

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-Q

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 1999

or

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission File No. 1-11596

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(Exact name of registrant as specified in its charter)

Delaware 58-1954497
(State or other jurisdiction (IRS Employer
of incorporation or organization Identification Number)

1940 N.W. 67th Place, Gainesville, FL 32653
(Address of principal executive offices) (Zip Code)

(352) 373-4200
(Registrant's telephone number)

N/A

(Former name, former address and former fiscal year,
if changed since last report)

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

Indicate the number of shares outstanding of each of the
issuer's classes of Common Stock, as of the close of the latest
practical date.

Class	Outstanding at August 13, 1999
Common Stock, \$.001 Par Value	20,362,702
	(excluding 988,000 shares held as treasury stock)

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PERMA-FIX ENVIRONMENTAL SERVICES, INC.

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PERMA-FIX ENVIRONMENTAL SERVICES, INC.
CONSOLIDATED FINANCIAL STATEMENTS

PART I, ITEM 1

The consolidated financial statements included herein have been prepared by the Company, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information and note disclosures normally included in financial statements prepared in accordance with generally accepted

accounting principles have been condensed or omitted pursuant to such rules and regulations, although the Company believes the disclosures which are made are adequate to make the information presented not misleading. Further, the consolidated financial statements reflect, in the opinion of management, all adjustments (which include only normal recurring adjustments) necessary to present fairly the financial position and results of operations as of and for the periods indicated.

It is suggested that these consolidated financial statements be read in conjunction with the consolidated financial statements and the notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 1998.

The results of operations for the six months ended June 30, 1999, are not necessarily indicative of results to be expected for the fiscal year ending December 31, 1999.

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PERMA-FIX ENVIRONMENTAL SERVICES, INC.

CONSOLIDATED BALANCE SHEETS

(Amounts in Thousands, Except for Share Amounts)	June 30, 1999 (Unaudited)	December 31, 1998
<S>	<C>	<C>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 482	\$ 776
Restricted cash equivalents and investments	1,043	111
Accounts receivable, net of allowance for doubtful accounts of \$1,426 and \$313, respectively	11,133	5,950
Inventories	160	145
Prepaid expenses	820	471
Other receivables	153	11
Assets of discontinued operations	498	489
Total current assets	14,289	7,953
Property and equipment:		
Buildings and land	12,180	5,804
Equipment	10,860	8,606
Vehicles	1,459	941
Leasehold improvements	16	16
Office furniture and equipment	988	782
Construction in progress	2,325	1,592
	27,828	17,741
Less accumulated depreciation	(6,546)	(5,836)
Net property and equipment	21,282	11,905

Intangibles and other assets:

Permits, net of accumulated amortization of \$1,248 and \$1,088, respectively	9,883	3,661
Goodwill, net of accumulated amortization of \$852 and \$751, respectively	7,507	4,698
Other assets	602	531
	<hr/>	<hr/>
Total assets	\$ 53,563	\$ 28,748
	=====	=====

</TABLE>

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

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

(Amounts in Thousands, Except for Share Amounts)	June 30, 1999 (Unaudited)	December 31, 1998
<S>	<C>	<C>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 4,661	\$ 2,422
Accrued expenses	7,726	3,369
Revolving loan and term note facility	938	625
Current portion of long-term debt	1,280	302
Current liabilities of discontinued operations	719	863
	<hr/>	<hr/>
Total current liabilities	15,324	7,581
Environmental accruals	4,744	520
Accrued closure costs	948	715
Long-term debt, less current portion	11,299	2,087
Long term liabilities of discontinued operations	1,433	1,892
	<hr/>	<hr/>
Total long-term liabilities	18,424	5,214
Commitments and contingencies (see Note 5)	-	-
Stockholders' equity:		
Preferred Stock, \$.001 par value; 2,000,000 shares authorized, 5,287 and 9,850 shares issued and outstanding, respectively	-	-
Common Stock, \$.001 par value; 50,000,000 shares authorized, 21,246,442 and 13,215,093 shares issued, including 988,000 and 943,000 shares held as treasury stock, respectively	21	13
Redeemable warrants	-	140
Additional paid-in capital	43,096	39,769
Accumulated deficit	(21,440)	(22,157)
	<hr/>	<hr/>
	21,677	17,765

Less Common Stock in treasury at cost; 988,000 and 943,000 shares issued and outstanding	(1,862)	(1,812)
Total stockholders' equity	<u>19,815</u>	<u>15,953</u>
Total liabilities and stockholders' equity	<u>\$ 53,563</u> =====	<u>\$ 28,748</u> =====

</TABLE>

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

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

(Amounts in Thousands, Except for Share Amounts)	Three Months Ended June 30,		Six Months Ended June 30,	
	1999	1998	1999	1998
<S>	<C>	<C>	<C>	<C>
Net revenues	\$ 10,573	\$ 7,678	\$ 18,385	\$ 14,226
Cost of goods sold	<u>6,819</u>	<u>5,238</u>	<u>12,109</u>	<u>10,025</u>
Gross profit	3,754	2,440	6,276	4,201
Selling, general and admini- strative expenses	2,295	1,679	4,133	3,234
Depreciation and amortization	<u>597</u>	<u>527</u>	<u>1,116</u>	<u>1,035</u>
Income (loss) from operations	862	234	1,027	(68)
Other income (expense):				
Interest income	11	9	18	17
Interest expense	(91)	(142)	(118)	(269)
Other	<u>(6)</u>	<u>115</u>	<u>(20)</u>	<u>132</u>
Net income (loss)	<u>776</u>	<u>216</u>	<u>907</u>	<u>(188)</u>
Preferred Stock dividends	(73)	(89)	(190)	(176)
Net income (loss) applicable to Common Stock	<u>\$ 703</u> =====	<u>\$ 127</u> =====	<u>\$ 717</u> =====	<u>\$ (364)</u> =====

Net income (loss) per share

Basic	\$.04	\$.01	\$.05	\$ (.03)
-------	--------	--------	--------	----------

	=====	=====	=====	=====
Fully diluted	\$.04	\$.01	\$.05	\$ (.03)
	=====	=====	=====	=====

Number of shares and Common Stock
equivalents used in computing net
income (loss) per share:

Basic	16,570	11,965	14,483	11,836
	=====	=====	=====	=====
Fully diluted	20,254	18,006	18,175	11,836
	=====	=====	=====	=====

</TABLE>

The accompanying notes are an integral
part of the consolidated financial statements

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

	Six Months Ended June 30,	
(Amounts in Thousands, Except for Share Amounts)	1999	1998
<S>	<C>	<C>
Cash flows from operating activities:		
Net income (loss) from continuing operations	\$ 907	\$ (188)
Adjustments to reconcile net income (loss) to cash provided by operations:		
Depreciation and amortization	1,116	1,035
Provision for bad debt and other reserves	12	19
Loss on sale of plant, property and equipment	3	-
Changes in assets and liabilities, net of effects from business acquisitions:		
Accounts receivable	(1,118)	136
Prepaid expenses, inventories and other assets	(432)	930
Accounts payable and accrued expenses	84	(461)
Net cash provided by continuing operations	572	1,471
Net cash used by discontinued operations	(551)	(417)
Cash flows from investing activities:		
Purchases of property and equipment, net	(895)	(1,027)
Proceeds from sale of plant, property and equipment	14	-
Change in restricted cash, net	82	(16)
Cash used for acquisition consideration	(1,000)	-
Net cash used for acquisition settlements	(1,616)	-
Net cash used by discontinued operations	(40)	-
Net cash used in investing activities	(3,455)	(1,043)
Cash flows from financing activities:		
Borrowings of revolving loan and term note facility	3,279	262

Principal repayments on long-term debt	(134)	(113)
Purchase of treasury stock	(50)	-
Proceeds from issuance of stock	66	55
Net cash used by discontinued operations	(17)	(30)
	<hr/>	<hr/>
Net cash provided by financing activities	3,144	174
Increase (decrease) in cash and cash equivalents	(290)	185
Cash and cash equivalents at beginning of period including discontinued operations of \$0, and \$12, respectively	776	326
	<hr/>	<hr/>
Cash and cash equivalents at end of period, including discontinued operations of \$4, and \$3 respectively	\$ 486 =====	\$ 511 =====

Supplemental disclosure:

