase Price be made effective as of a record date for a specified event, the Company may elect to defer until the occurrence of such event the issuing to the holder of any Right exercised after such record date of the Preferred Shares and other capital stock or securities of the Company, if any, issuable upon such exercise over and above the Preferred Shares and other capital stock or securities of the Company, if any, issuable upon such exercise on the basis of the Purchase Price in effect prior to such adjustment; provided, however, that the Company shall deliver to such holder a due bill or other appropriate instrument evidencing such holder's right to receive such additional shares upon the occurrence of the event requiring such adjustment.
- (m) Anything in this Section 11 to the contrary notwithstanding, the Company will be entitled to make such reductions in the Purchase Price, in addition to those adjustments expressly required by this Section 11, as and to the extent that it in its sole discretion shall determine to be advisable in order that any consolidation or subdivision of the Preferred Shares, issuance wholly for cash of any Preferred Shares at less than the current market price, issuance wholly for cash of Preferred Shares or securities which by their terms are convertible into or exchangeable for Preferred Shares, dividends on Preferred Shares payable in Preferred Shares or issuance of rights, options or warrants referred to hereinabove in Section 11(b), hereafter made by the Company to holders of its Preferred Shares shall not be taxable to such stockholders.

(n) In the event that at any time after the date of this Agreement and prior to the Distribution Date, the Company s	nan (1
declare or pay any dividend on the shares of Common Stock payable in shares of Common Stock or (ii) effect a subdivision, combina	tion o
consolidation of the shares of Common Stock (by reclassification or otherwise than by payment of dividends in shares of Common	Stock)
into a greater or lesser number of shares of Common Stock, then in any such case (x) the number of one one-hundredths of a Preferred	l Share
purchasable after such event upon proper exercise of each Right will be determined by multiplying the number of one one-hundredti	hs of a
Preferred Share so purchasable immediately prior to such event by a fraction, the numerator of which is the number of shares of Co	mmor
Stock outstanding immediately before such event and the denominator of which is the number of shares of Common Stock outst	anding
immediately after such event, and (y) each share of Common Stock outstanding immediately after such event shall have issued with res	pect to
it that number of Rights which each share of Common Stock outstanding immediately prior to such event had issued with respect to	it. The
adjustments provided for in this Section 11(n) will be made successively whenever such a dividend is declared or paid or such a subdi	vision
combination or consolidation is effected.	

(o) The exercise of Rights under Section 11(a)(ii) shall only result in the loss of rights under Section 11(a)(ii) to the extent so exercised and shall not otherwise affect the rights represented by the Rights under this Agreement, including the rights represented by Section 13.

(p) The Company covenants and agrees that, after the Distribution Date, it will not, except as permitted by Sections 23, 24 or 27 hereof, take (or permit any Subsidiary to take) any action for the purpose of which is to, or if at the time such action is taken it is reasonably foreseeable that the effect of such action is to, materially diminish or otherwise eliminate the benefits intended to be afforded by the Rights. Any such action taken by the Company during any period after any Person becomes an Acquiring Person but prior to the Distribution Date shall be null and void unless such action could be taken under this subparagraph (p) from and after the Distribution Date.

Section 12. Certificate of Adjusted Purchase Price or Number of Shares. Whenever an adjustment is made as provided in Sections 11 and 13 hereof, the Company shall promptly (a) prepare a certificate setting forth such adjustment, and a brief statement of the facts accounting for such adjustment, (b) file with the Rights Agent and with each transfer agent for the shares of Common Stock and the Preferred Shares a copy of such certificate, and (c) mail a brief summary thereof to each holder of a Right Certificate in accordance with Section 25 hereof. Notwithstanding the foregoing sentence, the failure by the Company to make such certification or give such notice will not effect the validity of or the force or effect of the requirement for such adjustment period. The Rights Agent will be fully protected in relying on any such certificate and on any adjustment contained therein and will not be deemed to have knowledge of such adjustment unless and until it will have received such certificate.

Section 13. Consolidation, Merger or Sale or Transfer of Assets or Earning Power.

(a) In the event that, following the Share Acquisition Date or, if a Transaction is proposed, the Distribution Date, directly or indirectly, (i) the Company shall consolidate with, or merge with and into, any other Person, in which the Company is not the continuing or survivor corporation, (ii) any Person shall consolidate with the Company, or merge with and into the Company and the Company shall be the continuing or surviving corporation of such merger and, in connection with such merger, all or part of the shares of Common Stock of the Company shall be changed into or exchanged for stock or other securities of any other Person (or the Company) or cash or any other property, or (iii) the Company shall sell, mortgage or otherwise transfer (or one or more of its Subsidiaries shall sell, mortgage or otherwise transfer), in one or more transactions, assets or earning power aggregating 50% or more of the assets or earning power of the Company and its Subsidiaries (taken as a whole) to any other Person other than the Company or one or more of its wholly-owned Subsidiaries, then, and in each such case, proper provision shall be made so that (A) each holder of a Right (except as otherwise provided herein or a Right that has become void pursuant to the provisions of Section 11(a)(ii) hereof) shall thereafter have the right to receive, upon the exercise thereof at a price equal to the then current Purchase Price multiplied by the number of one one-hundredths of a Preferred Share for which a Right is then exercisable, in accordance with the terms of this Agreement and in lieu of Preferred Shares, such number of freely tradeable shares of Common Stock of such other Person (including the Company as successor thereto or as the surviving corporation), free and clear of liens, rights or calls or first refusal, encumbrances or other adverse claims as shall equal the result obtained by (1) multiplying the then current Purchase Price by the number of one one-hundredths of a Preferred Share for which a Right is then exercisable, and dividing that product by (2) 50% of the then current per share market price of the shares of Common Stock of such other Person (determined pursuant to Section 11(d) hereof) on the date of consummation of such consolidation, merger, sale or transfer; (B) the issuer of such shares of Common Stock shall thereafter be liable for, and shall assume, by virtue of such consolidation, merger, sale or transfer, all the obligations and duties of the Company pursuant to this Agreement; (C) the term "Company" shall thereafter be deemed to refer to such issuer; and (D) such issuer shall take such steps (including, but not limited to, the reservation of a sufficient number of its shares of Common Stock in accordance with Sections 11 and 24 hereof) in connection with such consummation as may be necessary to assure that the provisions hereof shall thereafter be applicable, as nearly as reasonably may be, in relation to the shares of Common Stock thereafter deliverable upon the exercise of the Rights. The Company will not consummate any such consolidation, merger, sale or transfer unless prior thereto (i) the Company and such other Person to such merger, consolidation, sale or transfer shall have executed and delivered to the Rights Agent a supplemental agreement providing for the terms set forth in this Section 13 and (ii) such other Person to such merger, consolidation, sale or transfer shall have prepared, filed and had declared and remain effective a registration statement under the Act on the appropriate form with respect to the Rights and the securities exercisable upon exercise of the Rights and further providing that, as soon as practicable after the date of any such merger, consolidation, sale or transfer of assets mentioned in Section 13(a), such other Person to such merger, consolidation, sale or transfer shall at its own expense:

(i))	cause the registration statement under the Act with respect to the Rights and the securities purchasable upon
exercise of the Rights on an a	app	ropriate form to remain effective (with a prospectus at all times meeting the requirements of the Act) until the
Final Expiration Date;		

(ii) use its best efforts to qualify or register the Rights and the securities purchasable upon exercise of the Rights under the Blue Sky laws of such jurisdictions as may be necessary or appropriate;

- (iii) list the Rights and the securities purchasable upon exercise of the Rights on each national securities exchange on which the Common Stock were listed prior to the consummation of such consolidation, merger, sale or transfer of assets or, if the Common Stock were not listed on a national securities exchange prior to the consummation of such consolidation, merger, sale or transfer of assets, on a national securities exchange; and
- (iv) deliver to holders of the Rights such other Persons' historical financial statements and each of its Affiliates that comply in all material respects with the requirements for registration on Form 10 under the Exchange Act.

The Company will not consummate any transaction of the kind referred to in this Section 13 if at the time of such transaction (i) there are any rights, warrants, instruments or securities outstanding or any agreements or arrangements which, as a result of the consummation of such transaction, would eliminate or substantially diminish the benefits intended to be afforded by the Rights, and (ii) the other Person to such transaction does not have a sufficient number of authorized shares of Common Stock that have not been issued or reserved for issuance to permit the exercise in full of the Rights in accordance with this Section 13. The provisions of this Section 13 shall similarly apply to successive mergers or consolidations or sales or other transfers.

(b) Notwithstanding anything in this Agreement to the contrary, Section 13 shall not be applicable to a transaction described in subparagraphs (i) and (ii) of Section 13(a) if (i) such transaction is consummated with a Person or Persons (or a wholly owned Subsidiary of any such Person or Persons) who acquired shares of Common Stock solely pursuant to a Permitted Offer; (ii) the price per share of Common Stock paid to all holders of Common Stock whose shares were purchased pursuant to such Permitted Offer; and (iii) the form of consideration offered in such transaction is the same as the form of consideration paid pursuant to such Permitted Offer. Upon consummation of any such transaction contemplated by this Section 13(b), all Rights hereunder shall expire.

Section 14. Fractional Rights and Fractional Shares.

(a) The Company shall not be required to issue fractions of Rights or to distribute Right Certificates which evidence fractional Rights. In lieu of such Fractional Rights, there shall be paid to the registered holders of the Right Certificates with regard to which such Fractional Rights would otherwise be issuable, an amount in cash equal to the same fraction of the current market value of a whole Right. For the purposes of this Section 14(a), the current market value of a whole Right shall be the closing price of the Rights for the Trading Day immediately prior to the date on which such Fractional Rights would have been otherwise issuable. The closing price for any day shall be the last sale price, regular way, or, in case no such sale takes place on such day, the average of the closing bid and asked prices, regular way, in either case as reported in the principal consolidated transaction reporting system with respect to securities listed or admitted to trading on the New York Stock Exchange or the American Stock Exchange or the NASD, or if the Rights are not listed or admitted to trading on any national securities exchange, the last quoted price or, if not so quoted, the average of the high bid and low asked prices in the over-the-counter market or such other system then in use or, if on any such date the Rights are not quoted by any such organization, the average of the closing bid and asked prices as furnished by a professional market maker making a market in the Rights on such date as determined in good faith by the Board of the Company shall be used.

- (b) The Company shall not be required to issue fractions of Preferred Shares (other than fractions which are integral multiples of one one-hundredth of a Preferred Share) upon exercise of the Rights or to distribute certificates which evidence fractional Preferred Shares (other than fractions which are integral multiples of one one-hundredth of a Preferred Shares. Fractions of Preferred Shares in integral multiples of one one-hundredth of a Preferred Share may, at the election of the Company, be evidenced by depositary receipts, pursuant to an appropriate agreement between the Company and a depositary selected by it; provided, that such agreement shall provide that the holders of such depositary receipts shall have all the rights, privileges and preferences to which they are entitled as beneficial owners of the Preferred Shares represented by such depositary receipts. In lieu of fractional Preferred Shares that are not integral multiples of one one-hundredth of a Preferred Share, the Company shall pay to the registered holders of Right Certificates at the time such Rights are exercised as herein provided an amount in cash equal to the same fraction of the current market value of one Preferred Share. For purposes of this Section 14(b), the current market value of a Preferred Share shall be the closing price of a Preferred Share (as determined pursuant to the second sentence of Section 11(d)(i) hereof) for the Trading Day immediately prior to the date of such exercise.
- (c) The holder of a Right by the acceptance of the Right expressly waives his right to receive any fractional Rights or any fractional shares upon exercise of a Right (except as provided above).

Section 15. Rights of Action. All rights of action in respect of this Agreement, excepting the rights of action given to the Rights Agent under Sections 18 and 20 hereof, are vested in the respective registered holders of the Right Certificates (and, prior to the Distribution Date, the registered holders of the shares of Common Stock); and any registered holder of any Right Certificate (or, prior to the Distribution Date, of the shares of Common Stock), without the consent of the Rights Agent or of the holder of any other Right Certificate (or, prior to the Distribution Date, of the shares of Common Stock, may, in his own behalf and for his own benefit, enforce, and may institute and maintain any suit, action or proceeding against the Company to enforce, or otherwise act in respect of, his right to exercise the Rights evidenced by such Right Certificate in the manner provided in such Right Certificate and in this Agreement. Without limiting the foregoing or any remedies available to the holders of Rights, it is specifically acknowledged that the holders of Rights would not have an adequate remedy at law for any breach of this Agreement and will be entitled to specific performance of the obligations under, and injunctive relief against actual or threatened violations of the obligations of any Person subject to, this Agreement.

Section 16. <u>Agreement of Right Holders</u>. Every holder of a Right, by accepting the same, consents and agrees with the Company and the Rights Agent and with every other holder of a Right that:

- (a) prior to the Distribution Date, the Rights will be transferable only in connection with the transfer of the shares of Common Stock, subject to the provisions of Section 11(a)(ii) hereof;
- (b) after the Distribution Date, the Right Certificates are transferable only on the registry books of the Rights Agent if surrendered at the office of the Rights Agent designated for such purpose, duly endorsed or accompanied by a proper instrument of transfer;

- (c) subject to Sections 6(a) and 7(b) hereof, the Company and the Rights Agent may deem and treat the person in whose name the Right Certificate (or, prior to the Distribution Date, the associated Common Stock certificate) is registered as the absolute owner thereof and of the Rights evidenced thereby (notwithstanding any notations of ownership or writing on the Right Certificates or the associated Common Stock certificate made by anyone other than the Company or the Rights Agent) for all purposes whatsoever, and neither the Company nor the Rights Agent shall be affected by any notice to the contrary;
- (d) notwithstanding anything in this Agreement to the contrary, neither the Company nor the Rights Agent will have any liability to any holder of a Right or other Person as a result of its inability to perform any of its obligations under this Agreement by reason of any preliminary or permanent injunction or an order, decree or ruling issued by a court of competent jurisdiction or by governmental, regulatory or administrative agency or commission, or any statute rule, regulation or executive order promulgated or enacted by any governmental authority, prohibiting or otherwise restraining performance of such obligations under this Agreement; provided, however, the Company must use its best efforts to have any such order, decree or ruling lifted or otherwise overturned as soon as possible.
- Section 17. <u>Right Certificate Holder Not Deemed a Stockholder</u>. No holder, as such, of any Right Certificate shall be entitled to vote, receive dividends or be deemed for any purpose the holder of the Preferred Shares or any other securities of the Company which may at any time be issuable on the exercise of the Rights represented thereby, nor shall anything contained herein or in any Right Certificate be construed to confer upon the holder of any Right Certificate, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action, or to receive notice of meetings or other actions affecting stockholders (except as provided in Section 25 hereof), or to receive dividends or subscription rights, or otherwise, until the Right or Rights evidenced by such Right Certificate shall have been exercised in accordance with the provisions hereof.

Section 18. Concerning the Rights Agent. The Company agrees to pay to the Rights Agent reasonable compensation for all services rendered by it hereunder and, from time to time, on demand of the Rights Agent, its reasonable expenses and counsel fees and other disbursements incurred in the administration and execution of this Agreement and the exercise and performance of its duties hereunder. The Company also agrees to indemnify the Rights Agent for, and to hold it harmless against, any loss, liability, or expense, incurred without gross negligence, bad faith or willful misconduct on the part of the Rights Agent, for any action taken, suffered or omitted by the Rights Agent in connection with the execution, acceptance and administration of this Agreement and the exercise and performance hereunder of its duties, including the costs and expenses of defending against any claim of liability in the premises.

The Rights Agent shall be protected and shall incur no liability for, or in respect of any action taken, suffered or omitted by it in connection with, its administration of this Agreement in reliance upon any Right Certificate or certificate for the Preferred Shares or shares of Common Stock or for other securities of the Company, instrument of assignment or transfer, power of attorney, endorsement, affidavit, letter, notice, direction, consent, certificate, statement, or other paper or document believed by it to be genuine and to be signed, executed and, where necessary, verified or acknowledged, by the proper person or persons, or otherwise upon the advice of counsel as set forth in Section 20 hereof.

Section 19. Merger or Consolidation or Change of Name of Rights Agent. Any corporation into which the Rights Agent or any successor Rights Agent may be merged or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which the Rights Agent or any successor Rights Agent shall be a party, or any corporation succeeding to the stock transfer or corporate trust business of the Rights Agent or any successor Rights Agent, shall be the successor to the Rights Agent under this Agreement without the execution or filing of any paper or any further act on the part of any of the parties hereto, provided that such corporation would be eligible for appointment as a successor Rights Agent under the provisions of Section 21 hereof. In case at the time such successor Rights Agent shall succeed to the agency created by this Agreement any of the Right Certificates shall have been countersigned but not delivered, any such successor Rights Agent may adopt the countersignature of the predecessor Rights Agent and deliver such Right Certificates so countersigned; and in case at that time any of the Right Certificates shall not have been countersigned, any successor Rights Agent may countersign such Right Certificates either in the name of the predecessor Rights Agent or in the name of the successor Rights Agent; and in all such cases such Right Certificates shall have the full force provided in the Right Certificates and in this Agreement.

In case at any time the name of the Rights Agent shall be changed and at such time any of the Right Certificates shall have been countersigned but not delivered, the Rights Agent may adopt the countersignature under its prior name and deliver Right Certificates so countersigned; and in case at that time any of the Right Certificates shall not have been countersigned, the Rights Agent may countersign such Right Certificates either in its prior name or in its changed name; and in all such cases such Right Certificates shall have the full force provided in the Right Certificates and in this Agreement.

Section 20. <u>Duties of Rights Agent.</u> The Rights Agent undertakes the duties and obligations imposed by this Agreement upon the following terms and conditions, by all of which the Company and the holders of Right Certificates, by their acceptance thereof, shall be bound:

- (a) The Right Agent may consult with legal counsel (who may be legal counsel for the Company), and the opinion of such counsel shall be full and complete authorization and protection to the Rights Agent as to any action taken or omitted by it in good faith and in accordance with such opinion.
- (b) Whenever in the performance of its duties under this Agreement the Rights Agent shall deem it necessary or desirable that any fact or matter be proved or established by the Company prior to taking or suffering any action hereunder, such fact or matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a certificate signed by any one of the Chairman of the Board of the Company, the Chief Executive Officer, the President, any Vice President, the Treasurer or the Secretary of the Company and delivered to the Rights Agent; and such certificate shall be full authorization to the Rights Agent for any action taken or suffered in good faith by it under the provisions of this Agreement in reliance upon such certificate.
- (c) The Rights Agent shall be liable hereunder to the Company and any other Person only for its own gross negligence, bad faith or willful misconduct.
- (d) The Rights Agent shall not be liable for or by reason of any of the statements of fact or recitals contained in this Agreement or in the Right Certificates (except its countersignature thereof) or be required to verify the same, but all such statements and recitals are and shall be deemed to have been made by the Company only.

- (e) The Rights Agent shall not be under any responsibility in respect of the validity of this Agreement or the execution and delivery hereof (except the due execution hereof by the Rights Agent) or in respect of the validity or execution of any Right Certificate (except its countersignature thereof); nor shall it be responsible for any breach by the Company of any covenant or condition contained in this Agreement or in any Right Certificate; nor shall it be responsible for any change in the exercisability of the Rights (including the Rights becoming void pursuant to Section 11(a)(ii) hereof) or any adjustment in the terms of the Rights (including the manner, method or amount thereof) provided for in Sections 3, 11, 13, 23 or 24, or the ascertaining of the existence of facts that would require any such change or adjustment (except with respect to the exercise of Rights evidenced by Right Certificates after receipt of the Certificate described in Section 12 hereof or has actual knowledge of such change or adjustment); nor shall it by any act hereunder be deemed to make any representation or warranty as to the authorization or reservation of any Preferred Shares to be issued pursuant to this Agreement or any Right Certificate or as to whether any Preferred Shares will, when issued, be validly authorized and issued, fully paid and nonassessable.
- (f) The Company agrees that it will perform, execute, acknowledge and deliver or cause to be performed, executed, acknowledged and delivered all such further and other acts, instruments and assurances as may reasonably be required by the Rights Agent for the carrying out or performing by the Rights Agent of the provisions of this Agreement.
- (g) The Rights Agent is hereby authorized and directed to accept instructions with respect to the performance of its duties hereunder from any one of the Chairman of the Board of the Company, the Chief Executive Officer, the President, any Vice President, the Secretary or the Treasurer of the Company, and to apply to such officers for advice or instructions in connection with its duties, and it shall not be liable for any action taken or suffered by it in good faith in accordance with instructions of any such officer or for any delay in acting while waiting for those instructions.

- (h) The Rights Agent and any stockholder, director, officer or employee of the Rights Agent may buy, sell or deal in any of the Rights or other securities of the Company or become pecuniarily interested in any transaction in which the Company may be interested, or contract with or lend money to the Company or otherwise act as fully and freely as though it were not Rights Agent under this Agreement. Nothing herein shall preclude the Rights Agent from acting in any other capacity for the Company or for any other legal entity.
- (i) The Rights Agent may execute and exercise any of the rights or powers hereby vested in it or perform any duty hereunder either itself or by or through its attorneys or agents, and the Rights Agent shall not be answerable or accountable for any act, default, neglect or misconduct of any such attorneys or agents or for any loss to the Company resulting from any such act, default, neglect or misconduct, provided reasonable care was exercised in the selection and continued employment thereof.

Section 21. Change of Rights Agent. The Rights Agent or any successor Rights Agent may resign and be discharged from its duties under this Agreement upon 30 days' notice in writing mailed to the Company and to each transfer agent of the Common Stock or Preferred Shares by registered or certified mail, and to the holders of the Right Certificates by first-class mail. The Company may remove the Rights Agent or any successor Rights Agent upon 30 days' notice in writing, mailed to the Rights Agent or successor Rights Agent, as the case may be, and to each transfer agent of the Common Stock or Preferred Shares by registered or certified mail, and to the holders of the Right Certificates by first-class mail. If the Rights Agent shall resign or be removed or shall otherwise become incapable of acting, the Company shall appoint a successor to the Rights Agent. If the Company shall fail to make such appointment within a period of 30 days after giving notice of such removal or after it has been notified in writing of such resignation or incapacity by the resigning or incapacitated Rights Agent or by the holder of a Right Certificate (who shall, with such notice, submit his Right Certificate for inspection by the Company), then the registered holder of any Right Certificate may apply to any court of competent jurisdiction for the appointment of a new Rights Agent. Any successor Rights Agent, whether appointed by the Company or by such a court, shall be a corporation organized and doing business under the laws of the United States or of any state of the United States that is authorized under such laws to exercise corporate trust or stock transfer powers and is supervision or examination by federal or state authorities and which has at the time of its appointment as Rights Agent a combined capital and surplus of at least \$50 million. After appointment, the successor Rights Agent shall be vested with the same powers, rights, duties and responsibilities as if it had been originally named as Rights Agent without further act or deed; but the predecessor Rights Agent shall deliver and transfer to the successor Rights Agent any property at the time held by it hereunder, and execute and deliver any further assurance, conveyance, act or deed necessary for the purpose. Not later than the effective date of any such appointment the Company shall file notice thereof in writing with the predecessor Rights Agent and each transfer agent of the Common Stock or Preferred Shares, and mail a notice thereof in writing to the registered holders of the Right Certificates. Failure to give any notice provided for in this Section 21, however, or any defect therein, shall not affect the legality or validity of the resignation or removal of the Rights Agent or the appointment of the successor Rights Agent, as the case may be.