Interest and dividends paid	\$ 422	\$ 351
Non cash investing and financing activities:		
Issuance of Common Stock for services	15	218
Issuance of stock for payment of dividends	114	183
Long-term debt incurred for purchase of property and equipment	221	330
Long-term debt incurred for acquisition	4,700	-
Issuance of stock for acquisition	3,000	-

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

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PERMA-FIX ENVIRONMENTAL SERVICES, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(Unaudited, for the six months ended June 30, 1999)

Amounts in Thousand, Except for Share Amounts)	Preferred Stock		Common Stock	
	Shares	Amount	Shares	Amount
<S>	<C>	<C>	<C>	<C>
Balance at December 31, 1998	9,850	\$ -	13,215,093	\$ 13
Net income	-	-	-	-
Issuance of Common Stock for Preferred Stock dividend	-	-	85,802	-
Issuance of Common Stock in exchange for warrants	-	-	200,000	-
Issuance of Common stock for acquisition	-	-	1,500,000	2
Issuance of stock for cash and services	-	-	32,185	-
Conversion of Preferred Stock to Common	(4,563)	-	6,119,135	6

Redemption of Common Stock to Treasury Stock	-	-	-	-
Exercise of warrants	-	-	62,227	-
Option Exercise	-	-	32,000	-
Expiration of redeemable warrants	-	-	-	-
Balance at June 30, 1999	<u>5,287</u> =====	<u>\$ -</u> =====	<u>21,246,442</u> =====	<u>\$ 21</u> =====

	Redeemable Warrants	Additional Paid-In Capital	Accumulated Deficit	Common Stock Held in Treasury
<S>	<C>	<C>	<C>	<C>
	\$ 140	\$ 39,769	\$ (22,157)	\$ (1,812)
	-	-	717	-
	-	114	-	-
	-	-	-	-
	-	2,998	-	-
	-	37	-	-
	-	(6)	-	-
	-	-	-	(50)
	-	11	-	-
	-	33	-	-
	(140)	140	-	-
	<u>\$ -</u> =====	<u>\$ 43,096</u> =====	<u>\$ (21,440)</u> =====	<u>\$ (1,862)</u> =====

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

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PERMA-FIX ENVIRONMENTAL SERVICES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 1999
(Unaudited)

Reference is made herein to the notes to consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 1998.

1. Summary of Significant Accounting Policies

Our accounting policies are as set forth in the notes to consolidated financial statements referred to above.

The Company adopted Financial Accounting Standards Board Statement No. 128, "Earnings per Share" ("SFAS No. 128") effective December 31, 1997. SFAS No. 128 requires presentation of both Basic Earnings per share ("Basic EPS") and Diluted Earnings per share ("Diluted EPS"). Basic EPS is based on the weighted average number of shares of Common Stock outstanding during the year. Diluted EPS also includes the dilutive effect of common stock equivalents or potential common shares. Potential common shares include 1,333,597 in stock options, 6,225,351 in warrants and 3,129,772 shares underlying the Convertible Preferred Stock at the minimum conversion price. Diluted loss per share for the six months ended June 30, 1998, does not include Common Stock equivalents as their effect would be anti-dilutive.

In June, 1998 the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("FAS 133"). FAS 133 requires companies to recognize all derivative contracts as either assets or liabilities in the balance sheet and to measure them at fair value. FAS 133 is effective for periods beginning after June 15, 1999. Historically, we have not entered into derivative contracts. Accordingly, FAS 133 is not expected to affect our financial statements.

2. Discontinued Operations

On January 27, 1997, an explosion and resulting tank fire occurred at the PFM facility, a hazardous waste storage, processing and blending facility, located in Memphis, Tennessee, which resulted in damage to certain hazardous waste storage tanks located on the facility and caused certain limited contamination at the facility. Given the loss of both the existing line of business and its related customer base, we reported the Memphis segment as a discontinued operation, pursuant to Paragraph 13 of APB 30. The fuel blending activities were discontinued on the date of the incident, January 27, 1997.

The accrued environmental and closure costs related to PFM total \$1,943,000 as of June 30, 1999, a decrease of \$558,000 from the December 31, 1998, accrual balance. This reduction was principally a result of the specific costs related to general closure and remedial activities, including groundwater remediation, and agency and

investigative activities (\$222,000), and the general operating losses, including indirect labor, materials and supplies, incurred in conjunction with the above actions (\$336,000). The general operating losses do not reflect management fees charged by the corporation, but does include interest expense of \$144,000 for the quarter ended June 30, 1999, specifically identified to such operations, including that debt specifically incurred under the Company's revolving and term loan facility. The Company's revolving and term loan debt is recorded on a consolidated basis and therefore, the revolving and term loan debt specifically attributable to PFM is not recorded as liabilities of discontinued operations. The remaining environmental and closure liability represents the best estimate of the cost to complete the groundwater remediation at the site of approximately \$892,000, the costs to complete the facility closure activities over the next five (5) to ten (10) year period (including agency and investigative activities, and future operating losses during such closure period) totaling approximately \$826,000, and the potential PRP liability of \$225,000.

3. Proposed Acquisition.

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

On May 27, 1999, the Stock Purchase Agreements and related transaction documents ("Documents") were executed and placed into escrow pending satisfaction of certain conditions precedent to closing. On June 1, 1999, the conditions precedent to closing of the Stock Purchase Agreement were completed, the Stock Purchase Agreements were consummated and the Documents were released from escrow.

Under the terms of the Stock Purchase Agreements, the purchase price paid by the Company in connection with the Chem-Con/Chem-Met acquisition was \$8,700,000, consisting of (i) \$1,000,000 in cash paid at closing, (ii) three promissory notes ("Promissory Notes"), in the aggregate amount of \$4,700,000, to be paid in equal monthly installments of principal and interest of approximately \$90,000 over five years and having an interest rate of 5.5% for the first three years and 7% for the remaining two years, with payment of such Promissory Notes being guaranteed by Chem-Met under a non-recourse guaranty, which non-recourse guaranty is secured by

certain real estate owned by Chem-Met, and (iii) \$3,000,000 paid in the form of 1,500,000 shares of Perma-Fix Common Stock, par value \$.001 per share ("Common Stock"), paid to the ALS Trust at closing; however, if the ALS Trust owns any of such shares of Common Stock at the end of eighteen (18) months from the June 1, 1999, closing date (the "Guarantee Period") and the market value (as determined below) per share of Common Stock at the end of the Guarantee Period is less than \$2.00 per share, the Company shall pay the ALS Trust, within ten (10) business days after the end of the Guarantee Period, an amount equal to the sum determined by multiplying the number of shares of Common Stock issued to the ALS Trust under the Stock Purchase Agreements that are still owned by the ALS Trust at the end of the Guarantee Period by \$2.00 less the market value (as determined below) of such shares of Common Stock owned by the ALS Trust at the end of the Guarantee Period, with such amount, if any, payable by the Company to the ALS Trust, at the Company's option, in cash or in Common Stock or a combination thereof.

Notwithstanding anything to the contrary, the aggregate number of shares of Common Stock issued or issuable under the Stock Purchase Agreements for any reason whatsoever shall not exceed eighteen percent (18%) of the number of issued and outstanding shares of Common Stock on the date immediately preceding the June 1, 1999, closing date. The market value of each share of Common Stock at the end of the Guarantee Period shall be determined based on the average of the closing sale price per share of Common Stock as reported on the NASDAQ SmallCap Market ("NASDAQ") for the five (5) consecutive trading days ending with the trading day immediately prior to the end of the Guarantee Period. Under the Company's loan agreement, the Company may only pay any such amount due the ALS Trust at the end of the Guarantee Period in Common Stock unless the lender agrees that the Company may satisfy all or part of such in cash.

The cash portion of the purchase price for Chem-Con and Chem-Met was obtained through borrowing from the Company's primary lender, Congress Financial Corporation (Florida) ("Congress"), as described below. The Company anticipates that the Promissory Notes will be paid with working capital generated from operations and/or borrowing under the Company's revolving credit facility with

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Congress. In connection with the closing, using funds borrowed from Congress, the Company paid an aggregate of approximately \$3,843,000 to satisfy certain obligations of Chem-Met.

The acquisition was accounted for using the purchase method effective June 1, 1999, and accordingly, the assets and liabilities as of this date are included in the accompanying consolidated financial statements. As of June 1, 1999, the Company has performed a preliminary purchase price allocation based upon information available as of this date. Accordingly, the purchase price has been preliminarily allocated to the net assets acquired and net liabilities assumed based on their estimated fair values. Included in this preliminary allocation were acquired assets of approximately \$13,996,000 and assumed liabilities of approximately \$14,535,000, against total consideration of \$8,700,000. This preliminary allocation has resulted in goodwill and intangible permits of \$2,911,000 and \$6,328,000, respectively. The goodwill and intangible permits are being amortized on a straight line basis over 20 years. The preliminary purchase price allocation is subject to completing the valuation of certain assets, which have not been finalized, and may or may not result in a change to the estimated fair market values assigned. The results of the acquired

businesses have been included in the consolidated financial statements since the date of acquisition. The audited combined net revenues of Chem-Con for the fiscal year ended September 30, 1998, were, in the aggregate, approximately \$21.8 million.

We accrued for the estimated closure costs, determined pursuant to RCRA guidelines, for the three regulated facilities acquired. This accrual, recorded at \$218,000, represents the potential future liability to close and remediate such facilities, should such a cessation of operations ever occur. We also recognized long-term environmental accruals totaling \$4,319,000. This amount represents management's best estimate of the long-term costs to remove contaminated soil and to undergo groundwater remediation activities at two of the Chem-Con acquired facilities, Valdosta, Georgia and Detroit, Michigan. Both facilities have pursued remedial activities for the last five years with additional studies forthcoming and potential groundwater restoration could extend for a period of ten years. No insurance or third party recovery was taken into account in determining our cost estimates or reserve, nor do our cost estimates or reserve reflect any discount for present value purposes.

At the date of acquisition, we also initiated the payoff of a Small Business Administration (SBA) loan, in the full amount of \$971,000. Prior to the acquisition, as required by the SBA loan agreement the previous owners had placed approximately \$331,000 of restricted cash into an SBA trust account. Pursuant to the acquisition and terms of the SBA loan agreement, we placed the remaining payoff amount (\$640,000) into the SBA trust account, thereby fully funding the loan repayment. The SBA loan repayment process requires various filings and notifications which take approximately sixty days, at which time funds are withdrawn from the trust account. As of June 30, 1999, such funds were reflected as restricted cash and the corresponding liability in accrued expenses. The restricted cash was withdrawn and SBA loan repaid on August 1, 1999.

The principal businesses of Chem-Con and Chem-Met are the collection, treatment, and recycling of industrial and hazardous waste, including waste oils, water and miscellaneous solid waste. Chemical Florida operates a permitted treatment and storage facility and transfer station that also serves as the base for a private trucking fleet; Chemical Georgia treats hazardous waste and recycles solvents and Chem-Met treats and stabilizes inorganic wastes and maintains a government services division that is focused principally on the Defense Revitalization and Marketing Services market. The Company intends to continue using the Chem-Con and Chem-Met facilities for substantially the same purposes as such were being used prior to the acquisition by the Company.

The following unaudited pro forma information presents the consolidated statement of operations of the company as if the acquisition had taken place on January 1, 1998. Chem-Con and Chem-Met were on a September 30 fiscal year-end and therefore, their results for the year ended September 30, 1998, have been

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consolidated with our results for the year ended December 31, 1998. Correspondingly, Chem-Con and Chem-Met's results for the six months ended March 31, 1999 and 1998, have been consolidated with our results for the six months ended June 30, 1999 (excluding the Chem-Con results for June 1999 included therein) and 1998.

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(Amounts in thousands, except per share amounts)	Year Ended December 31, 1998	Six Months Ended June 30,	
		1999	1998
<S>	<C>	<C>	<C>
Net revenues	\$ 52,352	\$27,036	\$24,981
Net income (loss) applicable to Common Stock	(1,046)	(5)	75
Net income (loss) per share	(.08)	-	.01
Weighted average number of common shares outstanding	13,528	15,983	13,336

</TABLE>

These unaudited pro forma results have been prepared for comparative purposes only and include certain adjustments, such as additional amortization expense as a result of goodwill and intangible permits and increased interest expense on acquisition related debt. They do not purport to be indicative of the results of operations that actually would have resulted on the date indicated, or which may result in the future.

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4. Long-Term Debt

Long-term debt consists of the following at June 30, 1999, and December 31, 1998 (in thousands):

	June 30, 1999 (Unaudited)	December 31, 1998
<S>	<C>	<C>
Revolving loan facility dated January 15, 1998, as amended May 27, 1999, collateralized by eligible accounts receivable subject to monthly borrowing base calculation, variable interest paid monthly at prime rate plus 1 3/4.	\$ 3,642	\$ 97
Term loan agreement dated January 15, 1998, as amended May 27, 1999, payable in monthly principal installments of \$78, balance due in June 2002, variable interest paid monthly at prime rate plus 1 3/4.	3,672	1,927
Three promissory notes dated May 27, 1999, payable in equal monthly installments of principal and interest of \$90 over 60 months, due June 2004, interest at 5.5% for first three years and 7% for remaining two years.	4,700	-
Various capital lease and promissory note obligations, payable 1999 to 2004, interest at rates ranging from 7.5% to 13.0%.	1,503	990
	<u>13,517</u>	<u>3,014</u>
Less current portion of revolving loan and term note facility	938	625
Less current portion of long-term debt	1,280	302

\$11,299

\$ 2,087

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On January 15, 1998, the Company, as parent and guarantor, and all direct and indirect subsidiaries of the Company, as co-borrowers and cross-guarantors, entered into a Loan and Security Agreement ("Agreement") with Congress Financial Corporation (Florida) as lender ("Congress"). The Agreement initially provided for a term loan in the amount of \$2,500,000, which required principal repayments based on a four-year level principal amortization over a term of 36 months, with monthly principal payments of \$52,000. Payments commenced on February 1, 1998, with a final balloon payment in the amount of approximately \$573,000 due on January 14, 2001. The Agreement also provided for a revolving loan facility in the amount of \$4,500,000. At any point in time the aggregate available borrowings under the facility are subject to the maximum credit availability as determined through a monthly borrowing base calculation, as updated for certain information on a weekly basis, equal to 80% of eligible accounts receivable

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accounts of the Company as defined in the Agreement. The termination date on the revolving loan facility was also the third anniversary of the closing date. The Company incurred approximately \$230,000 in financing fees relative to the solicitation and closing of this original loan agreement (principally commitment, legal and closing fees) which are being amortized over the term of the Agreement.

Pursuant to the Agreement, the term loan and revolving loan both bear interest at a floating rate equal to the prime rate plus 1 3/4%. The loans also contain certain closing, management and unused line fees payable throughout the term. The loans are subject to a 3.0% prepayment fee in the first year, 1.5% in the second and 1.0% in the third year of the original Agreement dated January 15, 1998.

In connection with the acquisition of Chemical Conservation Corporation, Chemical Conservation of Georgia and Chem-Met Services, Inc. ("Chem-Con") on May 27, 1999, Congress, the Company, and the Company's subsidiaries, including Chem-Con entered into an Amendment and Joinder to Loan and Security Agreement (the "Loan Amendment") dated May 27, 1999, pursuant to which the Loan and Security Agreement ("Original Loan Agreement") among Congress, the Company and the Company's subsidiaries was amended to provide, among other things, (i) the credit line being increased from \$7,000,000 to \$11,000,000, with the revolving line of credit portion being determined as the maximum credit of \$11,000,000, less the term loan balance, with the exact amount that can be borrowed under the revolving line of credit not to exceed eighty percent (80%) of the Net Amount of Eligible Accounts (as defined in the Original Loan Agreement) less certain reserves; (ii) the term loan portion of the Original Loan Agreement being increased from its current balance of approximately \$1,600,000 to \$3,750,000 and it shall be subject to a four year amortization schedule payable over three years at an interest rate of 1.75% over prime; (iii) the term of the Original Loan Agreement, as amended, will be extended for three years from the date of the acquisition, subject to earlier termination pursuant to the terms of the Original Loan Agreement, as amended; (iv) Chemical Florida, Chemical Georgia and Chem-Met being added as co-borrowers under the Original Loan Agreement, as amended; (v) the interest rate on the revolving line of credit will continue at 1.75% over prime, with a rate adjustment to 1.5% if

1999 net income applicable to Common Stock of the Company is equal to or greater than \$1,500,000 for either fiscal year ended December 31, 1999 or 2000; (vi) the monthly service fee shall increase from \$1,700 to \$2,000; (vii) government receivables will be limited to 20% of eligible accounts receivable; and (viii) certain obligations of Chem-Met shall be paid at closing of the acquisition of Chem-Con and Chem-Met. The Loan Amendment became effective on June 1, 1999, when the Stock Purchase Agreements were consummated. Payments under the term loan commenced on June 1, 1999, with monthly principal payments of approximately \$78,000 and a final balloon payment in the amount of \$938,000 on June 1, 2002. The Company incurred approximately \$40,000 in additional financing fees relating to the closing of this amendment, which is being amortized over the remaining term of the agreement.