Section 22. <u>Issuance of New Right Certificates</u>. Notwithstanding any of the provisions of this Agreement or of the Rights to the contrary, the Company may, at its option, issue new Right Certificates evidencing Rights in such form as may be approved by its Board of the Company to reflect any adjustment or change in the Purchase Price and the number or kind or class of shares or other securities or property purchasable under the Right Certificates made in accordance with the provisions of this Agreement.

Section 23. Redemption.

(a) The Company may, at its option, upon approval by a majority of the members of the Board of the Company, at any time prior to the earlier of (i) the Distribution Date and (ii) the Final Expiration Date, redeem all, but not less than all, of the then outstanding Rights at a redemption price of \$0.001 per Right, appropriately adjusted to reflect any stock split, stock dividend or similar transaction occurring after the date hereof (such redemption price being hereinafter referred to as the "Redemption Price"), and the Company may, at its option, pay the Redemption Price either in cash, shares of Common Stock (based on the then current per share market price thereof, as determined pursuant to Section 11(d) hereof, at the time of redemption) or any other form of consideration deemed appropriate by the Board of the Company; provided that if the Company elects to pay the redemption price in shares of Common Stock, the Company will not be required to issue any fractional shares of Common Stock, and the number of shares of Common Stock issuable to each holder of Rights will be rounded down to the next whole share. The redemption of the Rights by the Board of the Company may be made effective at such time and on such basis and with such conditions as a majority of the Board of the Company in its sole discretion may establish.

- (b) Immediately upon the action of the Board of the Company ordering the redemption of the Rights pursuant to paragraph (a) of this Section 23, and without any further action and without any notice, the right to exercise the Rights will terminate and the only right thereafter of the holders of Rights will be to receive the Redemption Price. The Company will promptly give public notice of any such redemption; provided, however, that the failure to give, or any defect in, any such notice will not affect the validity of such redemption. Within 10 days after such action of a majority of the Board of the Company ordering the redemption of the Rights, the Company will give notice of such redemption to the Rights Agent and will mail a notice of redemption to all the holders of the then outstanding Rights at their last addresses as they appear upon the registry books of the Rights Agent or, prior to the Distribution Date, on the registry books of the transfer agent for the Common Stock. Any notice which is mailed in the manner herein provided will be deemed given, whether or not the holder receives the notice. Each such notice of redemption will state the method by which the payment of the Redemption Price will be made. Neither the Company nor any of its Affiliates or Associates may redeem, acquire or purchase for value any Rights at any time in any manner other than that specifically set forth in this Section 23 or in Section 24 hereof or in connection with the purchase of shares of Common Stock prior to the Distribution Date.
- (c) The Company may, at its option, discharge all of its obligations with respect to the Rights by (i) issuing a press release announcing the manner of redemption of the Rights in accordance with this Agreement and (ii) mailing payment of the Redemption Price to the registered holders of the Rights at their last addresses as they appear on the registry books of the Rights Agent or, prior to the Distribution Date, on the registry books of the Transfer Agent of the shares of Common Stock and, upon such action, all outstanding Rights and Right Certificates shall be null and void without any further action by the Company.

Section 24. Exchange.

- (a) The Board of the Company may, at its option, at any time after any Person become an Acquiring Person, exchange all or part of the then outstanding and exercisable Rights (which shall not include Rights that have become void pursuant to the provisions of Section 11(a)(ii) hereof) for shares of Common Stock at an exchange ratio of one share of Common Stock per Right, appropriately adjusted to reflect any stock split, stock dividend or similar transaction occurring after the date hereof (such exchange ratio being hereinafter referred to as the "Exchange Ratio"). Notwithstanding the foregoing, the Board of the Company shall not be empowered to effect such exchange at any time after any Person (other than any of the Excluded Persons), together with all Affiliates and Associates of such Person, becomes the Beneficial Owner of 50% or more of the then outstanding shares of Common Stock.
- (b) Immediately upon the action of the Board of the Company ordering the exchange of any Rights pursuant to subsection (a) of this Section 24 and without any further action and without any notice, the right to exercise such Rights shall terminate and the only right thereafter of a holder of such Rights shall be to receive that number of shares of Common Stock equal to the number of such Rights held by such holder multiplied by the Exchange Ratio. The Company shall promptly give public notice of any such exchange; provided, however, that the failure to give, or any defect in, such notice shall not affect the validity of such exchange. The Company promptly shall mail a notice of any such exchange to all of the holders of such Rights at their last addresses as they appear upon the registry books of the Rights Agent. Any notice which is mailed in the manner herein provided shall be deemed given, whether or not the holder receives the notice. Each such notice of exchange will state the method by which the exchange of the shares of Common Stock for Rights will be effected and, in the event of any partial exchange, the number of Rights which will be exchanged. Any partial exchange shall be effected pro rata based on the number of Rights (other than Rights which have become void pursuant to the provisions of Section 11(a)(ii) hereof) held by each holder of Rights.

- (c) In any exchange pursuant to this Section 24, the Company, at its option, may substitute Preferred Shares (or equivalent preferred shares, as such term is defined in Section 11(b) hereof) for Common Stock exchangeable for Rights, at the initial rate of one one-hundredth of a Preferred Share (or equivalent preferred share) for each share of Common Stock, as appropriately adjusted. If there are not sufficient shares of Common Stock or Preferred Shares issued but not outstanding, or authorized but unissued, to permit any exchange of Rights as contemplated in accordance with this Section 24, the Company shall take all such action as may be necessary to authorize additional shares of Common Stock or Preferred Shares for issuance upon exchange of the Rights.
- (d) The Company will not be required to issue fractions of Common Stock or to distribute certificates which evidence fractional Common Stock. In lieu of such fractional Common Stock, the Company shall pay to the registered holders of the Right Certificates with regard to which such fractional Common Stock would otherwise be issuable an amount in cash equal to the same fraction of the current market value of a whole share of Common Stock. For the purposes of this paragraph (d), the current market value of a whole share of Common Stock shall be the closing price of a share of Common Stock (as determined pursuant to the second sentence of Section 11(d)(i) hereof) for the Trading Day immediately prior to the date of exchange pursuant to this Section 24.

Section 25. Notice of Certain Events.

(a) In case the Company shall propose (i) to pay any dividend payable in stock of any class to the holders of its Preferred Shares or to make any other distribution to the holders of its Preferred Shares (other than a regular quarterly cash dividend), (ii) to offer to the holders of its Preferred Shares rights or warrants to subscribe for or to purchase any additional Preferred Shares or shares of stock of any class or any other securities, rights or options, (iii) to effect any reclassification of its Preferred Shares (other than a reclassification involving only the subdivision of outstanding Preferred Shares), (iv) to effect any consolidation or merger into or with any other Person other an a Subsidiary of the Company in a transaction which complies with Section 11(p), or to effect any sale or other transfer (or to permit one or more of its Subsidiaries to effect any sale or other transfer), in one or more transactions, of 50% or more of the assets or earning power of the Company and its Subsidiaries (taken as a whole) to, any other Person, (v) to effect the liquidation, dissolution or winding up the Company, or (vi) to declare or pay any dividend on the shares of Common Stock payable in shares of Common Stock or to effect a subdivision, combination or consolidation of the shares of Common Stock (by reclassification or otherwise than by payment of dividends in shares of Common Stock then, in each such case, the Company shall give to each holder of a Right Certificate, in accordance with Section 26 hereof, a notice of such proposed action, which shall specify the record date for the purposes of such stock dividend, or distribution of rights or warrants, or the date on which such reclassification, consolidation, merger, sale, transfer, liquidation, dissolution, or winding up is to take place and the date of participation therein by the holders of the shares of Common Stock and/or Preferred Shares, if any such date is to be fixed, and such notice shall be so given in the case of any action covered by clause (i) or (ii) above at least 10 days prior to the record date for determining holders of the Preferred Shares for purposes of such action, and in the case of any such other action, at least 10 days prior to the date of the taking of such proposed action or the date of participation therein by the holders of the shares of Common Stock and/or Preferred Shares, whichever shall be the earlier.

(b) If any events set forth in Section 11(a)(ii) hereof shall occur, then the Company will as soon as practicable thereafter give to each holder of a Right Certificate, in accordance with Section 26 hereof, a notice of the occurrence of such event, which notice shall describe such event and the consequences of such event to holders of Rights under Section 11(a)(ii) hereof.

Section 26. <u>Notices</u>. Notices or demands authorized by this Agreement to be given or made by the Rights Agent or by the holder of any Right Certificate to or on the Company shall be sufficiently given or made if sent by first-class mail, postage prepaid, addressed (until another address is filed in writing with the Rights Agent) as follows:

Perma-Fix Environmental Services, Inc. 8302 Dunwoody Place, Suite 250 Atlanta, Georgia 30350 Attention: Corporate Secretary Subject to the provisions of Section 21 hereof, any notice or demand authorized by this Agreement to be given or made by the Company or by the holder of any Right Certificate to or on the Rights Agent shall be sufficiently given or made if sent by first-class mail, postage prepaid, addressed (until another address is filed in writing with the Company) as follows:

Continental Stock Transfer & Trust Company 17 Battery Place New York, New York 10004-1123 Attention: Compliance Department

Notices or demands authorized by this Agreement to be given or made by the Company or the Rights Agent to the holder of any Right Certificate will be sufficiently given or made if sent by first-class mail, postage prepaid, addressed to such holder at the address of such holder as shown on the registry books of the Company.

Section 27. Supplements and Amendments. Prior to the Distribution Date and subject to the terms of this Section 27, the Company may from time to time (and the Rights Agent shall, if the Company so directs) supplement or amend this Agreement without the approval of any holders of the Rights or the Right Certificates in order (i) to cure any ambiguity, (ii) to correct or supplement any provision contained herein which may be defective or inconsistent with any other provisions herein, or (iii) shorten or lengthen any period of time hereunder or (iv) to make any other changes or amendments to the provisions contained herein or with respect to the Rights which the Company may deem necessary or desirable; provided, however, that from and after such time as any Person becomes an Acquiring Person, this Agreement shall not be amended in any manner which would adversely affect the interests of the holders of the Rights (other than an Acquiring Person or an Affiliate or Associate of an Acquiring Person). Notwithstanding any other provision of this Section 27, and provided this Agreement may not be supplemented or amended to lengthen, pursuant to clause (iii) of the foregoing sentence, (A) a time period relating to when the Rights may be redeemed at such time as the Rights are not then redeemable or (B) any other time period unless such lengthening is for the purpose of protecting, enhancing or clarifying the rights of, and/or the benefits to, the holders of Rights. Upon the delivery of a certificate from an appropriate officer of the Company which states that the proposed supplement or amendment is in compliance with the terms of this Section 27, the Rights Agent shall execute such supplement or amendment, provided that such supplement or amendment does not adversely affect the rights or obligations of the Rights Agent under Section 18 or Section 20 of this Agreement. Prior to the Distribution Date, the interests of the holders of Rights shall be deemed coincident with the interests of the holders of shares of Common Stock. Notwithstanding anything in this Agreement to the contrary, no supplement or amendment shall be made which changes the redemption price or the number of Preferred Shares or shares of Common Stock for which a Right is exercisable or exchangeable.

Section 28. <u>Successors.</u> All the covenants and provisions of this Agreement by or for the benefit of the Company or the Rights Agent shall bind and inure to the benefit of their respective successors and assigns hereunder.

Section 29. <u>Determinations and Actions by the Board of the Company.</u> For all purposes of this Agreement, any calculation of the number of shares of Common Stock or any other securities of the Company of which any Person is the Beneficial Owner, will be made in accordance with the last sentence of Rule 13d-3(d)(1)(i) of the General Rules and Regulations under the Exchange Act. The Board of the Company will have the exclusive power and authority to administer this Agreement and to exercise all rights and powers specifically granted to the Board of the Company, or the Company, or as may be necessary or advisable in the administration of this Agreement, including, without limitation, the right and power to (i) interpret the provisions of this Agreement and (ii) make all determinations deemed necessary or advisable for the administration of this Agreement (including a determination to redeem or not redeem the Rights or to amend the Agreement). All such actions, calculations, interpretations and determinations (including, for purposes of clause (y) below, all omissions with respect to the foregoing), which are done or made by the Board of the Company in good faith, will (x) be final, conclusive and binding on the Company, the Rights Agent, the holders of the Rights Certificates and all other parties and (y) not subject the Board of the Company to any liability to the holders of the Rights.

- Section 30. <u>Benefits of this Agreement</u>. Nothing in this Agreement shall be construed to give to any Person other than the Company, the Rights Agent and the registered holders of the Right Certificates (and, prior to the Distribution Date, the shares of Common Stock) any legal or equitable right, remedy or claim under this Agreement; but this Agreement shall be for the sole and exclusive benefit of the Company, the Rights Agent and the registered holders of the Right Certificates (and, prior to the Distribution Date, the shares of Common Stock).
- Section 31. <u>Severability</u>. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction or other authority to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated.
- Section 32. Governing Law. This Agreement and each Right Certificate issued hereunder shall be deemed to be a contract made under the laws of the State of Delaware and for all purposes shall be governed by and construed in accordance with the laws of such State applicable to contracts to be made and performed entirely within such State.
- Section 33. Counterparts. This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.

Section 34. <u>Descriptive Headings</u>. Descriptive headings of the several Sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and attested, all as of the day and year first above written.

	PERMA-FIX ENVIRONMENTAL SERVICES, INC.
ATTEST	By: <u>/s/Louis Centofanti</u> Dr. Louis F. Centofanti, President
s/Steve Baughman	(the "Company")
Steve Baughman, Secretary	CONTINENTAL STOCK TRANSFER & TRUST COMPANY
ATTEST	By: <u>/s/John Comer</u> John Comer, Vice President
	(the "Rights Agent")
s/Thomas Jenning Thomas Jennings, Assistant Secretary	
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EXHIBIT "A"

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. <u>Designation and Amount</u>. 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. <u>Dividends and Distributions</u>.

- (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.

Exhibit "A" Page 2 of 6

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.

Exhibit "A" Page 3 of 6

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.

Exhibit "A" Page 4 of 6

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.

Exhibit "A" Page 5 of 6 IN WITNESS WHEREOF, this Certificate of Designation is executed on behalf of the Corporation by its President and attested by its Secretary this 2^{nd} day of May, 2008.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

ATTEST

/s/Steve Baughman Steve Baughman, Secretary (S E A L) By: /s/Louis Centofanti
Dr. Louis F. Centofanti, President

Exhibit "A" Page 6 of 6

EXHIBIT "B"

FORM OF RIGHT CERTIFICATE

Certificate No. R-		Rights
_	NOT EXERCISABLE AFTER May 1, 2018, OR EARLIER IF REDEMPTION OR EXCHANGE OCCURS. THE RIGHTS ARE SUBJECT TO REDEMPTION AT \$0.001 PER RIGHT AND TO EXCHANGE ON THE TERMS SET FORTH IN THE RIGHTS AGREEMENT. RIGHTS BENEFICIARY OWNED BY AN ACQUIRING PERSON (AS SUCH TERM IS DEFINED IN THE RIGHTS AGREEMENT) AND ANY SUBSEQUENT HOLDER OF SUCH RIGHTS WILL BE NULL AND VOID.	
	RIGHT CERTIFICATE	
	OF	
	PERMA-FIX ENVIRONMENTAL SERVICES, INC.	
which entitles the ov "Rights Agreement"	es that, or registered assigns, is the registered owner of the number of Rights set forth where thereof, subject to the terms, provisions and conditions of the Rights Agreement, dated as of May"), between PERMA-FIX ENVIRONMENTAL SERVICES, INC., a Delaware corporation (the "County of TOCK TRANSEER & TRUST COMPANY (the "Rights Agent"), to purchase from the Company at an	y 2, 2008, (the ompany"), and

> Exhibit "B" Page 1 of 6

Upon the occurrence of an event described in Section 11(a)(ii) of the Rights Agreement, if the Rights evidenced by this Right Certificate are beneficially owned by (i) an Acquiring Person or an Affiliate or Associate of any such Acquiring Person (as such terms are defined in the Rights Agreement), (ii) a transferee of such Acquiring Person, Associate or Affiliate who becomes a transferee after the Acquiring Person becomes such, or (iii) under certain circumstances specified in the Rights Agreement, a transferee of such Acquiring Person (or of any such Associate or Affiliate) who becomes a transferee prior to or concurrently with or such Acquiring Person (or of any such Associate or Affiliate) becoming such, such Rights shall become null and void and no holder of such Rights shall have any right with respect to such Rights from and after the occurrence of an event described in Section 11(a)(ii) of the Rights Agreement.

As provided in the Rights Agreement, the Purchase Price and the number of one one-hundredth of a Preferred Share or other securities which may be purchased upon the exercise of the Rights evidenced by this Right Certificate are subject to modification and adjustment upon the happening of certain events as described in the Rights Agreement.

This Right Certificate is subject to all of the terms, provisions and conditions of the Rights Agreement, which terms, provisions and conditions are hereby incorporated herein by reference and made a part hereof and to which Rights Agreement reference is hereby made for a full description of the rights, limitations of rights, obligations, duties and immunities hereunder of the Rights Agent, the Company and the holders of the Right Certificates. Copies of the Rights Agreement are on file at the principal executive offices of the Company and the Rights Agent's offices located at Continental Stock Transfer & Trust Company, Attention: Compliance Department.

This Right Certificate, with or without other Right Certificates, upon surrender at the principal office of the Rights Agent, may be exchanged for another Right Certificate or Right Certificates of like tenor and date evidencing Rights entitling the holder to purchase a like aggregate number of Preferred Shares as the Rights evidenced by the Right Certificate or Right Certificates surrendered shall have entitled such holder to purchase. If this Right Certificate shall be exercised in part, the holder shall be entitled to receive upon surrender hereof another Right Certificate or Right Certificates for the number of whole Rights not exercised.

Subject to the provisions of the Rights Agreement, the Rights evidenced by this Certificate: (i) may be redeemed by the Company at a redemption price of \$0.001 per Right, adjusted to reflect any stock split, stock dividend or similar transaction, and payable, at the option of the Company, either in cash, shares of common stock or any other form of consideration deemed appropriate by the Board of the Company; or (ii) may be exchanged in whole or in part for Preferred Shares or shares of the Company's Common Stock, par value \$.001 per share.

No factional Preferred Shares will be issued upon the exercise of any Right or Rights evidenced hereby (other than fractions which are integral multiples of one one-hundredth of a Preferred Share, which may, at the election of the Company, be evidenced by depository receipts), but in lieu thereof a cash payment will be made, as provided in the Rights Agreement.

Exhibit "B" Page 2 of 6

No holder of this Right Certificate shall be entitled to vote or receive dividends or be deemed for any purpose the holder of the Preferred Shares or of any other securities of the Company which may at any time be issuable on the exercise hereof, nor shall anything contained in the Rights Agreement or herein be construed to confer upon the holder hereof, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action, or to receive notice of meetings or other actions affecting stockholders (except as provided in the Rights Agreement), or to receive dividends or subscription rights, or otherwise, until the Right or Rights evidenced by this Right Certificate shall have been exercised as provided in the Rights Agreement.

This Right Certificate shall not be valid or obligatory for any purpose until it shall have been countersigned by the Rights Agent.

Form of Reverse Side Right Certificate

FORM OF ASSIGNMENT

(To be executed by the registered holder if such holder desires to transfer the Right Certificate)

FOR	VALUED	RECEIVED hereby sells, assigns
and	transfers	nereby sens, assigns unto
_	(Please print name and address of transferee)	
	right, title and interest therein, and does hereby _ Attorney, to transfer the within Right Certificate on th	-
Dated:, 2008.		
	Signature	
Signature Guaranteed:		
	ember firm of a registered national securities exchange, a mem c or trust company having an office or correspondent in the Un	
The undersigned hereby certifies that Person or an Affiliate or Associate thereof (as d	the Rights evidenced by this Right Certificate are not benef efined in the Rights Agreement).	ficially owned by an Acquiring
	Signature	
		Exhibit "B" Page 4 of 6

Form of Reverse Side of Right Certificate - continued

FORM OF ELECTION TO PURCHASE

(To be executed if holder desires to exercise the Right Certificate.)

To: PERMA-FIX ENVIRONMENTAL SERVICES, INC. The undersigned hereby irrevocably elects to exercise _ Rights represented by this Right Certificate to purchase the Preferred Shares, Common Stock or other Securities issuable upon the exercise of such Rights and requests that certificates for such Preferred Shares, Common Stock or other Securities be issued in the name of: Please insert social security or other identifying number: (Please print name and address) If such number of Rights shall not be all the Rights evidenced by this Right Certificate, a new Right Certificate for the balance remaining of such Rights shall be registered in the name of and delivered to: Please insert social security or other identifying number: (Please print name and address) _____, 2008. Signature Signature Guaranteed: Signatures must be guaranteed by a member firm of a registered national securities exchange, a member of the National Association of Securities Dealers, Inc., or a commercial bank or trust company having an office or correspondent in the United States. Exhibit "B" Page 5 of 6 Form of Reverse Side of Right Certificate - continued

The undersigned hereby certifies that the Rights evidenced by this Right Certificate are not beneficially owned by an Acquiring Person or an Affiliate or Associate thereof (as defined in the Rights Agreement).

Signature

NOTICE

The signature in the foregoing Forms of Assignment and Election must conform to the name as written upon the face of this Right Certificate in every particular, without alteration or enlargement or any change whatsoever.

In the event the certification set forth above in the Form of Assignment or the Form of Election to Purchase, as the case may be, is not completed, the Company and the Rights Agent will deem the beneficial owner of the Rights evidenced by this Right Certificate to be an Acquiring Person or an Affiliate or Associate thereof (as defined in the Rights Agreement) and such Assignment or Election to Purchase will not be honored.

Exhibit "B" Page 6 of 6

EXHIBIT "C"

SUMMARY OF RIGHTS TO PURCHASE PREFERRED SHARES

On May 2, 2008, the Board of Directors of Perma-Fix Environmental Services, Inc. (the "Company") declared a dividend distribution of one Right for each outstanding share of Common Stock, par value \$.001 per share (the "Common Stock"), of the Company to stockholders of record on May 12, 2008, (the "Record Date"). The Rights Agreement (as defined below) also contemplates the issuance of one Right for each share of Company Common Stock which is issued by the Company between the Record Date and the Distribution Date (or earlier redemption or termination of the Rights). Each Right entitles the registered holder to purchase from the Company one one-hundredth of a share of Series A Junior Participating Preferred Stock, par value \$.001 per share (the "Preferred Shares"), of the Company at a purchase price of \$13.00 per one-one hundredth of a Preferred Share (the "Purchase Price"), subject to adjustment. The description of the Rights are set forth in the Rights Agreement (the "Rights Agreement") between the Company and Continental Stock Transfer & Trust Company, as Rights Agent (the "Rights Agent").

Until the earlier to occur of (i) 10 days following a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") have acquired beneficial ownership of 20% or more of the outstanding Common Stock (except pursuant to a Permitted Offer, as defined below, or persons excluded from being an Acquiring Person under the Rights Agreement) or (ii) 10 business days (or such later date as may be determined by action of the Board of Directors prior to such time as any person becomes an Acquiring Person) following the commencement of, or announcement of an intention (which intention to commence remains in effect for 5 business days after such announcement) to make a tender offer or exchange offer, the consummation of which would result in a person or group becoming an Acquiring Person of 20% or more of the Company's Common Stock (the earlier of such dates being called the "Distribution Date"), the Rights will be evidenced with respect to any of the Common Stock certificates outstanding and no separate Rights Certificates will be distributed.

Excluded from being an Acquiring Person under the Rights Agreement are the following (collectively, the "Excluded Persons"):

- the Company;
- any subsidiary of the Company;
- any employee benefit plan of the Company or its subsidiaries;
- any entity holding Common Stock for or pursuant to the employee benefit plan of the Company or its subsidiary;
- any Person who becomes the beneficial owner of 20% or more of the Common Stock solely as a result of the acquisition of Common Stock by the Company, unless such Person shall, after such share purchases by the Company, become the beneficial owner of additional shares of Common Stock constituting 1% or more of the then outstanding shares of Common Stock; and

Exhibit "C" Page 1 of 4 any person whom the Board of Directors of the Company determines in good-faith has acquired 20% or more of the Common Stock inadvertently and such person divests, within 10 business days after such determination, a sufficient number of shares of Common Stock to no longer beneficially own 20% of the Common Stock.

The Rights Agreement provides that, until the Distribution Date (or earlier redemption or expiration of the Rights) the Rights will be transferred with and only with the Common Stock of the Company. Until the Distribution Date (or earlier redemption or expiration of the Rights), new Common Stock certificates issued after the Record Date, upon transfer or new issuance of Common Stock by the Company will contain a notation incorporating the Rights Agreement by reference. Until the Distribution Date (or earlier redemption or expiration of the Rights), the surrender for transfer of any certificates for Common Stock, even without such notation or a copy of this Summary of Rights being attached thereto, will also constitute the transfer of Rights associated with the Common Stock represented by such certificate. As soon as practicable following the Distribution Date, separate certificates evidencing the Rights ("Right Certificates") will be mailed to the holders of record of the Common Stock as of the close of business on the Distribution Date and such separate Right Certificates alone will evidence the Rights.

The Rights are not exercisable until the Distribution Date. The Rights will expire on May 1, 2018, (the "Final Expiration Date"), unless the Final Expiration Date is extended or unless the Rights are earlier redeemed by the Company, in each case, as described below.

In the event that any person becomes an Acquiring Person (except pursuant to a tender or exchange offer which is for all outstanding shares of Common Stock at a price and on terms which a majority of certain members of the Board of Directors determines to be adequate and in the best interests of the Company, its stockholders and other relevant constituencies, other than the Acquiring Person, its affiliates and associates (a "Permitted Offer")), each holder of a Right (except Rights which have been voided as set forth below) will thereafter have the right (the "Flip-In Rights") to receive upon exercise the number of shares of Common Stock or of one-one hundredths of a share of Preferred Shares (or, in certain circumstances, other securities of the Company) having a value (on the date such person became an Acquiring Person) equal to two times the Purchase Price of the Right.

In the event that at any time (i) the Company is acquired in a merger or other business combination transaction in which the Company is not the survivor, (ii) a merger or other business combination with the Company in which the Company is the survivor and, in connection with such transaction, all or part of the shares of Common Stock shall be changed for stock or other securities of any other person (or the Company) or (iii) more than 50% of the Company's assets or earning power is sold or transferred, then each holder of a Right (except Rights which have been voided as set forth below) shall thereafter have the right (the "Flip-Over Right") to receive, upon exercise, common stock of the acquiring company having a value equal to two times the Purchase Price of the Right. This paragraph shall not be applicable transactions described in (i) and (ii) of this paragraph if (i) such transaction is consummated with a person who acquired Common Stock pursuant to a Permitted Offer; (ii) the price per share of Common Stock offered in such transaction is not less than the price per share of Common Stock paid to all holders of Common Stock purchased pursuant to the Permitted Offer, and (iii) the form of consideration offered in such transaction is the same as the form of consideration paid pursuant to the Permitted Offer.

Exhibit "C" Page 2 of 4 The Purchase Price payable, and the number of Preferred Shares, Common Stock or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to prevent dilution (i) in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Preferred Shares, (ii) upon the grant to holders of the Preferred Shares of certain rights or warrants to subscribed for or purchase Preferred Shares at a price, or securities convertible into Preferred Shares with a conversion price, less than the then current market price of the Preferred Shares or (iii) upon the distribution to holders of the Preferred Shares of evidences of indebtedness or assets (excluding regular periodic cash dividends paid out of earnings or retained earnings or dividends payable in Preferred Shares) or of subscription rights or warrants (other than those referred to above).

The number of outstanding Rights and the number of one one-hundredths of a Preferred Share issuable upon exercise of each Right are also subject to adjustment in the event of a stock split of the Common Stock or a stock dividend on the Common Stock payable in Common Stock or subdivisions, consolidations or combinations of the Common Stock occurring, in any such case, prior to the Distribution Date.

Preferred Shares purchasable upon exercise of the Rights will not be redeemable. Each Preferred Share will be entitled to a minimum preferential quarterly dividend payment of \$1 per share but will be entitled to an aggregate dividend of 100 times the dividend declared per share of Common Stock. In the event of liquidation, the holders of the Preferred Shares will be entitled to a minimum preferential liquidation payment of \$100 per share but will be entitled to an aggregate payment of 100 times the payment made per share of Common Stock. In the event of any merger, consolidation or other transaction in which shares of Common Stock are exchanged, each Preferred Share will be entitled to receive 100 times the amount received per Common Stock. These rights are protected by customary anti-dilution provisions. Each Preferred Share will have 100 votes, voting together, as a single class, with the Common Stock and other capital stock of the Company having general voting rights, except as otherwise required by law or the Company's Certificate of Incorporation.

Any Rights that are beneficially owned by (i) any Acquiring Person (or any affiliate or associate of such Acquiring Person), (ii) a transferee of an Acquiring Person (or any affiliate or associate thereof) who becomes a transferee after the Acquiring Person becomes such, or (iii) under certain conditions, a transferee of any Acquiring Person (or any affiliate or associate thereof) who becomes a transferee prior to or concurrently with the Acquiring Person becoming such, shall be null and void and no holder of such Rights shall thereafter have rights to exercise such Rights.

At any time after a person becomes an Acquiring Person and prior to the acquisition by such Person (or affiliate or associate of an Acquiring Person) of 50% or more of the outstanding Common Stock, the Board of Directors of the Company may exchange the Rights (other than Rights owned by such Acquiring Person which have become void), in whole or in part, at an exchange ratio of one share of Common Stock, or one-one hundredth of a Preferred Share (or of a share of a class or series of the Company's preferred stock having equivalent rights, preferences and privileges), per Right (subject to adjustment). Upon the Board of Directors of the Company ordering the exchange, the right to exercise the Right shall terminate and the only right thereafter shall be to receive the shares in accordance with the exchange.

Exhibit "C" Page 3 of 4 With certain exceptions, no adjustment in the Purchase Price will be required until cumulative adjustments require an adjustment of at least 1% in such Purchase Price. No fractional Preferred Shares will be issued (other than fractions which are integral multiples of one one-hundredth of a Preferred Share, which may, at the election of the Company, be evidenced by depositary receipts) and in lieu thereof, an adjustment in cash will be made based on the market price of the Preferred Shares on the last trading day prior to the date of exercise.

At any time prior to the earlier of the Distribution Date or Final Expiration Date, the Board of Directors of the Company may redeem the Rights in whole, but not in part, at a price of \$0.001 per Right (the "Redemption Price"), adjusted to reflect any stock split, stock dividend or similar transaction, and payable, at the option of the Company, either in cash, shares of common stock, or any other form of consideration deemed appropriate by the Board of the Company. The redemption of the rights may be made effective at such time, on such basis and with such conditions as the Board of Directors in its sole discretion may establish. Immediately upon any redemption of the Rights, the right to exercise the Rights will terminate and the only right of the holder of Rights will be to receive the Redemption Price.

The terms of the Rights Agreement and the Rights may be amended by the Company without the consent of the holders of the Rights, in order to cure any ambiguity, to correct or supplement any provision contained therein which may be defective or inconsistent with any other provisions contained therein, or to make any other changes or amendments to the provisions contained therein which the Company may deem necessary or desirable, except that from and after such time as any person becomes an Acquiring Person no such amendment may adversely affect the interests of the holders of the Rights (other than the Acquiring Person or any affiliate or associate of the Acquiring Person). No amendment to the Rights Agreement or the Rights shall be made which changes the redemption price or the number of Preferred Shares or shares of Common Stock for which a Right is exercisable or exchangeable.

Until a Right is exercised, the holder thereof, as such, will have no rights as a stockholder of the Company, including, without limitation, the right to vote or to receive dividends.

A copy of the Rights Agreement has been filed with the Securities and Exchange Commission as an Exhibit to a current report on Form 8-K filed on May __, 2008. A copy of the Rights Agreement is available free of charge from the Company. This summary description of the Rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement, which is hereby incorporated herein by reference.

Exhibit "C" Page 4 of 4



September 29, 2008

<u>VIA FACSIMILE TO (212) 616-7608</u> <u>AND FEDERAL EXPRESS</u>

Continental Stock Transfer & Trust Company 17 Battery Place, 8th Floor New York, New York 10004 Attn: Ms. Alexandra Albrecht

Re: Perma-Fix Environmental Services, Inc.; Rights Agreement;

Our File No. 7034-002

Ladies and Gentlemen:

Certain subparagraphs of the Rights Agreement, dated May 2, 2008 (the "Rights Agreement"), by and between Perma-Fix Environmental Services, Inc. (the "Company") and Continental Stock Transfer & Trust Company (the "Rights Agent") were inadvertently numbered incorrectly. This letter agreement changes the Rights Agreement to correct such numbering system pursuant to the authority granted to the Company and the Rights Agent in Section 27 of the Rights Agreement. Effective upon the execution of this letter by the Company and the Rights Agent, the following subparagraph numbers of the Rights Agreement are changed as indicated:

- 1. Subparagraphs 13(e) and (f) are hereby renumbered 13(a) and (b), respectfully;
- 2. Subparagraphs 14(e), (f) and (g) are hereby renumbered 14(a), (b) and (c), respectfully;
- 3. Subparagraphs 16(e), (f), (g) and (h) are hereby renumbered 16(a), (b), (c) and (d), respectfully;
- 4. Subparagraphs 20(e), (f), (g), (h), (i), (j), (k), (l) and (m) are hereby renumbered 20(a), (b), (c), (d), (e), (f), (g), (h) and (i), respectfully;
- 5. Subparagraphs 23(e), (f) and (g) are hereby renumbered 23(a), (b) and (c), respectfully;
- 6. Subparagraphs 24(e), (f), (g) and (h) are hereby numbered 24(a), (b), (c) and (d), respectfully; and
- 7. Subparagraphs 25(e) and (f) are hereby renumbered 25(a) and (b), respectfully.

Compliance Department Continental Stock Transfer & Trust Company September 29, 2008 Page 2

Except as expressly set forth above, the Rights Agreement remains effective without modification. This letter agreement may be signed in two counterparts, which together will constitute a single agreement. Please indicate acceptance of the foregoing by signing where indicated below.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By: /s/Steven Baughman

Steven T. Baughman Chief Financial Officer

Dated: September 29, 2008

CONTINENTAL STOCK TRANSFER & TRUST COMPANY

/s/Alexandra Albrecht

Alexandra Albrecht, Vice President and Senior Account Manager

Dated: September 29, 2008

PERMA-FIX ENVIRONMENTAL SERVICES, INC. 2003 OUTSIDE DIRECTORS STOCK PLAN

ARTICLE I

DEFINITIONS

- 1.1 <u>Definitions</u>. As used herein, the following terms have the meanings hereinafter set forth unless the context clearly indicates to the contrary:
 - 1.1.1 "Board" shall mean the Board of Directors of the Company.
 - 1.1.2 "Company" shall mean Perma-Fix Environmental Services, Inc.
 - 1.1.3 "Initial Election Date" shall mean the date an Eligible Director is initially elected or appointed to the Board of Directors.
 - 1.1.4 "Grant Date" shall mean the date an Eligible Director is reelected to the Board after the Initial Election Date at an annual meeting of shareholders of the Company or any adjournment thereof.
 - 1.1.5 "Fair Market Value" shall mean (a) if the Stock is listed on an established securities exchange or quoted on a national market system, including without limitation, the Nasdaq National Market or the Nasdaq SmallCap Market of the Nasdaq Stock Market, the closing sales price (or the closing bid if no sales were reported) of the Stock on such exchange or system on the day on which such value is to be determined, as reported in the composite quotations for securities traded on such exchange or system; or (b) if the Stock is not listed on an established securities exchange or quoted on a national market system, but is traded in the over-the-counter market, the closing average of the bid and asked prices for the Stock as reported by the National Association of Securities Dealers Automated Quotation System or successor national quotation service. In the event no such quotations are available for the day in question, "Fair Market Value" shall be determined by reference to the appropriate prices on the next preceding day for which such prices are reported. If the Stock is not traded on such an exchange or system, the "Fair Market Value" of a share of Stock will be determined in good faith by the Board.
 - 1.1.6 "Effective Date of the Plan" shall mean the date of adoption by the stockholders of the Company.
 - 1.1.7 "Eligible Director" shall mean any member of the Board who is not an employee of the Company or its subsidiaries.
 - 1.1.8 "Non-Qualified Stock Options" shall mean any stock option that is not an "incentive stock option" within the meaning of Section 422 of the Internal Revenue Code.
 - 1.1.9 "Option" shall mean an Eligible Director's stock option to purchase Stock granted pursuant to the provisions of Article V hereof
 - 1.1.10 "Optionee" shall mean an Eligible Director to whom an Option has been granted hereunder.
 - 1.1.11 "Option Price" shall mean the price at which an Optionee may purchase a share of Stock under a Stock Option Agreement.
 - 1.1.12 "Plan" shall mean the Perma-Fix Environmental Services, Inc. 2003 Outside Directors Stock Plan, the terms of which are set forth herein.

- 1.1.13 "Stock" shall mean the common stock, par value \$.001 per share, of the Company or, in the event that the outstanding shares of Stock are hereafter changed into or exchanged for different stock or securities of the Company or some other corporation, such other stock or securities.
- 1.1.14 "Stock Award" shall mean an Eligible Director's right to receive shares of Stock pursuant to Section 5.2.3.
- 1.1.15 "Stock Option Agreement" shall mean an agreement between the Company and the Optionee under which the Optionee may purchase Stock in accordance with the Plan.

ARTICLE II

THE PLAN

- 2.1 Name. This Plan shall be known as the "Perma-Fix Environmental Services. Inc., 2003 Outside Directors Stock Plan."
- 2.2 <u>Purpose</u>. The purpose of the Plan is to advance the interests of the Company and its stockholders by affording Eligible Directors of the Company an opportunity to acquire or increase their proprietary interests in the Company, and thereby to encourage their continued service as directors and to provide them additional incentives to achieve the growth objectives of the Company.
- 2.3 <u>Effective Date</u>. The Effective Date of the Plan is the date of adoption by the stockholders.
- 2.4 <u>Termination Date.</u> The Plan shall terminate at such time as no shares of Stock remain available for grant of Options or Stock Awards and no Options remain outstanding. Outstanding Options shall remain in effect until they have been exercised, become vested or have terminated or expired.

ARTICLE III

PARTICIPANTS

3. <u>Participants.</u> Only Eligible Directors shall participate in the Plan.

ARTICLE IV

SHARES OF STOCK SUBJECT TO PLAN

- 4.1 <u>Limitations</u>. Subject to any antidilution adjustment pursuant to the provisions of Section 4.2 hereof, the maximum number of shares of Stock, which may be issued and sold hereunder, shall not exceed 1,000,000 shares. Shares of Stock subject to an Option or Stock Award may be either authorized and unissued shares or shares issued and later acquired by the Company (in the open-market or in private transactions and which are being held as treasury shares); provided however, the shares of Stock with respect to which an Option has been exercised shall not again be available for Option hereunder. If outstanding Options granted hereunder are terminated, forfeited, or cancelled or expire for any reason without being wholly exercised prior to the end of the period during which Options may be granted hereunder, new Options may be granted hereunder covering such unexercised shares. No fractional shares of Stock shall be issued under the Plan.
- 4.2 <u>Antidilution</u>. In the event that the outstanding shares of Stock are changed into or exchanged for a different number or kind of shares or other securities of the Company or of another corporation by reason of merger, consolidation, reorganization, recapitalization, reclassification, combination of shares, stock split or stock dividend:
 - 4.2.1 The aggregate number of shares of Stock for which Options may be granted or for which Stock Awards may be issued shall be adjusted appropriately.

- 4.2.2 The rights under outstanding Options granted hereunder, both as to the number of subject shares and the Option price, shall be adjusted appropriately; and
- 4.2.3 Where dissolution or liquidation of the Company or any merger or combination in which the Company is not a surviving corporation is involved, each outstanding Option granted hereunder shall terminate, but the Optionee shall have the right, immediately prior to such dissolution, liquidation, merger or combination, to exercise his Option, in whole or in part, to the extent that it shall not have been exercised, without regard to the date on which such Option would otherwise have become exercisable pursuant to Section 5.5.

The foregoing adjustments, and the manner of application thereof, shall be determined solely by the Board, and any such adjustment may provide for the elimination of fractional share interests. The adjustments required under this Article shall apply to any successor or successors of the Company and shall be made regardless of the number or type of successive events requiring adjustments hereunder.

ARTICLE V

OPTIONS AND STOCK AWARDS

- 5.1 <u>Terms and Conditions.</u> Options granted under the Plan shall be in respect of Common Stock and shall be in the form of Non-Qualified Stock Options. Options and Stock Awards shall be subject to the terms and conditions set forth in this Article V and any additional terms and conditions, not inconsistent with the express terms and provisions of the Plan, as the Board shall set forth in the relevant Stock Option Agreement.
- 5.2 Options and Stock Awards, Numbers of Shares and Agreement.
 - 5.2.1 Each Eligible Director shall automatically be granted an Option to purchase 30,000 shares of Stock on the Initial Election Date to the Board of Directors of the Company.
 - 5.2.2 Each Eligible Director shall automatically be granted an Option to purchase 12,000 shares of Stock on each Grant Date subsequent to such Eligible Director's Initial Election Date.
 - 5.2.3 Each Eligible Director shall receive, at such Eligible Director's option, either 65% or 100% of the fee payable to such Eligible Director for services rendered to the Company as a member of the Board, including services as a member of any committee of the Board (the "Director's Fee") in Stock. If the Eligible Director wishes to receive 65% of his Director's Fee in Stock: (a) the Eligible Director will receive the number of shares of Stock obtained by dividing 65% of the applicable Director Fee by 75% of the Fair Market Value of the Stock and (b) the Eligible Director will receive 35% of his Director's Fee in cash or its equivalent. If the Eligible Director wishes to receive 100% of his Director's Fee in Stock the Eligible Director will receive that number of shares of Stock obtained by dividing the applicable Director's Fee by 75% of the Fair Market Value of the Stock. Fair Market Value as used in this Section 5.2.3, shall be determined on the business day immediately preceding the date that the Director's fee is due.
 - 5.2.4 Each Option so granted shall be evidenced by a written Stock Option Agreement, dated as of the Initial Election Date or Grant Date, as applicable, and executed by the Company and the Optionee, stating (a) the Option's duration, time of exercise, exercise price, (b) that the Eligible Director is acquiring the Option and will require the shares of Stock upon exercise of the Option for investment without a view to distribution, and (c) that the Company may condition the issuance of the Option and the issuance of shares of Stock upon exercise of the Option on such other representations and warranties as may be necessary or advisable solely to comply with the provisions of the Securities Act of 1933, as amended, or any other federal, state or local securities laws. The terms and conditions of the Option shall be consistent with the Plan.
 - 5.2.5 The Board may require each Eligible Director receiving a Stock Award pursuant to Section 5.2.3 to represent to and agree with the Company in writing that each Eligible Director is acquiring the shares of Stock for investment without a view to distribution, and may condition the issuance of shares of Stock pursuant to the Stock Award or such other representation or agreement as may be necessary or advisable solely to comply with the provision of the Securities Act of 1933, as amended, or any other federal, state or local securities laws.

- 5.2.6 The election by the Eligible Director, as described in Section 5.2.3 hereof, shall be made in writing to the Company at any time prior to the date on which the Director's Fee is due. Should an Eligible Director fail to make such election in a timely manner, such Eligible Director shall be deemed to have elected to receive 100% of the Director's Fee payable to such Eligible Director in Stock as described in Section 5.2.3.
- 5.3 Option Price. The Option Price of the Stock subject to each Option shall be the Fair Market Value of the Stock on the day preceding the Grant Date, or the Initial Election Date.
- 5.4 <u>Term.</u> The period for the exercise of each Option shall expire on the 10th anniversary of the Initial Election Date or the Grant Date, as applicable (the "Term").

5.5 Option Exercise.

- 5.5.1 No Option granted under the Plan shall become exercisable until after the expiration of six months from the Grant Date or Initial Election Date, as applicable. An option shall remain exercisable after its exercise date at all times during the Exercise Period, regardless of whether the Optionee thereafter continues to serve as a member of the Board.
- 5.5.2 Subject to the terms of this Section 5.5, an Option may be exercised at any time or from time to time during the term of the Option, in whole or in part, as to full shares of Stock which have become exercisable under this Plan and the terms of the Option, but not as to less than 1,000 shares of Stock, unless the remaining shares of Stock that are so exercisable are less than 1,000 shares of Stock. The Option Price is to be paid in full pursuant to the terms of this Section 5.5 upon the exercise of the Option. The holder of an Option shall not have any of the rights of a Stockholder with respect to the shares of Stock subject to the Option until such shares of Stock have been issued or transferred to the holder upon the exercise of the Option.
- 5.5.3 Subject to the terms of this Plan, an Option may be exercised by the Optionee, in whole or in part, during the Company's normal business hours on any business day by surrender of the Option and written notice of exercise of the Option, duly executed by the Optionee, with such notice duly delivered to the Company at its principal office, setting forth the specified number of full shares of Stock being exercised, and accompanied by payment, in cash or by certified or official bank check payable to the order of the Company in the amount obtained by multiplying (i) the number of shares of Stock so designated in such notice of exercise by (ii) the Option Price specified in the Option. In addition to, and prior to issuance of a certificate for shares of Stock pursuant to the exercise of an Option, the Optionee shall pay to the Company in cash or by certified or official bank check, payable to the order of the Company, for the full amount of any federal and state withholding or other employment taxes applicable to the taxable income of such Optionee resulting from such exercise.
- Nontransferability of Option. Options may not be transferred by an Optionee other than by will or the laws of descent and distribution. During the lifetime of an Optionee, this Option may be exercised only by the Optionee (or by his guardian or legal representative should one be appointed). In the event of the death of an Optionee, any Option held by him may be exercised by his legatee(s) or other distributee(s) or by his personal representative.
- 5.7 <u>Nontransferability of Stock Award</u>. No shares of Stock issued under the Plan pursuant to Stock Awards may be transferred by the recipient thereof for a period of six months from the date such Stock is issued to the Eligible Director, other than by will or the laws of descent and distribution. The certificates representing shares of Stock issued under Stock Awards shall bear a legend to the foregoing effect.