Under the terms of the Original Loan Agreement, as amended, the Company has agreed to maintain an Adjusted Net Worth (as defined in the Original Loan Agreement) of not less than \$3,000,000 throughout the term of the Original Loan Agreement, as amended. The Company has agreed that it will not pay any dividends on any shares of capital stock of the Company, except that dividends may be paid on the Company's shares of Preferred Stock outstanding as of the date of the Loan Amendment (collectively, "Excepted Preferred Stock") under the terms of the applicable Excepted Preferred Stock and if and when declared by the Board of Directors of the Company pursuant to Delaware General Corporation Law. As security for the payment and performance of the Original Loan Agreement, as amended, the Company and its subsidiaries (including Chem-Con and Chem-Met) have granted a first security interest in all accounts receivable, inventory, general intangibles, equipment and certain of their other assets, as well as the mortgage on two facilities owned by subsidiaries of the Company, and except for certain real property owned by Chem-Met, for which a first security interest is held by the TPS Trust and the ALS Trust as security for Chem-Met's non-recourse guaranty of the payment of the Promissory Notes. All other terms and conditions of the original loan remain unchanged.

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As of June 30, 1999, borrowings under the revolving loan agreement were approximately \$3,642,000, an increase of \$3,545,000 over the December 31, 1998, balance of \$97,000. This increase represents \$2,799,000 funded pursuant to the Chem-Con acquisition on June 1, 1999, and \$746,000 for general working capital needs which is typical during increased revenue periods. The balance under the Congress term loan at June 30, 1999, was \$3,672,000, an increase of \$1,745,000 over the December 31, 1998, balance of \$1,927,000. This increase represents \$2,083,000 funded pursuant to the Chem-Con acquisition on June 1, 1999, partially offset by scheduled repayments of \$338,000. We funded through the revolving and term loan a total of \$4,882,000 pursuant to the Chem-Con acquisition excluding legal, professional and other closing fees, of which \$2,651,000 represented the repayment of certain debt obligations, \$1,192,000 represented payment of certain settlement obligations and \$1,000,000 of the cash consideration as paid to the former owners of Chem-Con. As of June 30, 1999, the Company's borrowing availability under the Congress credit facility, based on its then outstanding eligible accounts receivable, was approximately \$3,062,000.

Pursuant to the terms of the Stock Purchase Agreements in connection with the acquisition of Chem-Con, a portion of the

consideration was paid in the form of three promissory notes, in the aggregate amount of \$4,700,000 payable to the former owners of the Company. The promissory notes are paid in equal monthly installments of principal and interest of approximately \$90,000 over five years with the first installment due on July 1, 1999, and having an interest rate of 5.5% for the first three years and 7% for the remaining two years. The current portion of the three promissory notes total \$846,000 at June 30, 1999. Payment of such promissory notes are guaranteed by Chem-Met under a non-recourse guaranty, which non-recourse guaranty is secured by certain real estate owned by Chem-Met. See Note 3 for further discussion of the above referenced acquisition.

As further discussed in Note 2, the long-term debt, other than revolving and term loan debt, associated with the discontinued PFM operation is excluded from the above and is recorded in the Liabilities of Discontinued Operations total. The PFM debt obligations total \$11,000, all of which is current.

5. 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

In the normal course of conducting its business, we are involved in various litigation. There has been no material changes in legal proceedings from those disclosed previously in the Company's Form 10-K for year ended December 31, 1998. We are not a party to any litigation or governmental proceeding which our management believes could result in any judgments or fines against us that would have a material adverse affect on the Company's financial position, liquidity or results of operations.

Permits

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

Accrued Closure Costs and Environmental Liabilities

We maintain closure cost funds to insure the proper decommissioning of our RCRA facilities upon cessation of operations. Additionally, in the course of owning and operating

on-site treatment, storage and disposal facilities, we are subject to corrective action proceedings to restore soil and/or groundwater to its original state. These activities are governed by federal, state and local regulations and we maintain the appropriate accruals for restoration. We have recorded accrued liabilities for estimated closure costs and identified environmental remediation costs. See Note 3 for discussion of the accrued closure costs and long-term environmental accruals recorded in conjunction with the Chem-Con acquisition.

Insurance

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

6. Business Segment Information

Pursuant to FAS 131, we define an operating segment as:

- * A business activity from which we may earn revenue and incur expenses;
- * Whose operating results are regularly reviewed by our chief operating division 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 have thirteen operating segments which are defined as each separate facility or location that we operate. We clearly view each facility as a separate segment and make decisions based on the activity and profitability of that particular location. These segments however, exclude the Corporate headquarters which does not generate revenue and Perma-Fix of Memphis, Inc. which is reported elsewhere as a discontinued operation. See Note 2 regarding discontinued operations.

Pursuant to FAS 131 we have aggregated two or more operating segments into two reportable segments to ease in the presentation and understanding of our business. We used the following criteria to aggregate our segments:

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

Our reportable segments are defined as follows:

The Waste Management Services segment, which provides on-and-off site treatment, storage, processing and disposal of hazardous and non-hazardous industrial and commercial, mixed waste, and wastewater through our seven TSD facilities; Perma-Fix Treatment Services, Inc., Perma-Fix of Dayton, Inc., Perma-Fix of Ft. Lauderdale, Inc., Perma-Fix of Florida, Inc, Chem-Met Services, Inc., Chem-Met Government Services, Chemical Conservation Corporation and Chem-Con of Georgia, Inc. We provide through Perma-Fix Inc. and Perma-Fix of New Mexico, Inc. on-site waste treatment services to convert certain types of characteristic hazardous wastes into non-hazardous waste. We also provide through

Reclamation Systems, Inc. and Industrial Waste Management, Inc. the supply and management of non-hazardous and hazardous waste to be used by cement plants as a substitute fuel or raw material source and the resell of by-product materials generated at cement plants for environmental applications.

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The Consulting Engineering Services segment provides environmental engineering and regulatory compliance services through Schreiber, Yonley & Associates, Inc. and Mintech, Inc. These engineering groups provide oversight management of environmental restoration projects, air and soil sampling and compliance and training activities, as well as, engineering support as needed by our other segment.

<TABLE>

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The table below shows certain financial information by business segment for quarter ended June 30, 1999 and quarter ended June 30, 1998 and excludes the results of operations of the discontinued operations.

Segment Reporting Quarter Ended 06/30/99

	Waste Services	Engineering	Segment Total
<S>	<C>	<C>	<C>
Revenue from external customers	\$9,640	\$993	\$10,573
Intercompany revenues	1,190	98	1,288
Interest income	11	-	11
Interest expense	92	23	115
Depreciation and amortization	573	20	593
Segment profit (loss)	1,170	19	1,189
Segment assets(1)	49,735	2,119	51,854
Expenditures for segment assets	564	2	566

	Corp (2)	Memphis (3)	Consolidated Total
<S>	<C>	<C>	<C>
	\$ -	\$ -	\$ 10,573
	-	-	1,288
	-	-	11
	(24)	-	91
	4	-	597
	(486)	-	703
	1,211	498	53,563
	88	-	654

Segment Reporting Quarter Ended 06/30/98

	Waste Services	Engineering	Segment Total
<S>	<C>	<C>	<C>
Revenue from external customers	\$ 6,550	\$1,128	\$ 7,678
Intercompany revenues	75	109	184
Interest income	9	-	9
Interest expense	125	8	133
Depreciation and amortization	504	19	523
Segment profit (loss)	419	108	527

Segment assets(1)	24,104	2,410	26,514
Expenditures for segment assets	402	3	405

	Corp (2)	Memphis (3)	Consolidated Total
<S>	<C>	<C>	<C>
	\$ -	\$ -	\$ 7,678
	-	-	184
	-	-	9
	9	-	142
	4	-	527
	(400)	-	127
	3,961	459	30,934
	-	-	405

<FN>

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

(2) Amounts reflect the activity for corporate headquarters.

(3) Amounts reflect the activity for Perma-Fix of Memphis, Inc., which is a discontinued operation, not included in the segment information (See Note 2).

</FN>

</TABLE>

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The table below shows certain financial information by business segment for the six months ended June 30, 1999 and the six months ended June 30, 1998 and excludes the results of operations of the discontinued operations.

Segment Reporting Six Months Ended 06/30/99

	Waste Services	Engineering	Segment Total
<S>	<C>	<C>	<C>
Revenue from external customers	\$16,241	\$2,144	\$18,385
Intercompany revenues	1,283	191	1,474
Interest income	16	-	16
Interest expense	133	43	176
Depreciation and amortization	1,067	40	1,107
Segment profit (loss)	1,440	96	1,536
Segment assets(1)	49,735	2,119	51,854
Expenditures for segment assets	1,009	15	1,024

	Corp (2)	Memphis (3)	Consolidated Total
<S>	<C>	<C>	<C>
	\$ -	\$ -	\$ 18,385
	-	-	1,474
	2	-	18
	(58)	-	118
	9	-	1,116
	(819)	-	717

1,211	498	53,563
93	-	1,117

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Segment Reporting Six Months Ended 06/30/98

	Waste Services	Engineering	Segment Total
<S>	<C>	<C>	<C>
Revenue from external customers	\$12,047	\$2,179	\$14,226
Intercompany revenues	158	235	393
Interest income	17	-	17
Interest expense	225	27	252
Depreciation and amortization	986	41	1,027
Segment profit (loss)	292	88	380
Segment assets(1)	24,104	2,410	26,514
Expenditures for segment assets	1,353	4	1,357

	Corp (2)	Memphis (3)	Consolidated Total
<S>	<C>	<C>	<C>
	\$ -	\$ -	\$ 14,226
	-	-	393
	-	-	17
	17	-	269
	8	-	1,035
	(744)	-	(364)
	3,961	459	30,934
	-	-	1,357

<FN>

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

(2) Amounts reflect the activity for corporate headquarters.

(3) Amounts reflect the activity for Perma-Fix of Memphis, Inc., which is a discontinued operation, not included in the segment information (See Note 2).

</FN>

</TABLE>

7. Stock

On April 20, 1999, the Company and RBB Bank Aktiengesellschaft ("RBB Bank") entered into an agreement to restructure the Company's Convertible Preferred Stock held by RBB Bank, which totaled approximately \$9.5 million. Under the restructuring the Company and RBB Bank agreed to the following:

1. RBB Bank converted, pursuant to existing terms of the Convertible Preferred Stock, \$4.6 million of the Convertible Preferred Stock into approximately 6.1 million shares of the Company's Common Stock, which was completed in May 1999.
2. The Company was granted the right to purchase at a stated value (\$1,000 per share) \$750,000 of the Convertible Preferred Stock, which was subsequently purchased on July 15, 1999.
3. The terms of the balance of the Convertible Preferred Stock

(approximately \$4.2 million) was changed, as follows:

- a. Not subject to conversion for 12 months from the date of the restructuring ("Lock-Up Period");
 - b. For one (1) year from the end of the Lock-Up Period, any conversion of the Convertible Preferred Stock would be subject to a minimum conversion price of \$1.50 per share of Common Stock; and
 - c. The Company will be granted the option to redeem the shares of the Convertible Preferred Stock at 110% of the stated value (\$1,000 per share) for the first twelve months from the date of restructuring and RBB Bank may not convert such shares redeemed during such twelve month period, and thereafter the Company has the option to redeem the Convertible Preferred Stock at 120% of the stated value (\$1,000 per share) of the Convertible Preferred Stock and upon notice of such redemption RBB Bank will have the right to exercise its conversion rights pursuant to the then current terms of the Convertible Preferred Stock.
4. The Company is required to register with the Commission the Common Stock issuable upon conversion of the Convertible Preferred Stock by January 31, 2000. The Company agreed that if a registration statement covering such Common Stock is not declared effective by the Commission by January 31, 2000, the Company agrees to pay to RBB Bank a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of such Convertible Preferred Stock then outstanding times (b) \$1,000, payable in cash. The Company agreed that for each month thereafter which terminates without such registration statement being declared effective by the Commission before the end of the last day thereof, the Company shall pay to RBB Bank a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of Convertible Preferred Stock then outstanding times (b) \$1,000, payable in cash.
5. The remaining terms of the Convertible Preferred Stock will remain unchanged.

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The restructuring was accomplished through two exchange agreements ("First Exchange Agreement" and "Second Exchange Agreement") which are further described as follows:

First Exchange Agreement

On July 15, 1999, the Company and RBB Bank entered into (i) an Exchange Agreement, dated July 15, 1999 ("Series 3 Exchange Agreement"), pursuant to which the 1,769 outstanding shares of Series 3 Preferred, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 11 Class K Convertible Preferred Stock par value \$.001 per share ("Series 11 Preferred"); (ii) an Exchange Agreement, dated July 15, 1999 ("Series 8 Exchange Agreement"), pursuant to which the outstanding shares of Series 8 Preferred, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 12 Class L Convertible Preferred Stock, par value \$.001 per share ("Series 12 Preferred"); and (iii) an Exchange Agreement, dated July 15, 1999 ("Series 10 Exchange Agreement"), pursuant to which the outstanding shares of Series 10 Preferred Stock, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 13 Class M Convertible Preferred Stock, par value \$.001 per share ("Series 13 Preferred").

The Series 8 Preferred was redeemable by the Company (a) within four (4) years from June 9, 1997 at \$1,300 per share when the average of the closing bid price of the Common Stock for ten (10) consecutive days is in excess of \$4.00 per share as quoted on the NASDAQ and (b) at \$1,000 per share after four years from June 9, 1997. The Company had to provide thirty (30) days notice to the Series 8 Preferred holder prior to any date stipulated by the Company for redemption and at such time, the Series 8 Preferred holder has the option of converting the shares which are to be redeemed.

Under the terms of the Series 12 Preferred, the Company is permitted to redeem up to 300 shares of Series 12 Preferred for \$1,000 per share, or an aggregate of \$300,000, provided that any such redemption must occur within 120 days of issuance of the Series 12 Preferred. On July 15, 1999, the Company redeemed 300 shares of Series 12 Preferred leaving 616 shares of Series 12 Preferred issued and outstanding.

The Series 10 was not redeemable by the Company. Under the terms of the Series 13 Preferred, the Company is permitted to redeem up to 450 shares of Series 13 Preferred for \$1,000 per share, or an aggregate of \$450,000, provided that any such redemption must occur within 120 days of issuance of the Series 13 Preferred. On July 15, 1999, the Company redeemed 450 shares of Series 13 Preferred leaving 1,802 shares of Series 13 Preferred issued and outstanding.

In addition to the different redemption terms for the Series 12 Preferred and the Series 13 Preferred described above, the Series 11 Preferred, Series 12 Preferred and Series 13 Preferred (collectively, the "Exchange Preferred") each contain provisions, described hereafter, which are different from those provisions in the Series 3 Preferred, Series 8 Preferred and Series 10 Preferred, as applicable.

- * RBB Bank may make no conversions of the Exchange Preferred for 12 months from July 15, 1999.
- * Each of the Exchange Preferred has a minimum conversion price of \$1.50 per share for a 24 month period from July 15, 1999.
- * For 12 months from July 15, 1999, the Company may redeem at any time and from time to time any of the Exchange Preferred held by RBB Bank at 110% of its "stated value" of \$1,000 per share. Thereafter, the Company may redeem at any time and from time to time any of such Exchange Preferred at 120% of its "stated value" of \$1,000 per share. After 12 months from July 15, 1999, upon any notice of redemption, RBB shall have only 5 business days to exercise its conversion rights regarding the redeemed

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shares. For 12 months from July 15, 1999, RBB Bank cannot elect to convert shares of Exchange Preferred even if the Company redeems such shares of Exchange Preferred.

Second Exchange Agreements

On August 3, 1999, the Company and RBB Bank entered into (i) an Exchange Agreement, dated August 3, 1999 ("Series 11 Exchange Agreement"), pursuant to which the 1,769 outstanding shares of

Series 11 Preferred, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 14 Class N Convertible Preferred Stock par value \$.001 per share ("Series 14 Preferred"); (ii) an Exchange Agreement, dated August 3, 1999 ("Series 12 Exchange Agreement"), pursuant to which the 616 outstanding shares of Series 12 Preferred, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 15 Class O Convertible Preferred Stock, par value \$.001 per share ("Series 15 Preferred"); and (iii) an Exchange Agreement, dated August 3, 1999 ("Series 13 Exchange Agreement"), pursuant to which the 1,802 outstanding shares of Series 13 Preferred Stock, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 16 Class P Convertible Preferred Stock, par value \$.001 per share ("Series 16 Preferred").