ARTICLE VI

STOCK CERTIFICATES

6.1 Stock Certificates. The Company shall not be required to issue or deliver any certificate for shares of Stock purchased upon the exercise of any Option granted hereunder or any portion thereof unless, in the opinion of counsel to the Company, there has been compliance with all applicable legal requirements. An Option granted under the Plan may provide that the Company's obligation to deliver shares of Stock upon the exercise thereof may be conditioned upon the receipt by the Company of a representation as to the investment intention of the holder thereof in such form as the Company shall determine to be necessary or advisable solely to comply with the provisions of the Securities Act of 1933, as amended, or any other federal, state or local securities laws.

ARTICLE VII

RELATIONSHIP TO OTHER COMPENSATION PLANS

7.1 <u>Relationship to other Compensation Plans</u>. The adoption of the Plan shall neither affect any other stock option, incentive or other compensation plans in effect for the Company or any of its subsidiaries, nor shall the adoption of the Plan preclude the Company from establishing any other forms of incentive or other compensation plan for directors of the Company.

ARTICLE VIII

ADMINISTRATION

- 8.1 <u>Administrator of the Plan</u>. The Plan shall be administered by the Board.
- 8.2 Plan Rules. The Board shall have full power and authority to promulgate, amend and rescind rules and regulations relating to the implementation, administration and maintenance of the Plan. Subject to the terms and conditions of the Plan, the Board shall make all determinations necessary or advisable for the implementation, administration and maintenance of the Plan including, without limitation, correcting any technical defect(s) or technical omission(s), or reconciling any technical inconsistency(ies), in the Plan and/or any Stock Option Agreement. The Board may designate persons other than members of the Board to carry out the day-to-day ministerial administration of the Plan under such conditions and limitations as it may prescribe. Any determination, decision or action of the Board in connection with the construction, interpretation, administration, implementation or maintenance of the Plan shall be final, conclusive and binding upon all Eligible Directors and any person(s) claiming under or through any Eligible Directors.

ARTICLE IX

AMENDMENT SUSPENSION AND TERMINATIONS

- 9.1 In General. The Board may suspend or terminate the Plan (or any portion thereof) at any time and may amend the Plan at any time and from time to time in such respects as the Board may deem advisable to ensure that any and all Options and Stock Awards conform to or otherwise reflect any change in applicable laws or regulations, or to permit the Company or the Eligible Directors to benefit from any change in applicable laws or regulations, or in any other respect the Board may deem to be in the best interests of the Company or any subsidiary. No such amendment, suspension or termination shall (a) materially adversely effect the rights of any Eligible Director under any outstanding Options or Stock Awards, without the consent of such Eligible Director or (b) be effective without shareholder approval if such approval is required to comply with any applicable law or stock exchange rule.
- 9.2 <u>Agreement Modifications</u>. No modification, extension, renewal or other change in any Stock Option Agreement granted under the Plan shall be made after grant, unless the same is consistent with the provisions of the Plan.

ARTICLE X

MISCELLANEOUS

- 10.1 No Right to Reelection. Neither the adoption of the Plan, the granting of any Award, nor the execution of any Stock Option Agreement, shall confer upon any Eligible Director any right to remain a member of the Board for any period of time, nor shall it create any obligation on the part of the Board to nominate any of its members for reelection by the Company's stockholders.
- 10.2 <u>Unfunded Plan</u>. The Plan shall be unfunded and the Company shall not be required to segregate any assets in connection with the Plan. Any liability of the Company to any person with respect to any Option or Stock Award under the Plan or any Stock Option Agreement shall be based solely upon the contractual obligations that may be created as a result of the Plan or any such system, award or agreement. No such obligation of the Company shall be deemed to be secured by any pledge of, encumbrance on, or other interest in, any property or asset of the Company or any subsidiary. Nothing contained in the Plan or any Stock Option Agreement shall be construed as creating in respect of any Eligible Director (or beneficiary thereof or any other person) any equity or other interest of any kind in any assets of the Company or any subsidiary or creating a trust of any kind or a fiduciary relationship of any kind between the Company, any subsidiary and/or any such Eligible Director, any beneficiary thereof or any other person.
- 10.3 <u>Listing, Registration and Other Legal Compliance</u>. No shares of Stock shall be required to be issued or granted under the Plan unless legal counsel for the Company shall be satisfied that such issuance or grant will be in compliance with all applicable federal and state securities laws and regulations and any other applicable laws or regulations. The Board may require, as a condition of any payment or share issuance, that certain agreements, undertakings, representations, certificates, and/or information, as the Board may deem necessary or advisable, be executed or provided to the Company to assure compliance with all such applicable laws or regulations. Certificates for shares of the Stock delivered under the Plan may be subject to such stop-transfer orders and such other restrictions, including restrictive legends, as the Board may deem advisable under the rules, regulations, or other requirements of the Securities and Exchange Commission, any stock exchange upon which the Common Stock is then listed, and any applicable federal or state securities law.
- 10.4 Plan Binding on Successors. The Plan shall be binding upon the successors and assigns of the Company.
- 10.5 <u>Singular Plural: Gender.</u> Whenever used herein, nouns in the singular shall include the plural, and the Masculine pronoun shall include the feminine gender.
- 10.6 <u>Headings, etc., No Part of Plan</u>. Headings of articles and paragraphs hereof are inserted (or convenience and reference, and do not constitute a part of the Plan.
- 10.7 <u>Governing Law</u>. The Plan and all actions taken thereunder shall be governed by and construed in accordance with the laws of the State of Delaware, without reference to the principles of conflict of laws thereof.

FIRST AMENDMENT to 2003 OUTSIDE DIRECTORS STOCK PLAN

THIS FIRST AMENDMENT TO THE PERMA-FIX ENVIRONMENTAL SERVICES, INC. 2003 OUTSIDE DIRECTORS STOCK PLAN (the "First Amendment") was approved by the Board of Directors (the "Board") of Perma-Fix Environmental Services, Inc. (the "Company") to be effective on June 13, 2008, subject to the approval of the shareholders of the Company.

WHEREAS, Article VII of the 2003 Outside Directors Stock Plan (the "Plan"), provides that the Board may at any time, and from time to time and, in any respect amend or modify the Plan;

WHEREAS, as of June 5, 2008, the maximum number of shares of our common stock that may be issued under the Plan is 1,000,000 shares (subject to adjustment as provided in the 2003 Plan), of which 838,465 have previously been issued or reserved for issuance under the Plan, comprised of 412,465 shares previously been issued under the Plan, and 426,000 shares issuable under outstanding options granted under the Plan;

WHEREAS, in order to continue to attract and retain qualified members of the Board who are not employees of the Company, the Board is of the opinion that it is necessary that the maximum number of shares of Common Stock that may be issued under the Plan be increased from 1,000,000 to 2,000,000 shares (subject to adjustment as provided in the Plan); and,

NOW, THEREFORE, the following amendments to the plan are unanimously adopted by the Board, subject to the approval of the shareholders of the Company:

Amendment to Section 4.1:

Section 4.1 of the Plan is hereby amended by deleting the number "1,000,000" from the first full sentence contained therein and substituting in lieu thereof the number "2,000,000."

The Plan is hereby amended and modified only to the extent specifically amended or modified by this First Amendment to the 2003 Outside Directors Stock Plan. None of the other terms, conditions or provisions of the Plan, is amended or modified by this First Amendment to the 2003 Outside Directors Stock Plan.

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IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO WESTERN DIVISION

BARBARA FISHER,	
Plaintiff,	
and)	
UNITED STATES OF AMERICA,	Civil Action No. 3:04 CV 00418 Magistrate Judge Michael R. Merz
Plaintiff-Intervenor,	
v. (
PERMA-FIX OF DAYTON, INC.	
Defendant.)	

CONSENT DECREE

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WHEREAS on December 2, 2004, Plaintiff Barbara Fisher filed a Complaint in this action, alleging that Defendant Perma-Fix of Dayton, Inc. facility emitted odors, fumes, noxious materials, and other pollutants, which caused Plaintiff Fisher and others in her community to suffer adverse health effects, damage to property, and other injuries, and thus violated 1) Ohio Administrative Code 3745-3102 and 40 C.F.R. Part 52, 2) Ohio Administrative Code 3745-77, 42 U.S.C. §§ 7661a and 7661b, 3) 40 C.F.R. Part 63, Subpart DD, and 4) Ohio Administrative Code 3745-15-07 and 40 C.F.R. Part 52.

WHEREAS Plaintiff-Intervenor the United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), filed an amended complaint in intervention in this action on August 24, 2006. The Amended Complaint in Intervention alleges that Defendant Perma-Fix of Dayton, Inc. ("PFD"), an off-site waste recovery operation, is a major source of hazardous air pollutants that failed to comply with specified requirements under the Act. Specifically, the Amended Complaint in Intervention alleges that 1) PFD failed to comply with the National Emission Standards for Hazardous Air Pollutants ("NESHAP") regulations for Off-Site Waste Recovery Operations ("OSWRO"), in violation of 40 C.F.R. Part 63, Subpart DD; 2) PFD failed to comply with the general NESHAP requirements at 40 C.F.R. Part 63, Subpart A incorporated by the OSWRO regulations; 3) PFD failed to apply for and operate under a Title V permit in violation of 42 U.S.C. § 7661a(a), 40 CFR §§ 70.5(a) and 70.7(b), and Ohio Administrative Code 3745-77; 4) PFD failed to apply for and obtain Permits to Install prior to installing various new emission sources, in violation of the Ohio State Implementation Plan, Ohio Admin. Code 3745-31-02; and 5) PFD failed to respond to a July 26, 2002, information request issued by EPA, as modified on August 14, 2003, in violation of Section 114(a) of the Act, 42 U.S.C. § 7414(a).

WHEREAS PFD has filed an Answer to the Amended Complaint in which it has denied the material allegations of the United States and asserted affirmative defenses to the claims asserted therein.

WHEREAS PFD denies any liability to the United States arising out of the transactions or occurrences alleged in the Amended Complaint in Intervention and has agreed to the terms of this Consent Decree in order to avoid the cost of further litigation with the United States and the distraction of its personnel from the operation of PFD's business.

WHEREAS Plaintiff Fisher and PFD represent that they have entered into an additional settlement agreement that is not incorporated in this Consent Decree. Plaintiff Fisher and PFD represent that they have agreed, as part of that settlement, that Fisher and her counsel will organize a Neighborhood Environmental Committee that will, as one means of addressing the Committee's concerns, meet, from time to time, with representatives of the Facility to discuss and seek to resolve issues of concern to the neighborhood and/or Perma-Fix (including all successors, transferees, and/or other entities or persons bound by this Consent Decree) arising out of operations at the Facility.

WHEREAS Plaintiff-Intervenor the United States and Defendant Perma-Fix of Dayton, Inc. recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the United States and PFD in good faith and will avoid further litigation between the United States and PFD and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, with the consent of the United States and PFD, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to

28 U.S.C. §§ 1331, 1345, and 1355 and Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the United States and PFD. Venue lies in this District pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because the violations alleged in the Amended Complaint in Intervention are alleged to have occurred in, and PFD conducts business in, this judicial district. For purposes of this Decree, or any action to enforce this Decree, the United States and PFD consent to the Court's jurisdiction over this Decree and any such action and over the United States and PFD, and consent to venue in this judicial district.

- Solely for purposes of this Consent Decree, PFD agrees that the Amended Complaint in Intervention states claims upon which relief may be granted pursuant to Section 113 of the Clean Air Act ("Act"), 42 U.S.C. § 7413.
- Notice of the commencement of this action has been given to the State of Ohio, as required by Section 113(b) of the Act, 42 U.S.C. § 7413(b).

II. APPLICABILITY

- The obligations of this Consent Decree apply to and are binding upon the United States and upon PFD and any successors, assigns, or other entities or persons otherwise bound by law.
- 5. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve PFD of its obligation to ensure that the terms of the Decree are implemented, unless (1) the transferee agrees to undertake the obligations required by Sections V, VI, VII, VIII, and XI of this Decree and to be substituted for the PFD as a Party under the Decree and be thus bound by the terms thereof, and (2) the United States consents to relieve PFD of its obligations. The United States' decision to refuse to approve the

substitution of the transferee for PFD shall not be subject to judicial review. At least 30 days prior to such transfer, PFD shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to EPA Region 5 and the United States Department of Justice, in accordance with Section XIV of this Decree (Notices). Any attempt to transfer ownership or operation of the Facility without complying with the notice requirements of this Paragraph constitutes a violation of this Decree.

- 6. Financial Assurance. In order to ensure the full and final completion of the obligations of this Decree, PFD agrees that the Corporation will not dissolve without prior approval from the United States or, in the alternative, will not dissolve until it establishes and maintains a Performance Guarantee for the benefit of EPA in the amount of the value of any capital expenditures then remaining to be performed, which must be satisfactory in form and substance to EPA.
- 7. PFD shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree. For any contractor retained to perform work required under this Consent Decree, PFD shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.
- 8. In any action to enforce this Consent Decree, PFD shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. DEFINITIONS

9. Terms used in this Consent decree that are defined in the Act or in regulations

promulgated pursuant to or otherwise authorized by the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

- a. "Bioplant" shall mean Bio-VDR (Tank T-703) and Bio-SBR (Tank T-705) and associated equipment used in the biological oxidation of organic wastewaters at the Facility.
- "Complaint" shall mean the Amended Complaint in Intervention filed
 Plaintiff-Intervenor the United States in this action;
- c. "Consent Decree" or "Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXIII);
- d. "Day" shall mean a calendar day unless expressly stated to be a working day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day;
 - e. "Defendant" shall mean Perma-Fix of Dayton, Inc. or PFD;
 - f. "Effective Date" shall have the meaning set forth in Paragraph 101;
- g. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;
- h. "Facility" shall mean the facility currently owned by PFD located at 300 Cherokee Drive, Dayton, Ohio, 45427 and generally depicted on the map attached hereto as Appendix B;
 - "Paragraph" shall mean a portion of this Decree identified by an arabic

numeral;

- j. "Parties" shall mean the United States and Defendant PFD;
- k. "Section" shall mean a portion of this Decree identified by a roman

numeral;

1. "United States" shall mean the United States of America, acting on

behalf of EPA.

IV. CIVIL PENALTY

the sum of \$360,000 to the United States as a civil penalty. PFD shall pay the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be provided to PFD, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Ohio, 303 Marconi Blvd., Columbus Ohio 43215, (614) 469-5715. At the time of payment, PFD shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in Fisher, et al., v. Perma-Fix of Dayton, 3:04CV418 (S.D. Ohio), and shall reference the civil action number and DOJ case number 90-5-2-1-08318, to the United States in accordance with Section XIV of this Decree (Notices); by email to acctsreceivable.CINWD@epa.gov; and to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268.

V. COMPLIANCE REQUIREMENTS

General Requirements

- 11. PFD shall achieve and maintain compliance with the OSWRO regulations, 40 C.F.R. Part 63, Subpart DD, the applicable provisions of the General NESHAP regulations, 40 C.F.R. Part 63, Subpart A, as identified in Table 2 of Subpart DD, and Title V of the Clean Air Act, 42 U.S.C. § 7661 et seq., consistent with the schedules set forth in this Decree and the applicable regulations.
- 12. Within 30 days of the Effective Date of this Decree, PFD shall install a permanent monitor that displays the pressure in the closed-vent system according to the requirements in 40 CFR § 63.693(c)(1)(ii). This monitor shall be placed such that if it indicates a vacuum is present in the closed vent system at that point, there is a vacuum in the entire closed vent system. PFD shall observe the monitor at least once per day on days of operation and shall record each observation. PFD shall also record each day that there was no vacuum present in the closed vent system on days of operation. In the event there is no negative pressure in the closed vent system, PFD shall take all necessary action to remedy the problem as soon as possible including, but not limited to, taking applicable actions prescribed in its Startup, Shutdown, and Malfunction plan. Records associated with these requirements shall be kept on site and available for inspection for at least 3 years.
- 13. Within 60 days of the Effective Date of this Decree, PFD shall install a Continuous Monitoring System to monitor the Regenerative Thermal Oxidizer ("RTO") combustion chamber temperature, recovery bed temperature, and RTO stack exhaust temperature. Monitoring performed by this system must conform to 40 C.F.R. § 63.695(e). Data will be subject to record-

keeping and reporting requirements of 40 C.F.R. Subparts DD and A at 40 C.F.R. §§ 63.696, 63.697.

- 14. Within 180 days after the Effective Date of this Decree, PFD shall comply with the OSWRO and General NESHAP provisions with respect to all units listed in Appendix A of this Decree and shall implement the respective controls identified for each unit in Appendix A. All tanks identified in Appendix A as requiring Level 2 controls shall comply with 40 C.F.R. § 63.685(d).
- engineering evaluation of airflow through the closed-vent system to the RTO to ensure the closedvent system meets good engineering practices. PFD shall submit this evaluation to EPA and the
 Regional Air Pollution Control Agency ("RAPCA") within 120 days of the Effective Date of this
 Decree; the evaluation shall include a schedule for implementing its recommendations. In the event
 of any disagreement on the methods PFD uses or the conclusions the report reaches, the United
 States and PFD shall resolve the dispute pursuant to Paragraphs 76-84 for dispute resolution. PFD
 shall implement the recommendations of the engineering evaluation in accordance with the schedule
 and shall amend any PTI application already submitted to request additional control measures, if
 necessary. Irrespective of the engineering evaluation, the RTO shall meet the design and operation
 standards for closed-vent systems and their control devices as specified in 40 C.F.R. §§ 63.693 and
 63.695.
- 16. For purposes of this Decree, a closed vent system is either (i) a system that is designed to operate with no detectable organic emissions using the procedure specified in 40 C.F.R. § 93.694(k), or (ii) a system that is designed to operate at a pressure below atmospheric pressure, where the system is equipped with at least one pressure gauge or other pressure

measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed -vent system when the control device is operating.

- 17. Within 180 days of the Effective Date of this Decree, PFD shall vent displaced vapors from fuel oil loading and hazardous waste drum bulking to a control device, using a closed vent system as described in Paragraph 16 above and a control device that achieves 95% destruction of either total organic compounds or total HAP listed in Table 1 of 40 C.F.R 63, Subpart DD. All truck loading not vented to a control device pursuant to this Paragraph shall utilize submerged fill.
- fume hood vents to atmosphere from the Building G laboratory with an organic vapor control device, which may be a carbon adsorption system. The system shall be designed and sized in order to remove compounds that are expected to be emitted by the laboratory, and shall be operated according to the manufacturer's specifications. If the organic vapor control device is a carbon adsorption system, PFD shall either replace or regenerate the carbon to remove captured volatile organic carbon when the unit fails to meet the manufacturer's performance specifications. PFD will monitor the concentration level of the organic compounds in the exhaust vent from the carbon adsorption system on a regular schedule, and when carbon breakthrough is indicated, immediately replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon. Measurement of the concentration level of the organic compounds in the exhaust vent stream must be made with a detection instrument that is appropriate for the composition of organic constituents in the vent stream and is routinely calibrated to measure the organic concentration level expected to occur at breakthrough. Records associated with these

requirements shall be kept on site and available for inspection for at least 3 years.

- 19. Within 120 days after the Effective Date of this Decree, PFD shall conduct a review of all operating equipment to ensure use of good engineering practices to reduce emissions, including identifying and addressing any equipment openings to the atmosphere, identifying and addressing any odorous operations, such as tank cleaning or routine spills, and identifying and addressing any process activities that may cause nuisance conditions. A report summarizing the review and proposed actions shall be submitted to EPA within 60 days after the review is completed, and PFD shall implement the plan within 180 days of submittal.
- 20. Within 180 days after the Effective Date of this Decree, PFD shall develop and submit to EPA and implement an environmental management plan to include the general categories set out in ISO 14000.
- 21. Within 120 days after the Effective Date of this Decree, PFD shall install and operate a data acquisition system for the pressure monitor located immediately upstream of the RTO fan. The data collection performed by this system shall conform with 40 C.F.R. § 63.695(e). Recordkeeping and reporting shall conform with 40 C.F.R.§§ 63.696, 63.697.
- 22. Within 120 days after the Effective Date of this Decree, PFD shall implement a community response plan including (1) public communication, (2) investigation procedures for responding to air pollution complaints, (3) quarterly newsletters, and (4) record keeping. PFD will share community response plan records with RAPCA at RAPCA's request. A report summarizing the community response plan shall be submitted to EPA within 60 days after the Effective Date of the Decree.
 - 23. Within 180 days after the Effective Date of this Decree, PFD shall perform

an initial inspection and/or test of conservation vent setpoints on tanks subjected to Tank Level 1 Controls pursuant to Appendix A to this Decree, to confirm that the opening setpoint matches the tanks' design limits, in accordance with 40 C.F.R.§§ 63.902(c)(2), 63.905, and 63.906. Within 210 days after the Effective Date of this Decree, PFD shall submit to EPA the results of the initial inspection and/or test of conservation vent setpoints and shall state each tank's design rating, the setpoint at which the vent opens, and all supporting documentation.

PFD shall perform an annual visual inspection of all fixed roofs and conservation vents subject to Tank Level 1 Controls pursuant to Appendix A to this Decree. Inspections shall include visually checking equipment for defects that could result in air emissions, including, but not limited to, connections of the conservation vents to the tank roofs, and mechanical integrity of the pressure relief devices. PFD shall repair all detected defects as follows: PFD shall make first efforts at repair of the defect no later than 5 days after detection, and repair shall be completed as soon as possible but no later than 45 days after detection except that repair of a defect may be delayed beyond 45 days if PFD determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the regulated material normally managed in the tank. PFD shall prepare and maintain documentation describing the defect, explaining why alternative storage capacity is not available, and specify a schedule of action that will ensure the equipment will be repaired or the tank emptied as soon as possible. Repairs of defects, dates of inspections, and corrective actions taken to repair defects shall be recorded by PFD. Inspection and corrective action records shall be maintained at the facility, including the date of inspection, the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect, for a period of 5 years. In the

event that repair of the defect is delayed in accordance with this provision, PFD shall also record the reason for the delay and the date that completion of repair of the defect is expected.