The exchanges of the Series 14 Preferred, Series 15 Preferred, and Series 16 Preferred (collectively, the "Second Exchange Preferred") to RBB Bank were made in private placements under Section 4(2) and/or Section 3(a)(9) of the Securities Act. The terms of each of the Second Exchange Preferred are substantially identical to the particular Exchange Preferred for which each was exchanged except that the July 15 dates as described above in connection with the Exchange Preferred were changed to April 20. Therefore, (i) RBB Bank may make no conversions of the Second Exchange Preferred for 12 months from April 20, 1999; (ii) each of the Second Exchange Preferred has a minimum conversion price of \$1.50 per share for a 24 month period from April 20, 1999; and (iii) for 12 months from April 20, 1999, the Company may redeem at any time and from time to time any of the Second Exchange Preferred held by RBB Bank at 110% of its "stated value" of \$1,000 per share. Thereafter, the Company may redeem at any time and from time to time any of such Second Exchange Preferred at 120% of its "stated value" of \$1,000 per share. After 12 months from April 20, 1999, upon any notice of redemption, RBB shall have only 5 business days to exercise its conversion rights regarding the redeemed shares. During the 12 months after April 20, 1999, RBB Bank cannot elect to convert shares of Second Exchange Preferred even if the Company redeems such shares of Second Exchange Preferred.

During May 1999, the Company issued to RBB Bank Aktiengesellschaft ("RBB Bank"), located in Graz, Austria, 6,119,135 shares in the aggregate of the Company's Common Stock relating to conversion of certain series of the Company's Preferred Stock in accordance with the terms of such Preferred Stock, summarized as follows:

(i) During May 1999, the Company issued to RBB Bank Aktiengesellschaft ("RBB Bank"), 3,090,563 shares of Common Stock to reflect RBB Bank's conversion on April 20, 1999, of 2,231 shares of the Company's Series 3 Class C Convertible Preferred Stock ("Series 3 Preferred") pursuant to the terms of the Series 3 Preferred. The issuance of the Common Stock was made in a private placement pursuant to an exemption from registration under Section 4(2) and/or Section 3(a)9 of the Securities Act. As of the conclusion of the described conversion, there were 1,769 shares of Series 3 Preferred remaining outstanding, all of which were held by RBB Bank.

(ii) During May 1999, the Company issued to RBB Bank 2,057,143 shares of Common Stock to reflect RBB Bank's conversion on April 20, 1999, of 1,584 shares of the Company's Series 8 Class H Convertible Preferred Stock ("Series 8 Preferred") pursuant to the

terms of the Series 8 Preferred. The issuance of the Common Stock was made in a private placement pursuant to an exemption from registration under Section 4(2) and/or Section 3(a)9 of the Securities Act. As of the conclusion of the described conversion, there were 916 shares of Series 8 Preferred remaining outstanding, all of which were held by RBB Bank.

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(iii) During May 1999, the Company issued to RBB Bank 971,429 shares of Common Stock to reflect RBB Bank's conversion on April 20, 1999, of 748 shares of the Company's Series 10 Class J Convertible Preferred Stock ("Series 10 Preferred") pursuant to the terms of the Series 10 Preferred. The issuance of the Common Stock was made in a private placement pursuant to an exemption from registration under Section 4(2) and/or Section 3(a)9 of the Securities Act. As of the conclusion of the described conversion, there were 2,252 shares of Series 10 Preferred remaining outstanding, all of which were held by RBB Bank.

During May 1999, the Company issued certain shareholders of Chem-Con, 1,500,000 shares of the Company's Common Stock relating to the acquisition of Chem-Con. See Note 3 for further discussion of the above referenced acquisition.

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PERMA-FIX ENVIRONMENTAL SERVICES, INC.
MANAGEMENT'S DISCUSSION AND ANALYSIS OF
FINANCIAL CONDITION AND RESULTS OF OPERATIONS
PART I, ITEM 2

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 statements 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, (i) ability to fund capital expenditures by a combination of lease financing and/or internally generated funds, (ii) the ability to integrate the Chem-Con companies in a cost effective and efficient manner, (iii) anticipated financial performance, (iv) ability to comply with the Company's general working capital requirements, (v) ability to retain or receive

certain permits or patents, (vi) ability to be able to continue to borrow under the Company's revolving line of credit, (vii) ability to generate sufficient cash flow from operations to fund all costs of operations and remediation of certain formerly leased property in Dayton, Ohio, and the Company's facilities in Memphis, Tennessee, Valdosta, Georgia, and Detroit, Michigan, (viii) ability to remediate certain contaminated sites for projected amounts, (ix) the government's acceptance of the Company's offer regarding settlement of claims involving the WR Drum Site, and (x) all other statements which are not statements of historical fact. 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, (i) general economic conditions, (ii) material reduction in revenues, (iii) inability to collect in a timely manner a material amount of receivables, (iv) increased competitive pressures, (v) the ability to maintain and obtain required permits and approvals to conduct operations, (vi) the ability to develop new and existing technologies in the conduct of operations, (vii) overcapacity in the environmental industry, (viii) discovery of additional contamination or expanded contamination at a certain Dayton, Ohio, property formerly leased by the Company or the Company's facilities at Memphis, Tennessee, Valdosta, Georgia and Detroit, Michigan, which would result in a material increase in remediation expenditures, (ix) determination that PFM is the source of chlorinated compounds at the Allen Well Field, (x) changes in federal, state and local laws and regulations, especially environmental regulations, or in interpretation of such, (xi) potential increases in equipment, maintenance, operating or labor costs, (xii) management retention and development, (xiii) the requirement to use internally generated funds for purposes not presently anticipated, (xiv) inability to operate profitably, or if unable to become profitable, the inability to secure additional liquidity in the form of additional equity or debt. The Company undertakes no obligations to update publicly any forward-looking statement, whether as a result of new information, future events or otherwise.

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<TABLE>

<CAPTION>

Results of Operations

The table below should be used when reviewing management's discussion and analysis for the six months ended June 30, 1999 and 1998:

	Three Months Ended June 30			
	1999	%	1998	%
Consolidated				
<S>	<C>	<C>	<C>	<C>
Net Revenues	\$10,573	100.0	\$7,678	100.0
Cost of Goods Sold	6,819	64.5	5,238	68.2
Gross Profit	3,754	35.5	2,440	31.8
Selling, General & Administrative	2,295	21.7	1,679	21.9

Depreciation/Amortization	597	5.6	527	6.9
	<hr/>	<hr/>	<hr/>	<hr/>
Income (Loss) from Operations	\$ 862	8.2	\$ 234	3.0
	=====	=====	=====	=====
Interest Expense	\$ (91)	(0.9)	\$ (142)	(1.8)
Preferred Stock Dividends	(73)	(0.7)	(89)	(1.1)

Six Months Ended
June 30

	1999	%	1998	%
	<hr/>	<hr/>	<hr/>	<hr/>
<S>	<C>	<C>	<C>	<C>
	\$18,385	100.0	\$14,226	100.0
	12,109	65.9	10,025	70.4
	<hr/>	<hr/>	<hr/>	<hr/>
	6,276	34.1	4,201	29.6
	<hr/>	<hr/>	<hr/>	<hr/>
	4,133	22.5	3,234	22.7
	1,116	6.1	1,035	7.3
	<hr/>	<hr/>	<hr/>	<hr/>
	\$ 1,027	5.5	\$ (68)	(.4)
	=====	=====	=====	=====
	<hr/>	<hr/>	<hr/>	<hr/>
	\$ (118)	(0.6)	\$ (269)	(1.9)
	(190)	(1.0)	(176)	(1.2)

</TABLE>

Summary - Three and Six Months Ended June 30, 1999 and 1998

We provide services through two reportable operating segments. The Waste Management Services segment is engaged in on-and off-site treatment, storage, disposal and processing of a wide variety of by-products and industrial and hazardous wastes. This segment competes for materials and services with numerous regional and national competitors to provide comprehensive and cost-effective Waste Management Services to a wide variety of customers in the Midwest, Southeast and Southwest regions of the country. We operate and maintain facilities and businesses in the waste by-product brokerage, on-site treatment and stabilization, and off-site blending, treatment and disposal industries. Effective June 1, 1999, we acquired three additional facilities, with similar lines of business as those currently operating within this waste management services segment. The facilities acquired were Chemical Conservation Corporation, Chemical Conservation of Georgia and Chem-Met Services, Inc. (Chem-Con) which are further described in Note 3 to Notes to Consolidated Financial Statements. Our Consulting Engineering segment provides a wide variety of environmental related consulting and engineering services to industry and government. Through our wholly-owned subsidiaries in Tulsa, Oklahoma and St. Louis, Missouri, the Consulting Engineering segment provides oversight management of environmental restoration projects, air and soil sampling, compliance reporting, surface and subsurface water treatment design for removal of pollutants, and various compliance and training activities.

Consolidated net revenues increased to \$10,573,000 from \$7,678,000 for the quarter ended June 30, 1999, as compared to the same quarter in 1998. This increase of \$2,895,000 or 37.7% is

attributable to the Waste Management Services segment which experienced an increase in revenues of \$3,090,000, including approximately \$2,345,000 of additional revenue resulting from the Chem-Con acquisition on June 1, 1999. This waste management services increase for the quarter was partially offset by a reduction in revenue of \$195,000 from the consulting engineering segment. Consolidated net revenues increased to \$18,385,000 from \$14,226,000 for the six month period ended June 30, 1999. This increase of \$4,159,000 or 29.2% is again attributable to the waste management services segment which experienced an increase in revenues of \$4,194,000, including the above reference Chem-Con revenue for the month of June 1999. We recognized revenue growth across all of the operating facilities, which were partially offset by reductions in certain of the offsite/service related operations.

Cost of goods sold for the Company increased \$1,581,000 or 30.2% for the quarter ended June 30, 1999, as compared to the quarter ended June 30, 1998. This consolidated increase in cost of

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goods sold reflects principally the increased operating, disposal and transportation costs, corresponding to the increased revenue of 37.7% as discussed above. The resulting gross profit for the quarter ended June 30, 1999, increased \$1,314,000 to \$3,754,000, which as a percentage of revenue is 35.5%, reflecting an increase over the corresponding quarter in 1998 percentage of revenue of 31.8%. Cost of goods sold also increased \$2,084,000 or 20.8% for the six month period ended June 30, 1999, as compared to the six month period ended June 30, 1998. As with the quarter, this increase is a direct result of the increased revenue of 29.2%, as discussed above. The resulting gross profit for the six months of 1999 increased \$2,075,000 to \$6,276,000, which as a percentage of revenue is 34.1%, also reflecting an increase over the corresponding six month period of 1998 percentage of revenue of 29.6%. This increase in gross margins for the quarter and six month period ended June 30, 1999, occurred within both the waste management and consulting services segments, and reflects the improved pricing structures we have been able to achieve, along with the continued focus on cost reductions.

Selling, general and administrative expenses increased \$616,000 or 36.7% for the quarter ended June 30, 1999, as compared to the quarter ended June 30, 1998. However, as a percentage of revenue, selling, general and administrative expense decreased to 21.7% for the quarter ended June 30, 1999, compared to 21.9% for the same period in 1998. Selling, general and administrative expenses also increased for the six month period of 1999, as compared to 1998, by \$899,000 or 27.8%. However, as a percentage of revenue, selling, general and administrative expense decreased to 22.5% for the six month period ended June 30, 1999, compared to 22.7% for the same period of 1998. The increase in the total selling, general, and administrative expenses is partially due to the addition of Chem-Con which contributed \$339,000 of this increase, in addition to the increased expenses associated with the our additional sales and marketing efforts as we continue to refocus the business segments into new environmental markets, such as nuclear and mixed waste, and the additional administrative overhead associated with our research and development efforts. We have continued to expense in the current period all research and development costs associated with the development of various technologies which we aggressively pursued during 1999.

Depreciation and amortization expense for the six month period

ended June 30, 1999, reflects an increase of \$81,000 as compared to the same period of 1998. This increase is attributable to the acquisition of Chem-Con, effective June 1, 1999, for which depreciation of \$44,000 and amortization expense of \$38,000 were recorded during June of 1999. This acquisition also accounted for the change in the quarter ended June 30, 1999.

Interest expense decreased \$51,000 from the quarter ended June 30, 1999, as compared to the corresponding period of 1998, excluding discontinued operations. Interest expense also decreased by \$151,000 for the six month period ending June 30, 1999, as compared to the corresponding period of 1998, excluding discontinued operations. The decrease in interest expense for both the quarter and six month periods of 1999 are a direct result of the reduced borrowing levels on the Congress Financial Corporation revolving loan and term note. During the last half of 1998, the revolving loan had been paid down to a minimal balance. However, in conjunction with the acquisition of Chem-Con, certain debt was consolidated into the Congress Financial Corporation revolving loan and term debt and additional borrowing were made to fund certain settlements and repayments in conjunction with the acquisition, which resulted in increased borrowing levels effective June 1999. See Notes 3 and 4 to Notes to Consolidated Financial Statements for additional disclosure on the Chem-Con acquisition and Congress Financial Corporation debt. Interest expense for discontinued operations was \$144,000 for the six month period ended June 30, 1999, specifically identified to such operations, including that debt specifically incurred under the Company's revolving note and term loan facility. See Note 2 to Notes to Consolidated Financial Statements regarding discontinued operations.

Preferred Stock dividends increased \$14,000 for the six month period ended June 30, 1999, as compared to the corresponding period of 1998. This increase is due to the issuance and subsequent dividends of the Series 10 Class J Convertible Preferred Stock which were issued in June of 1998. However, for the quarter ended June 30, 1999, Preferred Stock dividends decreased by \$16,000 to

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\$73,000, as compared to \$89,000 for the quarter ended June 30, 1998. This decrease in the second quarter of 1999 is a result of the conversion of \$4,563,000 of the Convertible Preferred Stock into Common Stock on April 20, 1999, of the total of \$9,850,000 outstanding prior to such conversion.

Discontinued Operations

On January 27, 1997, an explosion and resulting tank fire occurred at the Perma-Fix of Memphis, Inc. ("PFM") facility, a hazardous waste storage, processing and blending facility, which resulted in damage to certain hazardous waste storage tanks located on the facility and caused certain limited contamination at the facility. As a result of the significant disruption and the cost to rebuild and operate this segment, the Company made a strategic decision, in February 1998, to discontinue its fuel blending operations at PFM. The fuel blending operations represented the principal line of business for PFM prior to this event, which included a separate class of customers, and its discontinuance has required PFM to attempt to develop new markets and customers, through the utilization of the facility as a storage facility under its RCRA permit and as a transfer facility.

Liquidity and Capital Resources of the Company

At June 30, 1999, the Company had cash and cash equivalents of \$486,000, including \$4,000 from discontinued operations. This cash

and cash equivalents total reflects a decrease of \$290,000 from December 31, 1998, as a result of net cash provided by continuing operations of \$572,000, offset by cash used by discontinued operation of \$551,000, cash used in investing activities of \$3,455,000 (principally purchases of equipment, net totaling \$895,000 and the net cash used to fund the acquisition totaling \$2,616,000) and cash provided by financing activities of \$3,144,000 (principally additional borrowing under the revolving loan and term note facility pursuant to the acquisition). Accounts receivable, net of allowances for doubtful accounts, totaled \$11,133,000, an increase of \$5,183,000 over the December 31, 1998, balance of \$5,950,000. This increase in accounts receivable represents the addition of the Chem-Con receivables as acquired effective June 1, 1999, in the amount of \$4,146,000 and the increase of \$1,037,000 resulting from the increased revenues during the second quarter of 1999.

On January 15, 1998, the Company, as parent and guarantor, and all direct and indirect subsidiaries of the Company, as co-borrowers and cross-guarantors, entered into a Loan and Security Agreement ("Agreement") with Congress Financial Corporation (Florida) as lender ("Congress"). The Agreement provides for a term loan in the amount of \$2,500,000, which requires principal repayments based on a four-year level principal amortization over a term of 36 months, with monthly principal payments of \$52,000. Payments commenced on February 1, 1998, with a final balloon payment in the amount of approximately \$573,000 due on January 14, 2001. The Agreement also provides for a revolving loan facility in the amount of \$4,500,000. At any point in time the aggregate available borrowings under the facility are subject to the maximum credit availability as determined through a monthly borrowing base calculation, as updated for certain information on a weekly basis, equal to 80% of eligible accounts receivable accounts of the Company as defined in the Agreement. The termination date on the revolving loan facility is also the third anniversary of the closing date. The Company incurred approximately \$230,000 in financing fees relative to the solicitation and closing of this loan agreement (principally commitment, legal and closing fees) which are being amortized over the term of the Agreement.