- PFD shall perform quarterly visual inspections of the closed vent system using the procedure outlined in 40 CFR § 63.695(c).
- PFD shall perform a visual inspection of the wastewater transfer lines for defects that could result in liquid leaks on the wastewater transfer lines at least once a day on days of operation. PFD shall repair all detected liquid leaks as follows: PFD shall make first efforts at repair of the liquid leak no later than 5 days after detection, and repair shall be completed as soon as possible but no later than 45 days after detection except that repair of a defect may be delayed beyond 45 days if PFD determines that repair of the defect requires emptying or temporary removal from service of the transfer system and no alternative transfer system capacity is available at the site to accept the regulated material normally managed in the transfer system. PFD shall repair the defect the next time the process or unit that is generating the material handled by the transfer system stops operation. Repairs of liquid leaks, dates of inspections, and corrective actions taken to repair liquid leaks shall be recorded by PFD. Inspection and corrective action records shall be maintained at the facility, including the date of inspection, the location of the liquid leak, a description of the liquid leak, the date of detection, and corrective action taken to repair the liquid leak. In the event that repair of the defect is delayed in accordance with this provision, PFD shall also record the reason for the delay and the date that completion of repair of the defect is expected. Records of these inspections shall be kept on site, available for review, for a period of 5 years.
- PFD shall not heat tanks S-6, S-7, S-13, S-14, S-21, S-22, S-23, S-24, S-28,
 and W-4 without installing, prior to heating, a closed-vent system as described in Paragraph 16

above which captures the emissions from the tank and vents those emissions to a control device that achieves 95% destruction of either total organic compounds or total HAP listed in Table 1 of 40 C.F.R Part 63, Subpart DD. To maintain an adequate volume of heated tank capacity during compliance activities, for a period not to exceed 180 days after the effective date of this Decree, Perma-Fix may take the following actions. Perma-Fix may temporarily heat any of the above tanks without connection to the closed vent system if that tank is being used as a direct replacement for a tank elsewhere in the facility that is out of service while it is being connected to the closed vent system. Perma-Fix may not heat more tanks than are necessary to provide replacement capacity for tanks taken out of service while being connected to the closed vent system. Any of the above tanks so heated must have the heating discontinued once the original tank is connected to the closed vent system and returned to service.

Standard Operating Procedures and Plans

- 28. Within 30 days of the Effective Date of this Decree, PFD shall implement and comply with the Containment Areas Standard Operating Procedure ("SOP") attached hereto as Appendix C.
- Within 30 days of the Effective Date of this Decree, PFD shall implement and comply with the Bioplant SOP attached hereto as Appendix D.
- 30. Within 30 days of the Effective Date of this Decree, PFD shall implement and comply with the Solidification Process SOP attached hereto as Appendix E.
- 31. Within 90 days of the Effective Date of this Decree, PFD shall submit to EPA, with a copy to RAPCA, startup, shutdown, and malfunction plans as provided for in 40 C.F.R. § 63.6(e)(3) for all emission units listed in Appendix A.

- 32. Within 90 days of the Effective Date of this decree, PFD shall develop and submit to EPA, with a copy to RAPCA, an SOP that explains how PFD will load material into tanker trucks to comply with Paragraphs 11 and 17 of this Decree.
- 33. Within 120 days after the Effective Date of this Decree, PFD shall develop and submit to EPA, with a copy to RAPCA, an SOP that explains how PFD will limit materials accepted and handled in order to assure it will not violate its permits, Subpart DD, or cause excessive odors off-site.

Permits

- 34. Within 90 days after the Effective Date of this Decree, PFD shall apply to the Ohio Environmental Protection Agency through RAPCA for Permits to Install ("PTIs") for all units listed in Appendix A, and within 180 days after the Effective Date of this Decree, PFD shall submit a Clean Air Act Title V permit application pursuant to 40 C.F.R. Part 70 and the Ohio CAA Title V permit program at O.A.C. § 3745-77 to RAPCA, with copies of all applications sent to EPA. The PTI applications and the Title V Permit application shall provide all necessary information and meet all legal requirements in order for them to be complete, accurate, and approvable. PFD shall request as part of its PTI applications, which will be incorporated into its Title V permit application, the following enforceable provisions:
- a. PFD shall request that the level of control identified for each unit in Appendix A be incorporated as federally enforceable requirements pursuant to O.A.C. § 3745-31, subject to RAPCA review and approval. Where Tank Level 2 controls are specified by Appendix A, PFD shall propose that the appropriate emission control is a closed vent system as described in Paragraph 16 above and a control device that achieves 95% destruction of either total organic

compounds or total HAP listed in Table 1 of 40 C.F.R 63, Subpart DD.

- PFD shall request that the following additional controls apply to the Bioplant;
 - i. For each day the bioplant is fed, the SBR and VDR must maintain DO levels above 1.0 ppm during the last two hours of the aeration stage of each batch. The SBR and VDR may fail to meet this limit, but not more than one batch every two calendar weeks, as long as the subsequent batch is extended so that the reactor is allowed to aerate until the DO level is above 1.0 ppm for at least two hours.
 - ii. The wastewater feed to the SBR and VDR shall have a maximum food to microorganism (F/M) ratio of 0.30, measured as lb TOC influent / lb MLVSS. The wastewater feed TOC shall be sampled and measured from the bioplant feed tank (currently T-706B). The MLVSS shall be sampled and measured from the SBR and VDR. Compliance with the F/M ratio shall be determined on a weekly average basis. The F/M shall be calculated on a daily basis.
 - The bioplant blowers shall not supply more than a total of 4,500 acfm of air to the SBR and VDR, combined.
- c. PFD shall request in their PTI applications that the requirements of Paragraphs 12, 17, 21, 24, 25, 26, and 27 be incorporated into the PTIs.

- 35. PFD shall submit copies of the Standard Operating Procedures for the Containment Areas, Bioplant, and Solidification Process described in Paragraphs 28, 29, and 30 as part of its PTI applications.
- 36. In the event there is a discrepancy between a PTI in existence as of the Effective Date of this Decree and any requirements of this Decree, PFD shall apply for a modification of the relevant PTI(s) to incorporate the level of control or operating practices specified in this Decree.
- 37. <u>Approval of Deliverables</u>. After review of any plan, report, or other item that is required to be submitted to the United States for approval pursuant to this Consent Decree, EPA shall in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.
- 38. If the submission is approved pursuant to Paragraph 37(a), PFD shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 37(b) or (c), PFD shall, upon written direction of EPA, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions, subject to PFD's right to dispute only the specified conditions or the disapproved portions, under Section X of this Decree (Dispute Resolution).
- 39. If the submission is disapproved in whole or in part pursuant to Paragraph 37(c) or (d), PFD shall, within 30 days or such other time as the United States and PFD agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion

thereof, for approval, in accordance with the preceding Paragraphs or invoke Dispute Resolution pursuant to Section X of this Decree. If the resubmission is approved in whole or in part, PFD shall proceed in accordance with the preceding Paragraph.

- 40. Any stipulated penalties applicable to the original submission, as provided in Section VIII of this Decree, shall accrue during the 30-day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of PFD's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.
- 41. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA may again require PFD to correct any deficiencies, in accordance with the preceding Paragraphs, or may itself correct any deficiencies, subject to PFD's right to invoke Dispute Resolution and the right of EPA to seek stipulated penalties as provided in the preceding Paragraphs.
- 42. Permits. Where any compliance obligation under this Section requires PFD to obtain a federal, state, or local permit or approval, PFD shall submit timely and complete applications and take all other actions reasonably necessary to obtain all such permits or approvals. PFD may seek relief under the provisions of Section IX of this Consent Decree (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation beyond PFD's reasonable control, so long as PFD has submitted timely and complete applications and has taken all other actions reasonably necessary to obtain all such permits or approvals.

VI. SUPPLEMENTAL ENVIRONMENTAL PROJECTS

- 43. PFD shall implement the following Supplemental Environmental Projects ("SEPs") as described in Appendix F to this Consent Decree: (1) painting of unheated tanks; (2) addition of demister to the RTO; and (3) addition of puff chamber to RTO. The SEPs shall be completed within 180 days after the effective date of this Decree. In implementing the SEP, PFD shall spend not less than \$562,000 in eligible SEP costs. Eligible SEP costs include the costs of planning and implementing the SEPs.
- 44. PFD is responsible for the satisfactory completion of the SEPs in accordance with the requirements of this Decree. "Satisfactory completion" means that PFD shall complete the work in accordance with all work plans and specifications for the project and shall spend not less than the amount set forth in Paragraph 43. PFD may use contractors or consultants in planning and implementing the SEPs.
- 45. With regard to the SEPs, PFD certifies the truth and accuracy of each of the following:
- a. that all cost information provided to EPA in connection with EPA's approval of the SEPs is complete and accurate and represents a fair estimate of the costs necessary to implement the SEPs;
- that, as of the date of executing this Decree, PFD is not required to perform or develop the SEPs by any federal, state, or local law or regulation and is not required to perform or develop the SEPs by agreement, grant, or as injunctive relief awarded in any other action in any forum;
 - c. that the SEPs are not projects that PFD was planning or intending to

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construct, perform, or implement other than in settlement of the claims resolved in this Decree;

- d. that PFD has not received and will not receive credit for the SEPs in any other enforcement action; and
- e. that PFD will not receive any reimbursement for any portion of the SEPs from any other person.

46. SEP Completion Report

- a. Within 30 days after the date set for completion of the SEPs, PFD shall submit a SEP Completion Report to the United States, in accordance with Section XIV of this Consent Decree (Notices). The SEP Completion Report shall contain the following information:
 - i. a detailed description of the SEPs as implemented;
 - a description of any problems encountered in completing the SEPs and the solutions thereto;
 - iii. an itemized list of all eligible SEP costs;
 - iv. certification that the SEPs have been fully implemented pursuant to the provisions of this Decree; and
 - a description of the environmental and public health benefits resulting from implementation of the SEPs (with a quantification of the benefits and pollutant reductions, if feasible).
- 47. EPA may, in its sole discretion, require information in addition to that described in the preceding Paragraph, in order to determine the adequacy of SEP completion or eligibility of SEP costs, and PFD shall provide such information.
 - 48. After receiving the SEP Completion Report, the United States shall notify

PFD whether or not PFD has satisfactorily completed the SEPs. If the SEPs have not been satisfactorily completed in accordance with all applicable work plans and schedules, or if the amount expended on performance of the SEPs is less than the amount set forth in Paragraph 43, stipulated penalties may be assessed under Section VIII of this Consent Decree.

- 49. Disputes concerning the satisfactory performance of the SEPs and the amount of eligible SEP costs may be resolved under Section X of this Decree (Dispute Resolution). No other disputes arising under this Section shall be subject to Dispute Resolution.
- 50. Each submission required under this Section shall be signed by an official with knowledge of the SEP and shall bear the certification language set forth in Paragraph 56.
- 51. Any public statement, oral or written, in print, film, or other media, made by PFD making reference to the SEPs under this Decree shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action, <u>Fisher and the United States v. Perma-Fix of Dayton</u>, taken on behalf of the U.S. Environmental Protection Agency under the Clean Air Act."
- 52. For Federal Income Tax purposes, PFD agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the SEPs.

VII. REPORTING REQUIREMENTS

- 53. PFD shall submit the following reports:
- a. Within 30 days after the end of each calendar-year quarter (i.e., by April 30, July 30, October 30, and January 30) following the Effective Date of this Consent Decree, until termination of this Decree pursuant to Section XVIII, PFD shall submit a quarterly report for

the preceding quarter that shall include (i) status of compliance measures; (ii) completion of milestones; (iii) problems encountered or anticipated, together with implemented or proposed solutions; (iv) status of permit applications; (v) a discussion of PFD's progress in satisfying its obligations in connection with the three SEPs under Section VI of this Decree including, at a minimum, a narrative description of activities undertaken; status of any construction or compliance measures, and a summary of costs incurred since the previous report; and (vi) other matters as identified by the United States and PFD.

- b. The quarterly report shall also include a description of any noncompliance with the requirements of this Consent Decree and an explanation of the violation's likely
 cause and of the remedial steps taken, or to be taken, to prevent or minimize the effect and
 recurrence of such violation. If the cause of a violation cannot be fully explained at the time the
 report is due, PFD shall so state in the report. PFD shall investigate the cause of the violation and
 shall then submit an amendment to the report, including a full explanation of the cause of the
 violation, within 30 days of the day PFD becomes aware of the cause of the violation. Nothing in
 this Paragraph or the following Paragraph relieves PFD of its obligation to provide the notice
 required by Section IX of this Consent Decree (Force Majeure).
- 54. Whenever any violation of this Consent Decree or any other event affecting PFD's performance under this Decree, or the performance of its Facility, may pose an immediate threat to the public health or welfare or the environment, PFD shall notify EPA orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after PFD first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

- All reports shall be submitted to the persons designated in Section XIV of this
 Consent Decree (Notices).
- 56. Each report submitted by PFD under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

- 57. The reporting requirements of this Consent Decree do not relieve PFD of any reporting obligations required by the Clean Air Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.
- 58. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

VIII. STIPULATED PENALTIES

59. PFD shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section IX (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of

this Decree and within the specified time schedules established by or approved under this Decree.

60. <u>Late Payment of Civil Penalty</u> If PFD fails to pay the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, PFD shall pay a stipulated penalty of \$5,000 per day for each day that the payment is late.

Compliance Milestones

 a. The following stipulated penalties shall accrue per violation per day for each violation of the requirements identified in Subparagraph b:

Penalty Per Vio	olation Per I	Period of Noncompliance
\$2,500		1st through 14th day
\$5,000		15th through 30th day
\$7,500		31st day and beyond
	b.	Paragraphs 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27,
28, 29, 30, 31, 3	32, 33, 34, 3	5, and 36.

62. <u>Reporting Requirements</u>. The following stipulated penalties shall accrue per violation per day for each violation of the reporting requirements of Section VII of this Consent Decree:

Penalty Per Violation Per Day	Period of Noncompliance	
\$1,000	1st through 14th day	
\$2,000	15th through 30th day	
\$5,000	31st day and beyond	

63. SEP Compliance

a. If PFD fails to satisfactorily complete the SEPs by the deadline set forth in Paragraph 43, PFD shall pay stipulated penalties for each day for which it fails to satisfactorily complete each SEP, as follows:

Penalty Per Violation Per Day	Period of Noncompliance
\$2,500	1st through 14th day
\$5,000	15th through 30th day
\$7,500	31st day and beyond

- b. If PFD fails to implement any of the three SEPs, or halts or abandons work on any of the three SEPs, PFD shall pay stipulated penalties as set forth below:
- For failing to implement, halting or abandoning work on the painting of unheated tanks SEP, PFD shall pay a stipulated penalty of \$65,000;
- For failing to implement, halting or abandoning work on the addition of demister to the RTO SEP, PFD shall pay a stipulated penalty of \$185,000;
- iii. For failing to implement, halting or abandoning work on the addition of puff chamber to the RTO SEP, PFD shall pay a stipulated penalty of \$200,000.
 The penalties under this subparagraph shall accrue as of the date specified for completing the SEP or the date performance ceases, whichever is earlier.
- 64. Except as provided in subparagraph 63.b. above, stipulated penalties under this Section shall begin to accrue on the first business day after performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

- PFD shall pay any stipulated penalty within 30 days of receiving the United
 States' written demand.
- 66. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.
- 67. Stipulated penalties shall continue to accrue as provided in Paragraph 64, during any Dispute Resolution, but need not be paid until the following:
- a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, PFD shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 days of the effective date of the agreement or the receipt of EPA's decision or order.
- b. If the dispute is appealed to the Court and the United States prevails in whole or in part, PFD shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 days of receiving the Court's decision or order, except as provided in Subparagraph c, below. Nothing in this Subparagraph shall be construed to require payment of any penalties that the United States waived pursuant to Paragraph 66.
- c. If any Party appeals the District Court's decision and the United States prevails in whole or in part, PFD shall pay all accrued penalties determined by the Court of Appeals to be owing, together with interest, within 15 days of receiving the final appellate court decision.
- 68. PFD shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 10, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

- PFD shall not deduct stipulated penalties paid under this Section in calculating its federal income tax.
- 70. If PFD fails to pay stipulated penalties according to the terms of this Consent Decree, PFD shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for PFD's failure to pay any stipulated penalties.
- 71. Subject to the provisions of Section XII of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for PFD's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Act ("Act"), 42 U.S.C. § 7401 et seq., and its implementing regulations, PFD shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

IX. FORCE MAJEURE

72. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of PFD, of any entity controlled by PFD, or of PFD's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite PFD's best efforts to fulfill the obligation. "Best efforts" includes anticipating any reasonably foreseeable potential force majeure event and addressing the effects of any such event (a) as it is occurring and (b) after it has occurred, to prevent or minimize any resulting delay to the greatest extent reasonably possible. "Force Majeure" does not include PFD's financial inability to

perform any obligation under this Consent Decree.

- 73. PFD shall provide notice orally or by electronic or facsimile transmission as soon as possible, but not later than 72 hours after the time PFD first knew of, or by the exercise of due diligence, should have known of, a claimed force majeure event. PFD shall also provide written notice, as provided in Section XIV of this Consent Decree (Notices), within seven days of the time PFD first knew of, or by the exercise of due diligence, should have known of, the event. The notice shall state the anticipated duration of any delay; its cause(s); PFD's past and proposed actions to prevent or minimize any delay; a schedule for carrying out those actions; and PFD's rationale for attributing any delay to a force majeure event. Failure to provide oral and written notice in a timely manner as required by this Paragraph shall preclude PFD from asserting any claim of force majeure, unless the delay was not reasonably avoidable based on all relevant circumstances.
- 74. If the United States agrees that a force majeure event has occurred, the United States may agree to extend the time for PFD to perform the affected requirements for the time necessary to complete those obligations. An extension of time to perform the obligations affected by a force majeure event shall not, by itself, extend the time to perform any other obligation not affected by a force majeure event.
- 75. If the United States does not agree that a force majeure event has occurred, or does not agree to the extension of time sought by PFD, the United States shall notify PFD of its position and the reason(s) therefor in writing. The United States' position shall be binding, unless PFD invokes Dispute Resolution under Section X of this Consent Decree. In any such dispute, PFD bears the burden of proving, by a preponderance of the evidence, that each claimed force majeure event is in fact a force majeure event within the meaning of this Section IX, that PFD gave the notice

required by Paragraph 73, that the force majeure event caused the delay PFD claims was attributable to that event, and that PFD exercised best efforts to prevent or minimize that delay.

X. DISPUTE RESOLUTION

- 76. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. PFD's failure to seek resolution of a dispute under this Section shall preclude PFD from raising any such issue as a defense to an action by the United States to enforce any obligation of PFD arising under this Decree. The procedures set forth in this Section do not apply to actions by the United States to enforce obligations of PFD that have not been disputed in accordance with this Section.
- 77. Except as otherwise expressly provided in this Consent Decree, the dispute resolution procedures set forth in this Section X shall be available to resolve any and all disputes arising under this Consent Decree, provided that the Party invoking the procedures has made a good faith attempt to informally resolve the matter with the other Party involved.
- 78. The dispute resolution procedure required herein shall be invoked upon the giving of written notice by one of the Parties to this Consent Decree to the other advising the other Party of a dispute pursuant to Section X. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such notice will acknowledge receipt of the notice and the Parties shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days from the receipt of such notice.
- Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations shall not

extend beyond thirty (30) days from the date of the first meeting between representatives of the Parties, unless the Parties agree that this period should be shortened or extended.

- 80. In the event that the Parties are unable to reach agreement during such informal negotiations period, the United States shall provide PFD with a written summary of its position regarding the dispute. The position advanced by the United States will be considered binding unless, within forty-five (45) days of PFD's receipt of the written summary, PFD invokes formal dispute resolution by filing with the Court a petition which describes the nature of the dispute and PFD's position on the dispute. The United States shall respond to the petition within forty-five (45) days of filing.
- 81. In a formal dispute resolution proceeding under this Section, PFD shall bear the burden of demonstrating that its position complies with this Consent Decree and the Act. The Court shall decide the dispute based upon applicable principles of law. The United States reserves the right to argue that its position is reviewable only on the administrative record and must be upheld unless arbitrary and capricious or otherwise not in accordance with law. PFD reserves the right to argue that the burden of proof for demonstrating that its position complies with this Consent Decree and the Act is by a preponderance of the evidence.
- 82. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set forth in this Section X may be shortened upon motion of one of the Parties to the dispute or by agreement of the Parties to the dispute.
- 83. The United States and PFD do not intend that the invocation of this Section X will cause the Court to draw any inferences nor establish any presumptions adverse to either United States or PFD as a result of invocation of this Section.

84. In appropriate circumstances, as part of the resolution of any matter submitted to this Court under this Section X, the United States and PFD may agree to, or the Court may order, an extension or modification of the schedule for completion of work under the Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. PFD shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule. Invocation of dispute resolution with respect to any of PFD's obligations under this Consent Decree shall not, of itself, excuse or extend the time for performance of any other obligation of PFD under this Consent Decree.

XI. INFORMATION COLLECTION AND RETENTION

- 85. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:
 - a. monitor the progress of activities required under this Consent Decree;
- verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- obtain samples and, upon request, splits of any samples taken by PFD
 or its representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data;
 - assess PFD's compliance with this Consent Decree.
- 86. Upon request, PFD shall provide EPA or its authorized representatives splits of any samples taken by PFD. Upon request, EPA shall provide PFD splits of any samples taken

by EPA.

- PFD shall preserve and maintain, during the pendency of this Consent Decree, at least one legible copy of all reports required to be generated by PFD under this Consent Decree, together with documentation, in either electronic or hard copy form, of the research and data used to generate such reports or which otherwise demonstrate the performance of PFD's obligations under this Consent Decree. In addition, all memoranda, written or electronic communications, meeting minutes, and drafts prepared in connection with each report required to be generated by PFD under this Consent Decree, and relevant to the issue of the adequacy of PFD's performance of its obligations under this Consent Decree, shall be maintained until one (1) year following EPA's written approval of each final report, regardless of any corporate document retention policy to the contrary. Where a report does not require EPA's written approval such documents must be maintained until one (1) year after submission to EPA.
- 88. Notwithstanding the provisions of the above Paragraph, PFD may request in writing permission from EPA to not preserve, to not maintain, or to destroy certain specified categories of documents. PFD's obligations under the above Paragraph will remain unchanged, however, unless and until EPA in its discretion issues written approval of the request.
- 89. At the conclusion of the information-retention period provided in the preceding Paragraph, PFD shall notify the United States at least 90 days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, PFD shall deliver any such documents, records, or other information to EPA. PFD may assert that certain documents, records, or other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If

PFD asserts such a privilege, it shall provide the United States the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by PFD.

- 90. PFD may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that PFD seeks to protect as CBI, PFD shall follow the procedures set forth in 40 C.F.R. Part 2.
- 91. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of PFD to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

92. This Consent Decree resolves only the civil claims of the United States for the violations alleged in the Amended Complaint in Intervention filed in this action, the claims for violations in EPA's Notice of Violation EPA-5-06-OH-5, the claims for violations in EPA's Finding of Violation EPA-5-04-OH-05, and the claims for violations in EPA's Administrative Order EPA-5-04-113(a)-OH-03, through the date of lodging of this Consent Decree. This Consent Decree does not limit or affect Plaintiff Fisher's right or ability to pursue her Fourth Claim for Relief, her Ohio Air Nuisance Claim pursuant to Ohio Administrative Code 3745-15-07.

- 93. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 92. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 92.
- 94. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. PFD is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and PFD's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that PFD's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. §§ 7401 et seq., or with any other provisions of federal, State, or local laws, regulations, or permits.
- 95. This Consent Decree does not limit or affect the rights of PFD or of the United States against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against PFD, except as otherwise provided by law.
- 96. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XIII. COSTS

97. The United States and PFD shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any

stipulated penalties due but not paid by PFD.

XIV. NOTICES

98. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing sent by U.S. Mail, with a copy sent by facsimile, and addressed as follows:

To the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08318

and

Compliance Tracker U.S. Environmental Protection Agency Region 5 77 West Jackson Blvd. Mail Code: AE-17J Chicago, IL 60604

To Perma-Fix

Mr. John Staton, or current Plant Manager Perma-Fix of Dayton, Inc. 300 Cherokee Drive Dayton, OH 45427 Scott Ellis Business, Government & Legal Affairs Manager Perma-Fix Environmental Services, Inc. 701 Scarboro Road, Suite 300 Oak Ridge, TN 37830

- 99. Either the United States or PFD may, by written notice to the other Party, change its designated notice recipient or notice address provided above.
- 100. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the United

States and PFD in writing.

XV. EFFECTIVE DATE

101. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court.

XVI. RETENTION OF JURISDICTION

102. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections X and XVII, or effectuating or enforcing compliance with the terms of this Decree.

XVII. MODIFICATION

- 103. The terms of this Consent Decree, including any attached appendices and Sections 1 and 7 from the Standard Operating Procedures, may be modified only by a subsequent written agreement signed by the United States and PFD. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court. All sections of the Standard Operating Procedures other than Sections 1 and 7 may be modified without prior written agreement or approval of the United States.
- 104. Any disputes concerning modification of this Decree shall be resolved pursuant to Section X of this Decree (Dispute Resolution), provided, however, that, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XVIII. TERMINATION

105. After PFD has completed the requirements of Section V (Compliance Requirements) and Section VI (Supplemental Environmental Projects) of this Decree and has thereafter maintained continuous satisfactory compliance with this Consent Decree for a period of three years and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, PFD may serve upon the United States a Request for Termination, stating that PFD has satisfied those requirements, together with all necessary supporting documentation.

106. Following receipt by the United States of PFD's Request for Termination, the United States and PFD shall confer informally concerning the Request and any disagreement that the United States and PFD may have as to whether PFD has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the United States and PFD shall submit, for the Court's approval, a joint stipulation terminating the Decree.

107. If the United States does not agree that PFD has satisfied the requirements set forth in Paragraph 105 above, PFD may invoke Dispute Resolution under Section X of this Decree. However, PFD shall not seek Dispute Resolution of any dispute regarding termination until 60 days after service of its Request for Termination.

XIX. PUBLIC PARTICIPATION

108. This Consent Decree shall be lodged with the Court for a period of not less than 30 days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or

inadequate. PFD consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified PFD in writing that it no longer supports entry of the Decree.

XX. SIGNATORIES/SERVICE

- 109. Each undersigned representative of PFD and the undersigned delegate of the Attorney General of the United States certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.
- 110. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. The Parties agree to accept service of process by mail, with a copy by facsimile, with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons; service is deemed complete upon mailing.

XXI. INTEGRATION

and understanding among the United States and PFD with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it

represents, nor shall it be used in construing the terms of this Decree.

XXII. FINAL JUDGMENT

112. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and PFD. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

XXIII. APPENDICES

- 113. The following appendices are attached to and part of this Consent Decree:
- "Appendix A" is the list of emission sources and controls at the Facility.
- "Appendix B" is the Facility map.
- "Appendix C" is the Containment Areas SOP.
- "Appendix D" is the Bioplant SOP.
- "Appendix E" is the Solidification Process SOP.
- "Appendix F" is the list of Supplemental Environmental Projects

ated and entered this	day of	, 2008.	
The Honor	rable Michael R.	Merz	
UNITED S	STATES MAGIS	STRATE JUDGE, SOUTHERN DISTRICT OF OH	IO

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of Fisher, et al., v. Perma-Fix of Dayton, Inc., No. 3:04 CV 418 (S.D. Ohio)

FOR DEFENDANT PERMA-FIX OF DAYTON, INC.

11/21/2007	Perma-Fix of Dayton, Inc.
Date	Name of Defendant
	300 Cherokee Drive, Dayton, OH 45427
	Address
	937-268-6501
	Telephone Number
By:	Mr. Larry McNamara
	Name of Officer (please type or print)
	Larry molamar
	Signature of Officer
	W. W. 11
	Vice President
	Title
	following is the name and address of PFD's agent for service and, if and address of PFD's counsel. Counsel may act as agent for service.
Agent for Service	Attorney
Name	Name
Address	Address

PFD shall notify the United States Department of Justice of any change in the identity or address of PFD, its agent for service, or its counsel.

Telephone

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of Fisher, et al., v. Perma-Fix of Dayton, Inc., No. 3:04 CV 418 (S.D. Ohio)

FOR THE UNITED STATES OF AMERICA

Ronald J. Tenpas Acting Assistant Attorney General

Environment and Natural Resources Division

Leslie E. Lehnert Laura A. Thoms

Trial Attorneys

Environment and Natural Resources Division

U.S. Department of Justice

Post Office Box 7611

Washington, D.C. 20044-7611

(202) 514-1761

Gregory G. Lockhart United States Attorney Southern District of Ohio

Patrick Quinn Assistant United States Attorney Room 602 Federal Building 200 W. 2d Street Dayton, Ohio 45402 (937)225-2910

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of <u>Fisher, et al., v. Perma-Fix of Dayton, Inc.</u>, No. 3:04 CV 418 (S.D. Ohio)

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY

Date: 11 75 157

Mary A. Gade

Regional Administrator

United States Environmental Protection

Agency, Region 5 77 W. Jackson Blvd.

Chicago, IL 60604

Date: 11-27-07

Luis A. Oviedo

Assistant Regional Counsel

United States Environmental Protection

Agency, Region 5 77 W. Jackson Blvd. Chicago, IL 60604

APPENDIX A

Appendix A

DR-1	ntrol Type
T-002	
T-001	5(d)(3), (g)
OR-2	5(d)(3), (g)
Oil-Water Separator Oil-Water Separator Oil-Water separator, 6: Surge Tank T-206 UF Permente Surge Tank 1,500-Gal. Tanks, Level 2, 63.68: T-2 T-506 Wastewater Chemical Conditioning Tank 4,000-Gal. Tanks, Level 2, 63.68: T-2 T-506 Wastewater Sludge Settling Tank 3,500-Gal. Tanks, Level 2, 63.68: TW-1 T-601 Treated Process Waters Storage Tank 16,000-Gal. Tanks, Level 2, 63.68: TW-1 T-602 Treated Process Waters Storage Tank 16,000-Gal. Tanks, Level 2, 63.68: T-602 T-603 T-603 T-603 Chemical Conditioning Tank 2 Tanks, Level 2, 63.68: T-603 T-603 T-603 Chemical Conditioning Tank 3 Tanks, Level 2, 63.68: Building B Wastewater Transfer System Transfer System (Water transfer among Bldg, B units) Transfer System, 63.68 Building B Wastewater Drain System Tricanter Tricanter Oil Receiving Tank Touth Touth Touth Touth Touth Tanks, Level 2, 63.68: Centrifuge Oil Phase Receiving Tank Touth Tanks, Level 2, 63.68: Centrifuge Oil Phase Receiving Tank Touth Tanks, Level 2, 63.68: Sweco-02 Solids Receiving Tank Touth Tanks, Level 2, 63.68: Tanks, Level 2, 63.68: Tanks, Level 2, 63.68: Touth Tan	5(d)(3), (g)
Surge Tank T-206 UF Perments Surge Tank 1,500-Gal. Tanks, Level 2, 63,685 T-1 T-601 Wastewater Chemical Conditioning Tank 4,000-Gal. Tanks, Level 2, 63,685 T-2 T-506 Wastewater Sludge Settling Tank 3,500-Gal. Tanks, Level 2, 63,685 TW-1 T-605 Treated Process Waters Storage Tank 16,000-Gal. Tanks, Level 2, 63,685 TW-1a T-602 T-602 T-602 T-603 Chemical Conditioning Tank 2 Tanks, Level 2, 63,685 T-603 T-603 T-603 T-603 T-603 T-603 T-604 Lamella Tanks, Level 2, 63,685 Transfer System Suiding B Wastewater Transfer System Individual Drain System (Water transfer among Bldg. B units) Transfer System, 63,68 Building B Wastewater Transfer System Individual Drain System (Water transfer from Bldg. B units) Transfer System, 63,68 Tricanter Oil Receiving Tank Tricanter Tricanter Tricanter Oil Receiving Tank Tricanter Solids Receiving Drum Drum-006 Tricanter Oil Receiving Tank Tanks, Level 2, 63,685 Tricanter Solids Receiving Tank Tanks, Level 2, 63,685 Tricanter Solids Receiving Tank Tanks, Level 2, 63,685 Tricanter Solids Receiving Tank Tricanter Tricanter Oil Receiving Tank Tricanter Tricanter Solids Discharge to 55-Gal Drum Containers, Level 2, 63,685 Centrifuge 3 Centrifuge 1 Centrifuge 3 Centrifuge 4 Centrifuge 4 Centrifuge 5 Centrifuge 5 Centrifuge 6 Centrifuge 6 Centrifuge 7 Transfer System Tanks, Level 2, 63,685 Transfer System Tanks, Level 2, 63,685 Transfer System Transfer System (Process oil & solids knockout transfer from centrifuge system) CONDENSER ROOM Evaporator Bottoms Tote Condenser Transfer System Transfer System (Transfer System) Transfer System (Transfer System) Transfer System (Transfer System) Transfer System (Transfer System) Transfer System (T	5(d)(3), (g)
T-1 T-501 Wastewater Chemical Conditioning Tank 4,000-Gal. Tanks, Level 2, 63.685 T-2 T-506 Wastewater Sludge Settling Tank 3,500-Gal. Tanks, Level 2, 63.685 TW-1 T-505 Treated Process Waters Storage Tank 16,000-Gal. Tanks, Level 2, 63.685 TW-1a T-602 T-602 Chemical Conditioning Tank 2 Tanks, Level 2, 63.685 T-603 T-603 Chemical Conditioning Tank 2 Tanks, Level 2, 63.685 Lamella T-604 Lamella Tanks 1 Tanks, Level 2, 63.685 Building B Wastewater Transfer System Transfer System (Water transfer among Bldg. B units) Transfer System, 63.68 Building B Wastewater Drain System Individual Drain System (Water transfer from Bldg. B units) Transfer System, 63.68 BUILDING B (CENTRIFUGE ROOM) Tricanter Tricanter Tricanter Oil Receiving Tank Transfer System, 63.68 Tricanter Solids Receiving Drum Drum-006 Tricanter Solids Discharge to 55-Gal Drum Containers, Level 2, 63.685 Tricanter Solids Receiving Tank T-003 Centrifuge 1 Oil-water separator, 60 Centrifuge 3 Centrifuge Oil Phase Receiving Tank Tanks, Level 2, 63.685 Centrifuge Oil Phase Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-05 Sweco Oil Receiving Tank Tanks Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-05 Sweco Oil Receiving Tank Tanks Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-05 Sweco Oil Receiving Tank Tanks Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-05 Sweco Oil Receiving Tank Tanks Tan	3.686(b)(2)
T-20 T-506 Wastewater Sludge Settling Tank 3,500-Gal. Tanks, Level 2, 63,685 TW-1 T-605 Treated Process Waters Storage Tank 16,000-Gal. Tanks, Level 2, 63,685 TW-1a Touris Storage Tank 16,000-Gal. Tanks, Level 2, 63,685 T-602 T-602 Chemical Conditioning Tank 2 Tanks, Level 2, 63,685 T-603 T-603 Chemical Conditioning Tank 3 Tanks, Level 2, 63,685 T-603 T-603 Chemical Conditioning Tank 3 Tanks, Level 2, 63,685 T-603 T-604 Lamella Tanks, Level 2, 63,685 T-604 Lamella Tanks, Level 2, 63,685 T-604 Lamella Tanks Level 2, 63,685 T-605 Transfer System Transfer System (Water transfer among Bldg, B units) Transfer System, 63,681 Transfer System (Water transfer from Bldg, B units) Transfer System, 63,681 Transfer System (Water transfer from Bldg, B units) Transfer System, 63,681 Transfer System (Water transfer from Bldg, B units) Transfer System, 63,681 Transfer System	5(d)(3), (g)
TW-1 Treated Process Waters Storage Tank 16,000-Gal. Tanks, Level 2, 63,685 TW-1a TW-1 Surge Tank 800-Gal Tanks, Level 2, 63,685 T-602 T-603 T-603 T-603 Chemical Conditioning Tank 2 Tanks, Level 2, 63,685 T-603 Lamella T-604 Lamella Building B Wastewater Transfer System Building B Wastewater Transfer System Individual Drain System (Water transfer among Bldg, B units) Transfer System, 63,685 Building B Wastewater Drain System Individual Drain System (Water transfer from Bldg, B units) Transfer System, 63,685 Tricanter Tricanter Tricanter Tricanter Tricanter Tricanter Tricanter Oil Receiving Tank Tricanter Oil Receiving Tank Tricanter Oil Receiving Tank Tricanter Oil Receiving Tank Tricanter Oil-water separator, 6: Centrifuge 1 Centrifuge 1 Centrifuge 1 Centrifuge 3 Centrifuge 3 Centrifuge Oil Phase Receiving Tank Tanks, Level 2, 63,685 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63,685 Tanks, Level 2, 63,685 Tricanter Oil Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Receiving Tank Tricanter Oil-water separator, 6: Tricanter Oil Receiving Tank Tricanter Oil-water separator, 6: Centrifuge Oil Phase Receiving Tank Tanks, Level 2, 63,685 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tricanter Oil Phase Receiving Tank Tanks, Level 2, 63,685 Tric	5(d)(3), (g)
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T-602 T-603 Chemical Conditioning Tank 2 Tanks, Level 2, 63.68; T-603 T-603 Chemical Conditioning Tank 3 Tanks, Level 2, 63.68; T-603 T-604 Lamella Tanks, Level 2, 63.68; Building B Wastewater Transfer System Transfer System (Water transfer among Bldg, B units) Transfer System, 63.68; Building B Wastewater Drain System Individual Drain System (Water transfer from Bldg, B units) Transfer System, 63.68; Building B Wastewater Drain System Individual Drain System (Water transfer from Bldg, B units) Transfer System, 63.68; Building B Wastewater Drain System Individual Drain System (Water transfer from Bldg, B units) Transfer System, 63.68; Building B Wastewater Drain System Individual Drain System (Water transfer from Bldg, B units) Transfer System, 63.68; Building B (CENTRIFUGE ROOM) Tricanter Tricanter Oil Receiving Tank T-006 Tricanter Oil Receiving Tank Tricanter Solids Receiving Drum Drum-006 Tricanter Solids Discharge to 55-Gal Drum Containers, Level 2, 63.68; Centrifuge Oil Phase Receiving Tank T-003 Centrifuge Oil Phase Receiving Tank Tanks, Level 2, 63.68; Centrifuge Water Phase Receiving Tank T-004 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63.68; Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.68; Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Solids Discharge to 55-Gal Drum Containers, Level 2, 63.68; Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Solids Discharge to 55-Gal Drum Containers, Level 2, 63.68; Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Solids Discharge to 55-Gal Drum Transfer System, 63.69; CONDENSER ROOM Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge System) Transfer System (Process oil & solids knockout transfer from centrifuge System) Transfer System (Process oil & solids knockout transfer from centrifuge System) Transfer System (Process oil & solids knockout transfer from centrifuge System) Transfer System (Process oil & soli	5(d)(3), (g)
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Lamella T-604 Lamella Tanks, Level 2, 63.685 Building B Wastewater Transfer System Transfer System (Water transfer among Bldg. B units) Transfer System, 63.68 Building B Wastewater Drain System Individual Drain System (Water transfer from Bldg. B units) Transfer System, 63.68	5(d)(3), (g)
Building B Wastewater Transfer System Transfer System (Water transfer among Bldg, B units) Transfer System, 63.68	5(d)(3), (g)
Building B Wastewater Drain System Individual Drain System (Water transfer from Bldg, B units) Transfer System, 63.66 BUILDING B (CENTRIFUGE ROOM) Tricanter Tricanter Tricanter Tricanter Oil Receiving Tank Tricanter Oil Receiving Tank Tricanter Oil Receiving Tank Tricanter Solids Discharge to 55-Gal Drum Containers, Level 2, 63.682 Centrifuge 1 Centrifuge 3 Centrifuge 3 Centrifuge 3 Centrifuge 0il Plasse Receiving Tank Tanks, Level 2, 63.682 Centrifuge Oil Plasse Receiving Tank Tanks, Level 2, 63.682 Centrifuge Oil Plasse Receiving Tank Tanks, Level 2, 63.682 Centrifuge Oil Plasse Receiving Tank Tanks, Level 2, 63.682 Centrifuge Oil Plasse Receiving Tank Tanks, Level 2, 63.682 Centrifuge Oil Plasse Receiving Tank Tanks, Level 2, 63.682 Sweco-02 Oil Receiving Tank Tricanter Solids Discharge to 55-Gal Drum Tricanter Solids Receiving Tank Tanks, Level 2, 63.682 Sweco-02 Oil Receiving Tank Tanks, Level 2, 63.682 Sweco-02 Solids Receiving Tank Tanks, Level 2, 63.682 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Transfer System Transfer System Transfer System CONDENSER ROOM Evaporator Bottoms Tote Tote-203 Evaporator Studge Collection (Oil/Water) in 250-gal Tote Containers, Level 2, 6 Condenser Transfer System Transfer System, 63.61	5(d)(3), (g)
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Tricanter Oil Receiving Tank T-006 Tricanter Oil Receiving Tank Tricanter Solids Receiving Tank Tricanter Solids Discharge to 55-Gal Drum Containers, Level 2, 63,683 Tricanter Solids Receiving Tank Contrifuge 1 Oil-water separator, 63 Centrifuge 3 Centrifuge 3 Oil-water separator, 63 Centrifuge Oil Phase Receiving Tank T-003 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63,683 Centrifuge Water Phase Receiving Tank T-004 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solid Receiving Tank T-005 Sweco Oil Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solids Receiving Tank T-005 Sweco Oil Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solids Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solids Receiving Tank Tanks, Level 2, 63,683 Sweco-03 Solids Receiving Drum Drum-05 Sweco Oil Receiving Tank Tanks, Level 2, 63,683 Sweco-04 Solids Receiving Tank Tanks, Level 2, 63,683 Sweco-05 Solids Receiving Drum Drum-05 Sweco Oil Receiving Tank Tanks Tanks, Level 2, 63,683 Sweco-05 Solids Receiving Tank Tanks Tanks, Level 2, 63,683 Sweco-06 Solids Receiving Tank Tanks Tanks, Level 2, 63,683 Sweco-07 Solids Receiving Tank Tanks Tanks Tanks, Level 2, 63,683 Sweco-08 Solids Receiving Tank Tanks Tan	89(b)
Tricanter Oil Receiving Tank T-006 Tricanter Oil Receiving Tank Tricanter Solids Receiving Tank Tricanter Solids Discharge to 55-Gal Drum Containers, Level 2, 63,683 Tricanter Solids Receiving Tank Contrifuge 1 Oil-water separator, 63 Centrifuge 3 Centrifuge 3 Oil-water separator, 63 Centrifuge Oil Phase Receiving Tank T-003 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63,683 Centrifuge Water Phase Receiving Tank T-004 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solid Receiving Tank T-005 Sweco Oil Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solids Receiving Tank T-005 Sweco Oil Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solids Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solids Receiving Tank Tanks, Level 2, 63,683 Sweco-03 Solids Receiving Drum Drum-05 Sweco Oil Receiving Tank Tanks, Level 2, 63,683 Sweco-04 Solids Receiving Tank Tanks, Level 2, 63,683 Sweco-05 Solids Receiving Drum Drum-05 Sweco Oil Receiving Tank Tanks Tanks, Level 2, 63,683 Sweco-05 Solids Receiving Tank Tanks Tanks, Level 2, 63,683 Sweco-06 Solids Receiving Tank Tanks Tanks, Level 2, 63,683 Sweco-07 Solids Receiving Tank Tanks Tanks Tanks, Level 2, 63,683 Sweco-08 Solids Receiving Tank Tanks Tan	
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Centrifuge 1 Centrifuge 3 Oil-water separator, 6: Centrifuge 3 Oil-water separator, 6: Centrifuge Oil Phase Receiving Tank T-003 Centrifuge Oil Phase Receiving Tank Tanks, Level 2, 63.68: Sweco-02 Centrifuge Water Phase Receiving Tank T-004 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63.68: Sweco-02 Oil Receiving Tank T-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.68: Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Secoiving Tank Tanks, Level 2, 63.68: Sweco-02 Solids Receiving Drum Containers, Level 2, 63.68: Sweco-03 Oil Receiving Tank Tanks, Level 2, 63.68: Sweco-04 Solids Receiving Drum Containers, Level 2, 63.68: Sweco-05 Oil Receiving Tank Tanks, Level 2, 63.68: Sweco-05 Oil Receiving Drum Containers, Level 2, 63.68: Sweco-06 Solids Receiving Drum Containers, Level 2, 63.68: Sweco-07 Oil-water separator, 63.68: Sweco-08 Solids Receiving Tank Tanks, Level 2, 63.68: Sweco-09 Oil Receiving Tank Tanks Level 2, 63.68: Sweco-09 Oil Receiving Tanks Tanks Level 2, 63.68: Sweco-09 Oil Receiving Tank Tanks Level 2, 63.68: Sweco-09 Oil Receiving Tanks	5(d)(3), (g)
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Centrifuge Oil Phase Receiving Tank Centrifuge Water Phase Receiving Tank T-003 Centrifuge Water Phase Receiving Tank T-004 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63,685 Sweco-02 Sweco-02 Oil Receiving Tank T-005 Sweco Oil Receiving	3.686(b)(2)
Centrifuge Water Phase Receiving Tank T-004 Centrifuge Water Phase Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Sweco-02 Sweco-02 Oil Receiving Tank T-005 Sweco Oil Receiving Tank T-005 Sweco Oil Receiving Tank T-005 Sweco Oil Receiving Tank T-005 Sweco-02 Solids Receiving Drum Drum-005 Sweco-01g Solids Discharge to 55-Gal Drum Containers, Level 2, 66.685 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oily Solids Discharge to 55-Gal Drum Containers, Level 2, 66.685 Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system)	3.686(b)(2)
Sweco-02 Sweco-02 Oil Receiving Tank T-005 Sweco Oil Receiving Tank Tanks, Level 2, 63,683 Sweco-02 Solids Receiving Drum Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system)	5(d)(3), (g)
Sweco-02 Oil Receiving Tank T-005 Sweco Oil Receiving Tank Tanks, Level 2, 63.685 Sweco-02 Solids Receiving Drum Drum-005 Sweco Oil Solids Discharge to 55-Gal Drum Containers, Level 2, 6. Transfer System (Process oil & solids knockout transfer from centrifuge system) CONDENSER ROOM Evaporator Bottoms Tote Condenser Transfer System T-204 Heat Evchanger Transfer System, 63.61	5(d)(3), (g)
Sweco-02 Solids Receiving Drum Drum-005 Sweco Oily Solids Discharge to 55-Gal Drum Containers, Level 2, 6: Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system) CONDENSER ROOM Evaporator Bottoms Tote Tote-203 Evaporator Sludge Collection (Oil/Water) in 250-gal Tote Condainers, Level 2, 6 Condainers, Level 2, 6 Condainers Transfer System T-204 Heat Exchanger Transfer System, 63.61	3.686(b)(2)
Transfer System (Process oil & solids knockout transfer from centrifuge system) Transfer System (Process oil & solids knockout transfer from centrifuge system, 63.61 CONDENSER ROOM Evaporator Studge Collection (Oil/Water) in 250-gal Tote Containers, Level 2, 6 Condenser Transfer System T-204 Heat Exchanger Transfer System, 63.61	5(d)(3), (g)
Building B Oil Transfer System system) Transfer System, 63.64 CONDENSER ROOM Evaporator Bottoms Tote Condenser Transfer System T-204 Heat Exchanger Transfer System, 63.64 Transfer System, 63.64 Condenser Transfer System T-204 Transfer System, 63.64	3.688(b)(3)
Evaporator Bottoms Tote Tote-203 Evaporator Sludge Collection (Oil/Water) in 250-gal Tote Containers, Level 2, 6 Condenser Transfer System T-204 Heat Exchanger Transfer System, 63.69	i89(c)(2)
Evaporator Bottoms Tote Tote-203 Evaporator Sludge Collection (Oil/Water) in 250-gal Tote Containers, Level 2, 6 Condenser Transfer System T-204 Heat Exchanger Transfer System, 63.69	
Condenser Transfer System T-204 Heat Exchanger Transfer System, 63.64	2 (20 4) (2)
The state of the s	
Condensate Light Ends Receiver Tote Tote-205 Light Hydrocarbon 250-Gal. Portable Tote Containers, Level 2, 6.	
	3.688(b)(3)
BUILDING E	
Drum Bulking Drum Bulking Haz. Waste Containers, 0.1 to 0.46 m ³ Containers, Level 1, 6.	i3.688(b)(1)
Drum Bulking Drum Bulking Hzz. Waste Containers, >0.46 m ³ Containers, Level 2, 6	i3.688(b)(3)
Drum Bulking Drum Bulking Haz. Waste Tanker Trucks Containers, Level 2, 6	33.688(b)(3)
Hazardous Waste Fuel Transfer System Transfer System (Haz waste fuel from containers to tanker trucks) Transfer System, 63.61	89
S-71 S-71 Oily Wastewater Storage Tank 5,000-Gal. Tanks, Level 1, 63,685	5(c)

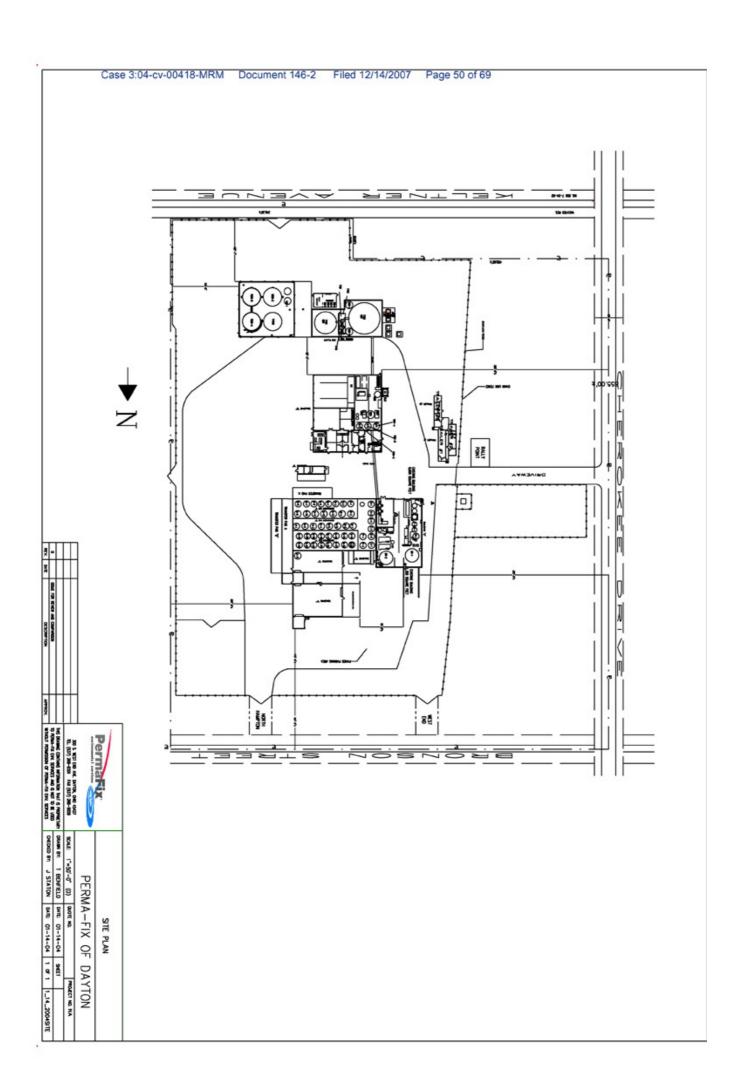
Appendix A

Affected Sources	Plant Unit#	Unit Description	Control Type
S-71 Transfer System		Hose/Hard Piping Individual Drain System	Transfer System, 63.689(b)
BUILDING G			
Rotary Vacuum Drum Filter		Rotary Vacuum Drum Filter	Organic-Water Separator, 63.686
Rotary Vacuum Sludge Vat		Rotary Vacuum Sludge Vat	Organic-Water Separator, 63.686
Bldg. G Wastewater Individual Drain			
System		Individual Drain System (Water transfer from G-1, G-2)	Transfer System, 63.689(b)
Bldg. G Wastewater Transfer System		Transfer System (Water transfer among Bldg, G units)	Transfer System, 63.689(b)
Bldg. G Solids/Sludge Transfer System		Transfer System (Solids/sludge transfer from G-3 to Solidification)	Transfer System, 63.689(b)
G-1	T-801A	G-Cone High Solids Process Vessel 14,080-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
G-2	T-801B	G-Cone High Solids Process Vessel 14,080-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
G-3	T-801C	G-Cone High Solids Process Vessel 14,080-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
T-808	T-808	Filter Press Feed Tank	Tanks, Level 2, 63.685(d)(3), (g)
Filter Press Permeate Tote	Tote-807	Filter Press Hazardous Permente Receiving Tote, 250-Gal.	Containers, Level 2, 63.688(b)(3)
BIOPLANT			
Bio-SBR	T-705	High COD Wastewaters 125,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
Bio-VDR	T-703	High COD Wastewaters 425,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
T-706B	T-706B	Bioplant Equalization Feed Tank 187,000-Gal.	Tanks, Level 1, 63.685(c)
Bioplant Wastewater Transfer System		Individual Drain System (Water transfer among Bioplant units)	Transfer System, 63.689(b)
Bioplant Wastewater Individual Drain Sy	stem	Individual Drain System (Water transfer from Bioplant to POTW)	Transfer System, 63.689(b)
TANK FARM			
Sweco-01		Sweco Vibratory Screen	Oil-water separator, 63.686(b)(2)
Sweco-01 Oil Receiving Tank	T-007	Sweco Oil Receiving Tank	Tanks, Level 2, 63.685(d)(3), (g)
Sweco-01 Solids Receiving Drum	Drum-007	Sweco Oily Solids Discharge to 55-Gal Drum	Containers, Level 2, 63.688(b)(3)
B-1	B-1	Process Oils Storage Tank 30,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
B-2	B-2	Process Oils Storage Tank 17,500-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
B-3	B-3	Process Oils Storage Tank 30,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
B-4	B-4	Process Oils Storage Tank 30,000-Gul.	Tanks, Level 2, 63.685(d)(3), (g)
C-2	C-2	Wastewater 15,000-Gal. Storage Tank	Tanks, Level 2, 63.685(d)(3), (g)
C-3	C-3	Raw Oil Solids 15,000-Gal. Storage Tank	Tanks, Level 2, 63.685(d)(3), (g)
C-4	C-4	Raw Oil 15,000-Gal. Storage Tank	Tanks, Level 2, 63.685(d)(3), (g)
P-1	P-1	Process Oils Storage Tank 18,500-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
P-2	P-2	Process Oils Storage Tank 18,500-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
R-1	R-1	Raw Oils Storage Tank 20,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
R-2	R-2	Raw Oils Storage Tank 20,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
S-1	S-1	Process Oils Storage Tank 16,700-Gal.	Tanks, Level 1, 63.685(c)
S-2	S-2	Process Oils Storage Tank 15,000-Gal.	Tanks, Level 1, 63.685(c)
S-3	S-3	Process Oils Storage Tank 15,000-Gal.	Tanks, Level 1, 63.685(c)
S-4	S-4	Cut Oils (Off-Road Diesel) Storage Tank 15,000-Gal.	Tanks, Level 1, 63.685(c)
S-6	S-6	Raw Oils Storage Tank 15,000-Gal.	Tanks, Level 1, 63.685(c)

Appendix A

Affected Sources	Plant Unit#	Unit Description	Control Type
S-7	S-7	Raw Oils Storage Tank 15,000-Gal.	Tanks, Level 1, 63.685(c)
S-9	S-9	Storage Tank 30,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
S-10	S-10	Raw Oils Storage Tank 30,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
S-11	S-11	Raw Oils Storage Tank 30,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
S-12	S-12	Raw Oils Storage Tank 30,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
S-13	S-13	Process Oils Storage Tank 30,000-Gal.	Tanks, Level 1, 63.685(c)
S-14	S-14	Storage Tank 20,300-Gal.	Tanks, Level 1, 63.685(c)
S-21	S-21	Storage Tank 16,700-Gal.	Tanks, Level 1, 63.685(c)
S-22	S-22	Crank Case Oils Storage Tank 17,500-Gal.	Tanks, Level 1, 63.685(c)
S-23	S-23	Crank Case Oils Storage Tank 18,350-Gal.	Tanks, Level 1, 63.685(c)
S-24	S-24	Crank Case Oils Storage Tank 15,000-Gal.	Tanks, Level 1, 63.685(c)
S-25	S-25	Crank Case Oils Storage Tank 15,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
S-26	S-26	Crank Case Oils Storage Tank 16,700-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
S-27	S-27	Crank Case Oils Storage Tank 23,400-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
S-28	S-28	Crank Case Oils Storage Tank 14,400-Gal.	Tanks, Level 1, 63.685(c)
W-1	W-1	Raw Oils Storage Tank 30,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
W-2	W-2	Raw Oils Storage Tank 18,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
W-4	W-4	Raw Oil Solids Storage Tank 19,000-Gal.	Tanks, Level 1, 63.685(c)
W-5	W-5	Wastewaters Storage Tank 23,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
W-6	W-6	Wastewaters Storage Tank 23,000-Gal.	Tanks, Level 2, 63.685(d)(3), (g)
T-609A	T-609A	Processed Oil Storage Tank 187,000-Gal.	Tanks, Level 1, 63.685(c)
T-609B	T-609B	Processed Oil Storage Tank 187,000-Gal.	Tanks, Level 1, 63.685(c)
T-609C	T-609C	Processed Oil Storage Tank 187,000-Gal.	Tanks, Level 1, 63.685(c)
Transfer Pad A Transfer System,		Transfer System (Wastewater and oils transfer from loading rack to tanks;	
Wastewater		tanks to treatment processes)	Transfer System, 63.689(b)
Transfer Pad A Transfer System, Raw and		Transfer System (Wastewater and oils transfer from loading rack to tanks;	
Process Oil	1	tanks to treatment processes)	Transfer System, 63.689(b)
Transfer Pad B Transfer System,		Transfer System (Wastewater and oils transfer from loading rack to tanks;	
Wastewater, Raw and Process Oil		tanks to treatment processes)	Transfer System, 63.689(b)
Transfer Pad B Transfer System, Hazardous		Transfer System (Wastewater and oils transfer from loading rack to tanks;	20 20 N
Waste Fuel Bulking		tanks to treatment processes)	Transfer System, 63.689(b)
Transfer Pad B Transfer System, Non-		Transfer System (Wastewater and oils transfer from loading rack to tanks;	
hazardous Waste Bulking		tanks to treatment processes)	Transfer System, 63.689(b)
Transfer Pad C Transfer System,		Transfer System (Wastewater and oils transfer from loading rack to tanks;	
Wastewater, Raw and Process Oil		tanks to treatment processes)	Transfer System, 63.689(b)
Transfer Pad D Transfer System,		Transfer System (Wastewater and oils transfer from loading rack to tanks;	
Wastewater		tanks to treatment processes)	Transfer System, 63.689(b)
Transfer Pad E Transfer System, Wastewater		Transfer System (Wastewater and oils transfer from loading rack to tanks;	
and Process Oil	1	tanks to treatment processes)	Transfer System, 63.689(b)
C. Assessed			
RTO			
Regenerative Thermal Oxidizer		10.000-cfm Regenerative Thermal Oxidizer	63.693(a.b.c and f)
Acceptance of a meaning of the same		A COLUMN TO THE STREET OF THE STREET OF THE STREET	the state of the s

APPENDIX B





APPENDIX C

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. CONTAINMENT AREAS CD	05/07

STANDARD OPERATING PROCEDURE

TITLE: CONTAINMENT AREAS

1.0 Purpose

To address potential liquid leaks of off-site materials from tanks or transfer systems located within containment areas.

2.0 Scope

This procedures applies to the following PFD employees:

- Operators
- Operations Manager
- · General Manager

3.0 Policy

Each Perma-Fix of Dayton employee shall follow the operating procedure in order to institutionalize appropriate facility management systems. Personnel safety shall be a primary concern when personnel are performing duties covered by this procedure.

4.0 Safety Warnings and Precautions

 Only properly trained personnel should inspect and/or maintain equipment in the containment areas.

5.0 Personal Protective Equipment

The following personal protective equipment (PPE) must be worn at appropriate times when performing tasks described in this operating procedure.

Activity	What must be worn?	By whom?	When?
Sampling	Hard Hat	Everyone	In plant
Sampling	Appropriate Gloves	Everyone	In plant
Sampling	Safety Glasses	Everyone	In plant

6.0 Responsibilities

The following are responsibilities assigned to facility personnel:

If you are the	Then you are responsible for
Operator,	Adherence to all sections of this Standard Operating

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. CONTAINMENT AREAS CD	05/07

Operations Manager, or Procedure General Manager	1	Procedure
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7.0 Procedure

All responsible individuals identified in Section 6.0 shall adhere to the following requirements:

Step	Action
1	PFD will visually inspect the containment areas for liquid leaks of off-site materials from tanks and transfer systems every operating day.
2	Any liquid leaks of off-site materials must be repaired as soon as practicable after
-	their detection. (See 40 CFR §63.6(e)(1)(ii))
3	PFD shall repair all liquid leaks of off-site materials from tanks and transfer systems as follows (see 40 CFR §63.906(b) and 40 CFR §63.964(b)):
	 PFD shall make first efforts at repair of the leak no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 15 calendar days after detection.
	 PFD shall maintain a record of the leak repair in the facility operating record.
4	PFD will maintain records of the daily inspections and leak repairs in the facility operating record. These records shall be retained at the facility for a minimum of three years.

8.0 Associated Procedures

The following procedures should be referred to and may be used in conjunction with this procedure.

Procedure No.	Description
	·

9.0 Revision List

The following revisions to this procedure are reflected in this version:

Rev. No.	Date of Revision	Revised By:	Reason
	340,10,10,000,000,000,000,000		
		1	

10.0 Attachments

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. CONTAINMENT AREAS CD	05/07

Annual Self-Audit Checklist

11.0 Inquiries/Contact Information

For questions or comments please contact:

Perma-Fix of Dayton General Manager (937) 268-6501 300 S. West End Ave. Dayton, OH 45427

12.0 Review and Approval

Prepared by:	Date:	-
Approved by:	Date:	

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. CONTAINMENT AREAS CD	05/07

ATTACHMENT NO. 1

Annual Self-Audit Checklist

Date Aud	of Self-Audit:itor (name):		
	checklist should be used by the General Manager or appointee to assure that this ping implemented at the department level.	procedure	
	Question	Yes	No
1.	Do [Work Practice] documents exist at the department level to implement this procedure effectively?		
2.	Is personnel protective equipment (PPE) available to, and worn by, each person performing work activities under this procedure?		
3.	Has there been a clear assignment of responsibility for routine execution of this procedure's activities?		
4.	For recorded deficiencies, have all corrective actions been implemented to correct the deficiencies?		
5.	Have all identified personnel been trained on this procedure?		
here	s this self-audit indicate that training and implementation are currently adequate? and take those actions as necessary to correct the deficiencies:		
docu	s this self-audit indicate a need to revise or update the department's work practice ments? Discuss here and take those actions as necessary to revise the document a onnel on the revision:		
Acti	ons Taken:	-	9

APPENDIX D

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. BIOPLANT CD	05/07

STANDARD OPERATING PROCEDURE

TITLE: BIOPLANT - DISSOLVED OXYGEN AND MIXED LIQUOR VOLATILE SUSPENDED SOLIDS (MLVSS)

1.0 Purpose

To identify operational and procedural requirements for maintaining dissolved oxygen (DO) levels and correct food to microorganism (F/M) levels in the Bioplant Sequencing Batch Reactor (SBR) and Variable Depth Reactor (VDR).

- For each day the Bioplant is fed, the SBR and VDR must maintain DO levels above 1.0
 ppm during the last two hours of the aeration stage of each batch. The SBR and VDR
 may fail to meet this limit, but not more than one batch every two calendar weeks, as
 long as the subsequent batch is extended so that the reactor is allowed to aerate until the
 DO level is above 1.0 ppm for at least two hours.
- The wastewater feed to the SBR and VDR shall have a maximum food to microorganism
 (F/M) ratio of 0.30, measured as lb TOC influent/lb MLVSS. The wastewater feed TOC
 shall be sampled and measured from the bioplant feed tank (currently T-706B). The
 MLVSS shall be sampled and measured from the SBR and VDR. Compliance with the
 F/M ratio shall be determined on a weekly average basis. The F/M shall be calculated on
 a daily basis.
- The bioplant blowers shall not supply more than 4,500 acfm of air to the SBR and VDR.

2.0 Scope

This procedures applies to the following PFD employees:

- Bioplant Operator
- Operations Manager
- General Manager
- Laboratory Personnel

3.0 Policy

Each Perma-Fix of Dayton employee shall follow the operating procedure in order to institutionalize appropriate facility management systems. Personnel safety shall be a primary concern when personnel are performing duties covered by this procedure.

4.0 Safety Warnings and Precautions

Only properly trained personnel should operate the loading system.

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. BIOPLANT CD	05/07

5.0 Personal Protective Equipment

The following personal protective equipment (PPE) must be worn at appropriate times when performing tasks described in this operating procedure.

Activity	What must be worn?	By whom?	When?
Sampling	Hard Hat	Everyone	In plant
Sampling	Latex Gloves	Everyone	In plant
Sampling	Safety Glasses	Evervone	In plant

6.0 Responsibilities

The following are responsibilities assigned to facility personnel:

If you are the	Then you are responsible for
Bioplant Operator, Operations Manager, or General Manager	Adherence to all sections of this Standard Operating Procedure
Lab personnel	Adherence to laboratory procedure sections of this Standard Operating Procedure

7.0 Procedure

The Bioplant operator shall perform the following actions each day the Bioplant is fed:

Step	Action
1	Calibrate a DO probe. Record calibration results in the laboratory record.
2	Initiate feeding cycle on the SBR and VDR. Record the start time of the feeding cycle. Record results in the laboratory record.
3	Record the time of feed cycle completion. Record results in the laboratory record. Perform the following Steps 5, 6, and 7 within four hours of feed cycle completion.
4	Using a DO probe, measure the DO levels of the SBR and the VDR 2 hours before feeding. Record results and the time of measurement in the laboratory record.
5	Collect a 1-liter sample from the SBR. Collect a 1-liter sample from the VDR.
6	Collect a 1-liter sample from the bioplant feed tank (currently T-706B).
7	Measure MLVSS twice per calendar on samples from Step 5 week using Standard Reference Method 2540, Subpart E in "Standard Methods for Examination of Water and Wastewater" of the American Water Works Association. Record results and the time of measurement in the laboratory record

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. BIOPLANT CD	05/07

- 8 Using the T-706B sample from Step 6 Measure the oxygen consumption rate (OCR) on each operating day the MLVSS is not measured. Record results and the time of measurement in the laboratory record.
- 9 Measure Total Organic Carbon (TOC) on the T-706B sample from Step 6. Record results and the time of measurement in the laboratory record each day the Bioplant is fed.
- 10 Calculate F/M ratio for the wastewater feed. Record results and the time of measurement in the laboratory record.
- 11 PFD will record laboratory analyses mentioned in this SOP in the facility operating record. These records shall be retained at the facility for a minimum of three years.

8.0 Associated Procedures

The following procedures should be referred to and may be used in conjunction with this procedure.

Procedure No.	Description

9.0 Revision List

The following revisions to this procedure are reflected in this version:

Rev. No.	Date of Revision	Revised By:	Reason
	1	2	2

10.0 Attachments

1. Annual Self-Audit Checklist

11.0 Inquiries/Contact Information

For questions or comments please contact:

Perma-Fix of Dayton General Manager (937) 268-6501 300 Cherokee Dr. Dayton, OH 45427

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. BIOPLANT CD	05/07

12.0 Review at	nd Approval
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Prepared by:	Date:	
Approved by:	Date:	

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. BIOPLANT CD	05/07

ATTACHMENT NO. 1

Annual Self-Audit Checklist

Date Audi	of Self-Audit: tor (name):		
	checklist should be used by the General Manager or appointee to assure that this ping implemented at the department level.	procedure	
	Question	Yes	No
1.	Do [Work Practice] documents exist at the department level to implement this procedure effectively?		
2.	Is personnel protective equipment (PPE) available to and worn by each person performing work activities under this procedure?		
3.	Has there been a clear assignment of responsibility for routine execution of this procedure's activities?		
4.	For recorded deficiencies, have all corrective actions been implemented to correct the deficiencies?		
5.	Have all identified personnel been trained on this procedure?		
	this self-audit indicate that training and implementation are currently adequate? and take those actions as necessary to correct the deficiencies:		
=			
docu	this self-audit indicate a need to revise or update the department's work practice ments? Discuss here and take those actions as necessary to revise the document a nucleon the revision:		
Actio	ons Taken:		

APPENDIX E

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. SOLIDIFICATION PROCESS CD	05/07

STANDARD OPERATING PROCEDURE

TITLE: SOLIDIFICATION PROCESS

1.0 Purpose

To set operating limitations on the solidification process conducted in Building G, pursuant to unit exemption under 40 CFR Part 63, Subpart DD.

2.0 Scope

This procedures applies to the following PFD employees:

- Solidification Operator
- · Operations Manager
- · General Manager
- · Laboratory Personnel

3.0 Policy

Each Perma-Fix of Dayton employee shall follow the operating procedure in order to institutionalize appropriate facility management systems. Personnel safety shall be a primary concern when personnel are performing duties covered by this procedure.

4.0 Safety Warnings and Precautions

· Only properly trained personnel should operate the loading system.

5.0 Personal Protective Equipment

The following personal protective equipment (PPE) must be worn at appropriate times when performing tasks described in this operating procedure.

Activity	What must be worn?	By whom?	When?
Sampling	Hard Hat	Everyone	In plant
Sampling	Appropriate Gloves	Everyone	In plant
Sampling	Safety Glasses	Everyone	In plant

6.0 Responsibilities

The following are responsibilities assigned to facility personnel:

Ifs	ou are the	Then you are responsible for
1 44 3	ou are me	Then you are responsible for

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. SOLIDIFICATION PROCESS CD	05/07

Solidification Operator, Operations Manager, or General Manager	Adherence to all sections of this Standard Operating Procedure
Lab personnel	Adherence to laboratory procedure sections of this Standard Operating Procedure

7.0 Procedure

All responsible individuals identified in Section 6.0 shall adhere to the following requirements:

Step	Action
1	Wastes received into G-PIT-001 (the Fixation/Solidification Pit) will be limited to
	off-site materials.
2	PFD will comply with Subpart DD at the G-PIT-001 by sampling the off-site
	material, and documenting by laboratory analysis that it contains organic
	concentrations less than 500 parts per million VOHAP, as allowed by Subpart
	DD. Laboratory test methods will include SW-846 Methods 8260 and 8270.
	Four samples will be obtained and analyzed as specified by 40 C.F.R. §
	63.683(b)(1) and 40 C.F.R. § 63.694(b). Confirmatory annual samples will be
	obtained and analyzed as specified by 40 C.F.R. § 63.683(b).
3	PFD's generator waste profile will be changed to include mandatory and specific screening information about the VOHAP concentration and a characterization of
	odor, from the generator's process knowledge or analytical data. For all incoming
	off-site materials to be received into G-PIT-001, PFD will pre-screen each waste
	load for a VOHAP content of less than 500 parts per million by reviewing the
	generator's waste profile.
4	When off-site material arrives at the facility, PFD will evaluate information
	supplied by the generator regarding VOHAP content and odors prior to accepting
	the waste for solidification in G-PIT-001. PFD will not introduce off-site
	materials into G-PIT-001 whose waste profiles indicate VOHAP content greater
	than 500 parts per million or a strong odor. If the generator has indicated on the
	waste profile that VOHAPs are present above 100 parts per million, PFD will
	conduct a laboratory analysis of the off-site material for BTEX compounds. If the
	analysis indicates the off-site material contains total BTEX compounds greater
	than 300 parts per million, PFD will choose one of these three options: 1) the off-
	site material will be placed in one of PFD's Subpart DD waste treatment units, 2)
	the off-site material will be returned to the generator or sent off-site to another
	waste treatment facility, or 3) PFD will conduct a full VOHAP analysis of the
	off-site material using SW-846 Methods 8260 and 8270 to verify that the total
	VOHAP content is less than 500 parts per million.
5	PFD will record laboratory analyses in the facility operating record. These
	records shall be retained at the facility for a minimum of three years. PFD shall
	also retain the generator's waste profile for three years after the last date on which
	any of the waste associated with that profile has been accepted into the facility.
	any of the waste associated with that profile has been accepted into the facility.

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STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. SOLIDIFICATION PROCESS CD	05/07

8.0 Associated Procedures

The following procedures should be referred to and may be used in conjunction with this procedure.

Procedure No.	Description

9.0 Revision List

The following revisions to this procedure are reflected in this version:

Rev. No.	Date of Revision	Revised By:	Reason

10.0 Attachments

Annual Self-Audit Checklist

11.0 Inquiries/Contact Information

For questions or comments please contact:

Perma-Fix of Dayton General Manager (937) 268-6501 300 Cherokee Dr. Dayton, OH 45427

12.0 Review and Approval

Prepared by:	Date:	
Approved by:	Date:	

Case 3:04-cv-00418-MRM Document 146-2 Filed 12/14/2007 Page 66 of 69

STANDARD OPERATING PROCEDURE MANUAL	REV 0
REFERENCE PROCEDURE NO. SOLIDIFICATION PROCESS CD	05/07

ATTACHMENT NO. 1

Annual Self-Audit Checklist

Date Audi	of Self-Audit: tor (name):		
	checklist should be used by the General Manager or appointee to assure that this ping implemented at the department level.	procedure	
	Question	Yes	No
1.	Do [Work Practice] documents exist at the department level to implement this procedure effectively?		
2.	Is personnel protective equipment (PPE) available to, and worn by, each person performing work activities under this procedure?		
3.	Has there been a clear assignment of responsibility for routine execution of this procedure's activities?		
4.	For recorded deficiencies, have all corrective actions been implemented to correct the deficiencies?		
5.	Have all identified personnel been trained on this procedure?		
Does	this self-audit indicate that training and implementation are currently adequate? and take those actions as necessary to correct the deficiencies:		
docu	this self-audit indicate a need to revise or update the department's work practice ments? Discuss here and take those actions as necessary to revise the document a onnel on the revision:	nd to train	
Actio	ons Taken:		0

APPENDIX F

Supplemental Environmental Projects

- Tank Painting. PFD shall paint unheated tanks at the Facility with white paint, in order to reduce VOC and HAP emissions. This project shall include power washing, priming, and painting with full finish coats of Sherwin-Williams' direct-to-metal acrylic for the following tanks: S1, S2, S3, S4, S5, S6, S7, S8, S13, S14, S21, S22, S23, S24, S28, P1, P2, W4, T609A, T609B, and T609C. The bottom 4' or 5' of these tanks will remain black. In addition, with respect to tanks T609A, T609B, and T609C, PFD shall power wash and apply epoxy prime, epoxy intermediate, and urethane top coat.
- 2. <u>Demister</u>. PFD shall install and operate a demister to dry out the bottom plenums of the RTO and remove liquid water and condensed organics from the gas stream prior to entering the ID fan and the bottom plenums. This project shall include the installation of:
 - One mist eliminator from Munters Co., per quote number G709-34889-A
- One fan and fan motor from Zimpher-kyser Co., per quote number 090907SZ, with added options of coatings and SS wheel
- Dampers and operators from Brock Air Products Co., per quote number KF205
- Ductwork as needed to tie in the mist eliminator and exhaust fan, up to the existing overhead duct. All ductwork shall be fabricated from type 304 SS, except the ductwork to connections rings, which shall be mild steel and painted. Rings shall be installed on the duct using a van stone bend which allows the duct to rotate during installation. PFD shall insulate all duct down stream of the demister with 2" fiberglass insulation, covered with an aluminum lagging.
- Process piping, including supply water, drains, traps, trap seal legs, gauges, valves and three demister solenoid valves. PFD shall insulate all items as needed.
 - Conduit, wire, and heat trace as needed for the project
- Programmable Logic Controller ("PLC") changes required by the addition of the demister, associated with damper operation
- Addition of Allen Bradley processor with Ethernet for the RTO data collection system.

The demister will be operated at all normal operating times of the RTO, and all fume will go through the demister before entering the RTO.

- 3. <u>Puff Chamber</u>. PFD shall install and operate a puff chamber (also known as an entrapment chamber) to hold fume that would otherwise be emitted to the atmosphere during valve changeover between the 2 energy recovery beds of the Facility's RTO, and then route the captured fume to the inlet of the RTO for treatment. This project shall include installation of:
 - One VOC entrapment chamber
 - One VOC damper/stack base
 - One 40' stack, with EPA test ports, to be mounted to the VOC damper
 - One stack test port platform assembly
 - Return piping to fan inlet
 - · Electrical engineering and Programmable Logic Controller ("PLC")

components to modify PLC program to control VOC damper and three demister solenoid valves, fresh air damper actuator and limit switches, isolation damper actuator and limit switches

Air compressor, air piping, and electrical connections as required by addition of the puff chamber.

The puff chamber will be operated at all normal operating times of the RTO, and all fume during valve cycling of the RTO will go through the puff chamber.



Purchase Order*

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B

PO No.:	X 847711	
Rev. No.:	χ8	
Page:	1 of 5	
PO Date:	01-MAY-14	
Rev Date:	01-DEC-14	
Supplier Phone:	(800) 365-6066	
Supplier Fax:	352-372-8963	

PERMA FIX ENVIRONMENTAL SERVICES Supplier 1940 N W 67TH PL GAINSVILLE,FL 32653 United States

United States Enrichment Corp ō 5600 Hobbs Road Kevil, KY 42053 Ship US

United States Enrichment Corp Attn: Accounts Payable Dept. P.O. Box 528, MS-6006 Piketon, OH 45661 US

Contact: S J (TIBBY) SNIPES II Buyer Buyer's Phone Buyer's Fax Buyer's email Payment Terms Ship Via F.O.B. Freight Terms V Alley (740) 897-2229 740-897-4057 alleyvj@centrusenergy.com 2/10 NET 30 Seller's Option Delivered F.O.B. Point Authorized Signature: /s/Vicki Alley Date 12-1-14

Award made per Permafix's Proposal Numbers 2014-04-1512 and 2014-04-1526 to USEC dated April 11, 2014. Line 3 is per Proposal Number 2014-07-1543 dated July 1, 2014.

ACCEPTANCE OF CONTRACT: REVISION 8

The Contractor hereby accepts this Contract as set forth herein. Acceptance of this Contract is expressly limited to the terms and conditions of the contract. See enclosed for additional terms and conditions.

By: /s/ Amy D. Weldon (Signature)

Name and Title: /s/ Amy D. Weldon, Sr. Contracts Administrator

Date: 12/2/14

REVISION 8 (12-1-14)
Moved \$*** from PO Line # 6 to PO Line # 7 due to Centrus required accounting changes. The Total PO NTE Amount of \$*** remains unchanged.

REVISION 7 (11-14-14)
Increased PO Line # 6 by \$*** from \$*** to \$*** Changed buyer from C. Tidwell to V. Alley

Centrus Proprietary Information

"INFORMATION IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS PUBLIC FILING PURSUANT TO A REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION. THE OMITTED INFORMATION HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION FOR PURPOSES OF SUCH REQUEST.
"INDICATES CERTAIN INFORMATION IN THIS DOCUMENT WHICH HAS BEEN OMITTED FROM THIS PUBLIC FILING PURSUANT TO A REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION. THE OMITTED INFORMATION HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION FOR PURPOSES OF SUCH REQUEST.

Purchase Order



REVISION 6: 9-29-14 Revision 6 included the following: 1) Added requisition 925641 as line item 6 and added \$*** 2) Increased the overall budget from \$*** to \$*** 3) All other conditions shall remain the same. END OF REVISION NUMBER 6
REVISION 5: 8-18-14 Revision 5 included the following: 1) Added requisition 925135 as line item 5 and added \$*** 2) Increased the overall budget from \$*** to \$*** 3) Extended the Period of Performance through December 31, 2014. 4) All other conditions shall remain the same. END OF REVISION NUMBER 5
REVISION 4: 8-12-14 Revision 4 included the following: 1) Added requisition 925065 as line item 4 and added \$*** 2) Increased the overall budget from \$*** to \$*** 3) All other conditions shall remain the same END OF REVISION NUMBER 4
REVISION 3: 7-2-14 REVISION 3 included the following: 1) Added requisition 924521 as line item 3 and added \$*** 2) Increased the overall budget from \$*** to \$*** 3) All other conditions shall remain the same. END OF REVISION NUMBER 3
REVISION 2: 6-24-14 REVISION 2 included the following: 1) Administrative Change: Modified POET information for items 1 and 2. 2) All other conditions shall remain the same. END OF REVISION NUMBER 2
REVISION 1: 6-03-14 REVISION 1 included the following: 1) Changed Payment Terms from Net 30 to 2/10 Net 30. 2) Added Permafix's proposal Number 2014-04-1526 to contract. Note, this material was part of the original bid. However, it was not numbered in the bid.

Centrus Proprietary Information

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Purchase Order

PO No.: Rev. No.

3) Modified Payment for Services to read as follows

Line Item # 1; Process and dispose of waste from the C-400 dip tanks: Payment will be broken down to 70% paid upon receipt of waste at vendor's facility, 20% paid upon receipt of certification of treatment and 10 percent paid upon receipt of signed manifest from disposal site.

Line Item # 2; Remove waste and clean dip tanks in C-400 as directed by SOW 811-1207: Item will be invoiced and paid per the following milestones: \$**** will be invoiced and paid upon PO execution.

\$*** will be invoiced and paid at the start of mobilization.

\$*** will be invoiced and paid at the start of mobilization.

\$*** will be invoiced and paid at the schedule's midpoint of onsite effort.

will be invoiced and paid at commencement of demobilization

INCORPORATED INTO AND MADE PART OF THIS PURCHASE ORDER ARE THE FOLLOWING SPECIAL TERMS AND CONDITIONS:

- Statement of Work No. SOW-811-1209 Revision No. 0, dated April 22, 2014.
 Perma Fix's proposals 2014-04-1512 and 2014-04-1526 dated April 11, 2014.

Any State of Ohio or Commonwealth of Kentucky sales or use taxes applicable to this Contract will be paid by the Corporation to the state/commonwealth on a direct payment permit (Ohio Direct Payment #98-002678 or Kentucky #030811).

Direct all shipments to the address set forth above. Deliveries should be made between the hours of 9:00 a.m. to 2:00 p.m., Monday - Friday, holidays excepted.

NOTE: THE CONTRACT NUMBERS MUST APPEAR ON ALL INVOICES.

Contractor hereby agrees that no person subject to an active Nuclear Regulatory Commission (NRC) enforcement action will be employed in the performance of this Contract. A listing of the persons subject to active NRC enforcement actions may be viewed at http://www.nrc.gov/reading-rm/doc Collections/enforcement/actions/individuals. The Contractor shall include this requirement in all subcontracts under this Contract.

This Contract constitutes the contract between Contractor and the Corporation, subject to and including the terms set forth herein and on the attached Terms and Conditions, Form UE-307 (2/28/14) with Alternatives #2 and #4.

PAYMENT FOR SERVICES

Payment for the services set forth in this Contract shall be in accordance with the price(s) established herein. Payment for services and material will be contingent upon acceptance by the Corporation and receipt of a proper invoice which is acceptable to the Corporation and will be made according to the payment terms set forth elsewhere in this Contract.

Line Item # 1; Process and dispose of waste from the C-400 dip tanks: Payment will be broken down to 70% paid receipt of waste at vendor's facility, 20% paid upon receipt of certification of treatment and 10 percent paid upon receipt of signed manifest from disposal site.

Centrus Proprietary Information

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Purchase Order

PO No.: Rev. No.

Line Item #2; Remove waste and clean dip tanks in C-400 as directed by SOW 811-1207: Item will be invoiced and paid per the following milestones: \$*** will be invoiced and paid upon PO execution.

\$*** will be invoiced and paid upon PO execution.

\$*** will be invoiced and paid at the start of mobilization.

\$*** will be invoiced and paid at the schedule's midpoint of onsite effort.

\$*** will be invoiced and paid at commencement of demobilization.

WASTE DISPOSAL/RECYCLING

- (a) The Contractor shall have obtained and shall comply with all applicable federal, state and local laws, regulations, permits, orders, licenses or approvals, as required by law to perform the services set forth herein. In the case where final permits have not been received, but applications have been submitted, interim required by law to perform the services set forth neterin. In the case where final permits have not been received, but applications have been submitted, interin approvals or permit shields (i.e. Title V air permitting) may be deemed to meet this requirement at the sole discretion of the Corporation. The Contractor shall allow the Corporation access to, and copies of any records (including regulatory compliance inspection reports) necessary to confirm compliance with the above. The facility permit or approval must allow the Contractor's facility to accept the type and amounts of waste or recyclable materials set forth herein. Any facility than basen found "unacceptable" by the United States Environmental Protection Agency (USEPA) under 40 CFR Section 300.44(b) is not approved by use under this Contract.

 (b) The Contractor shall immediately notify the Buyer of any permit modifications or changes that affect the processing or management of waste/recyclables
- under this Contract.
- under this Contract.

 (c) The Corporation shall have the right to inspect/audit the Contractor's facility to ensure compliance with this Contract and/or to determine if the facility is suitable for the handling of Corporation waste/recyclables. The Contractor shall provide access to Corporation employees at all reasonable times to work areas and to the Contractor's records or work performed under this Contract (including access to all pertinent documents). The Corporation shall treat all Contractor records as proprietary information and will disclose information obtained from these records only to Corporation and Government officials with a "need to know" to comply with applicable Corporation procedures and federal, state, and local laws, rules, regulations, codes and standards applicable to the services under this Contract.
 - (d) The requirements of this Paragraph shall be included in all subcontracts for waste/recycling services.

(Line#	Item No. / Description	Delive	ry Date	00	Qty	U/M)	Cost	Extension)
	1	Process and dispose of waste from the C-400 dip tanks. See attachments: SOW and Quote	30-0	CT-14		6,325,000.00	JOB		\$***	\$***	
	2	Remove waste and clean dip tanks in C-400 as directed by SOW 811-1207. See attachments: SOW and Quote				675,000.00	JOB		\$***	\$***	
			30-0	CT-14		194,197.00	JOB				

Centrus Proprietary Information

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Purchase Order



Line#	Item No. / Description	Delivery Date	Qty	U/M	Cost	Extension
		30-OCT-14	480,803.00	JOB		
3	LAB PACK SERVICES TO CHARACTERIZE, PACKAGE AND PREPARE SHIPPING FOR HAZARDOUS MATERIAL AT USEC AS DIRECTED BY SOW 811-1210 REVISION 0, DATES JULY 2, 2014	30-OCT-14	40,000.00	JOB	\$***	S***
4	LAB PACK SERVICES TO CHARACTERIZE, PACKAGE AND PREPARE SHIPPING FOR HAZARDOUS MATERIAL AT USEC AS DIRECTED BY SOW 811-1210.	30-OCT-14	16,000.00	JOB	\$***	S***
5	Process and dispose of waste from the C-400 dip tanks. See attachments: SOW and Quote	31-DEC-14	749,000.00	JOB	\$***	\$***
6	Increase PO 847711 – Process and dispose of waste from the C-400 dip tanks. This increase for up to 60 additional drums of waste.	31-DEC-14	417,600.00	JOB	\$***	\$***
7	Increase PO 847711 - Process and dispose of waste from the C-400 dip tanks	31-DEC-14	657,000.00	JOB	\$***	S***

Centrus Proprietary Information Total - \$***

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EXHIBIT 21.1

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

Treatment

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 subsidiary of the Company. The Company owns all of the issued voting Common Stock. M&EC has issued non-voting preferred stock owned by third parties.

Perma-Fix of Northwest Richland, Inc. ("PFNWR"), a Washington Corporation, is a 100% owned subsidiary of the Company.

Perma-Fix Northwest, Inc. ("PFNW"), a Washington Corporation, is a 100% owned subsidiary of the Company.

Services

Safety and Ecology Corporation ("SEC"), a Nevada corporation, is a 100% owned subsidiary of the Company.

Safety and Ecology Radcon Alliance, LLC ("SECRA"), a Nevada corporation, is a 75% owned subsidiary of the Company.

Perma-Fix Environmental Services UK Limited, a United Kingdom corporation, is a 100% owned subsidiary of the Company.

Safety and Ecology Holdings Corporation ("SEHC"), a Nevada corporation, is a 100% owned subsidiary of the Company.

Safety and Ecology Federal Services Corporation, a Nevada corporation, is a 100% owned subsidiary of the Company.

Perma-Fix of Canada, a Canadian corporation, is a 100% owned subsidiary of the Company.

Perma-Fix Medical S.A, a Polish Corporation, is a 64% owned subsidiary of the Company.

Discontinued Operations

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 Memphis, Inc. ("PFM"), a Tennessee Corporation, is a 100% owned subsidiary of the Company.

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

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

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

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

Perma-Fix of Pittsburgh, Inc. ("PFP), a Maryland Corporation, is a 100% owned subsidiary of the Company.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated March 31, 2015, with respect to the consolidated financial statements as of and for the year ended December 31, 2014, included in the Annual Report of Perma-Fix Environmental Services, Inc. on Form 10-K for the year ended December 31, 2014. We hereby consent to the incorporation by reference of said report in the Registration Statements of Perma-Fix Environmental Services, Inc. on Forms S-3 (File No. 333-158472, File No. 333-115061, File No. 33-85118, File No. 333-14513, File No. 333-43149, File No. 333-70676, and File No. 333-87437) and Forms S-8 (File No. 333-153086, File No. 333-124668, File No. 333-110995, File No. 333-17899, File No. 333-25835, and File No. 333-76024).

/s/ GRANT THORNTON LLP Atlanta, Georgia March 31, 2015

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 Form S-3 (No. 333-158472, 333-115061, 33-85118, 333-14513, 333-43149, 333-70676, and 333-87437) and Form S-8 (No. 333-153086, 333-124668, 333-110995, 333-17899, 333-25835, and 333-76024) of Perma-Fix Environmental Services, Inc. and subsidiaries of our report dated April 15, 2014, except for Notes 3, 12 and 17, as to which the date is March 31, 2015, relating to the consolidated financial statements, which appears in this Form 10-K. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

/s/ BDO USA, LLP Atlanta, Georgia March 31, 2015

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.;
- 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;
- 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):
 - 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;
 - 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 31, 2015

/s/ Louis F. Centofanti

Louis F. Centofanti Chief Executive Officer, President and Principal Executive Officer

Exhibit 31.2

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):
 - 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 31, 2015

/s/ Ben Naccarato

Ben Naccarato Chief Financial Officer and Principal 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, 2014 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 31, 2015

/s/ Louis F. Centofanti
Dr. Louis F. Centofanti
Chief Executive Officer, President and
Principal 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, 2014 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 31, 2015

/s/ Ben Naccarato

Ben Naccarato

Chief Financial Officer and Principal 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.