Pursuant to the Agreement, the term loan and revolving loan both bear interest at a floating rate equal to the prime rate plus 1 3/4%. The loans also contain certain closing, management and unused line fees payable throughout the term. The loans are subject to a 3.0% prepayment fee in the first year, 1.5% in the second and 1.0% in the third year of the Agreement.

In connection with the acquisition of Chemical Conservation Corporation, Chemical Conservation of Georgia and Chem-Met Services, Inc. ("Chem-Con") on May 27, 1999, Congress, the Company, and the Company's subsidiaries, including Chem-Con entered into an Amendment and Joinder to Loan and Security Agreement (the "Loan Amendment") dated May 27, 1999, pursuant to which the Loan and Security Agreement ("Original Loan Agreement") among Congress, the Company and the Company's subsidiaries was amended to provide, among other things, (i) the credit line being increased from

\$7,000,000 to \$11,000,000, with the revolving line of credit portion being determined as the maximum credit of \$11,000,000, less the term loan balance, with the exact amount that can be borrowed under the revolving line of credit not to exceed eighty percent (80%) of the Net Amount of Eligible Accounts (as defined in the

Original Loan Agreement) less certain reserves; (ii) the term loan portion of the Original Loan Agreement being increased from its current balance of approximately \$1,600,000 to \$3,750,000 and it shall be subject to a four year amortization schedule payable over three years at an interest rate of 1.75% over prime; (iii) the term of the Original Loan Agreement, as amended, will be extended for three years from the date of the acquisition, subject to earlier termination pursuant to the terms of the Original Loan Agreement, as amended; (iv) Chemical Florida, Chemical Georgia and Chem-Met being added as co-borrowers under the Original Loan Agreement, as amended; (v) the interest rate on the revolving line of credit will continue at 1.75% over prime, with a rate adjustment to 1.5% if 1999 net income applicable to Common Stock of the Company is equal to or greater than \$1,500,000 for either fiscal year ended December 31, 1999 or 2000; (vi) the monthly service fee shall increase from \$1,700 to \$2,000; (vii) government receivables will be limited to 20% of eligible accounts receivable; and (viii) certain obligations of Chem-Met shall be paid at closing of the acquisition of Chem-Con and Chem-Met. The Loan Amendment became effective on June 1, 1999, when the Stock Purchase Agreements were consummated. Payments under the term loan commenced on June 1, 1999, with monthly principal payments of approximately \$78,000 and a final balloon payment in the amount of \$938,000 on June 1, 2002. The Company incurred approximately \$40,000 in additional financing fees relating to the closing of this amendment, which is being amortized over the remaining term of the agreement.

As of June 30, 1999, borrowings under the revolving loan agreement were approximately \$3,642,000, an increase of \$3,545,000 over the December 31, 1998, balance of \$97,000. This increase represents \$2,799,000 funded pursuant to the Chem-Con acquisition on June 1, 1999, and \$746,000 for general working capital needs which is typical during increased revenue periods. The balance under the Congress term loan at June 30, 1999, was \$3,672,000, an increase of \$1,745,000 over the December 31, 1998, balance of \$1,927,000. This increase represents \$2,083,000 funded pursuant to the Chem-Con acquisition on June 1, 1999, partially offset by scheduled repayments of \$338,000. We funded through the revolving and term loan a total of \$4,882,000 pursuant to the Chem-Con acquisition excluding legal, professional and other closing fees, of which \$2,651,000 represented the repayment of certain debt obligations, \$1,192,000 represented payment of certain settlement obligations and \$1,000,000 of the cash consideration as paid to the former owners of Chem-Con. As of June 30, 1999, the Company's borrowing availability under the Congress credit facility, based on its then outstanding eligible accounts receivable, was approximately \$3,062,000.

Pursuant to the terms of the Stock Purchase Agreements in connection with the acquisition of Chem-Con, a portion of the consideration was paid in the form of three promissory notes, in the aggregate amount of \$4,700,000 payable to the former owners of the Company. The promissory notes are paid in equal monthly installments of principal and interest of approximately \$90,000 over five years with the first installment due on July 1, 1999. The three promissory notes have an interest rate of 5.5% for the first three years and 7% for the remaining two years. Payment of such promissory notes are guaranteed by Chem-Met under a non-recourse guaranty, which non-recourse guaranty is secured by certain real estate owned by Chem-Met. See Note 3 for further discussion of the above referenced acquisition.

At June 30, 1999, we had \$13,517,000 in aggregate principal amounts of outstanding debt, related to continuing operations, as

compared to \$3,014,000 at December 31, 1998. This increase in outstanding debt of \$10,503,000 reflects the net borrowings on the Congress Financial Corporation revolving loan and term note facility of \$5,290,000 principally related to the Chem-Con acquisition as discussed above, \$4,700,000 in the form of three new promissory notes in payment of a portion of the consideration for the Chem-Con acquisition as discussed above, approximately \$425,000 in various capital lease obligations assumed in conjunction with the acquisition of Chem-Con and \$221,000 of debt related to new capital equipment at several of our existing facilities. As of June 30, 1999, we had \$11,000 in aggregate principal amounts of outstanding debt related to PFM discontinued operations, all of which is classified as current.

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Our net purchases of new capital equipment for continuing operations for the three and six month period ended June 30, 1999, totaled approximately \$654,000 and \$1,117,000, respectively, of which \$89,000 and \$132,000, respectively, was financed. We have budgeted capital expenditures of \$2,500,000 for 1999 related to the original Perma-Fix locations, which includes completion of certain current projects, as well as other identified capital and permit compliance purchases. We have not completed as of yet a capital asset budget for the Chem-Con facilities for the remainder of 1999. However, we do not foresee significant capital asset requirements in the short term. We anticipate funding the remainder of these capital expenditures by a combination of lease financing with lenders other than the equipment financing arrangement discussed above, and/or internally generated funds.

Our working capital position at June 30, 1999, was a deficit of \$1,035,000, as compared to capital of \$372,000 at December 31, 1998, which reflects a decrease in this position of \$1,407,000 during this first six months of 1999. This reduced working capital position is principally a result of the impact of the Chem-Con acquisition. The consideration was paid in the form of cash, notes and debt, with the cash portion being \$1,000,000, a portion of which came from current cash and a portion funded through the Congress long term revolving loan. The Congress term loan was also increased by \$2,083,000 pursuant to this acquisition, which resulted in an increase of \$313,000 in the current portion of the term loan debt. Additionally, as of June 30, 1999, the acquired Chem-Con companies had a deficit working capital position of approximately \$360,000. See Note 3 to Notes to Consolidated Financial Statements for further discussion on this acquisition.

On April 20, 1999, the Company and RBB Bank Aktiengesellschaft ("RBB Bank") entered into an agreement to restructure the Company's Convertible Preferred Stock held by RBB Bank, which totaled approximately \$9.5 million. The restructuring was accomplished through two exchange agreements ("First Exchange Agreement" and "Second Exchange Agreement") which are further described in Note 7 to Notes to Consolidated Financial Statements and in "Part II-Item 5. Other Information". Under the restructuring the Company and RBB Bank :

1. RBB Bank converted, pursuant to existing terms of the Convertible Preferred Stock, \$4.6 million of the Convertible Preferred Stock into approximately 6.1 million shares of the Company's Common Stock, which was completed in May 1999.
2. The Company was granted the right to purchase at a stated value (\$1,000 per share) \$750,000 of the Convertible Preferred Stock, which was subsequently purchased on July 15, 1999.

3. The terms of the balance of the Convertible Preferred Stock (approximately \$4.2 million) was changed, as follows:
 - a. Not subject to conversion for 12 months from the date of the restructuring ("Lock-Up Period");
 - b. For one (1) year from the end of the Lock-Up Period, any conversion of the Convertible Preferred Stock would be subject to a minimum conversion price of \$1.50 per share of Common Stock; and
 - c. The Company will be granted the option to redeem the shares of the Convertible preferred stock at 110% of the stated value (\$1,000 per share) for the first twelve months from the date of restructuring and RBB Bank may not convert such shares redeemed during such twelve month period, and thereafter the Company has the option to redeem the Convertible Preferred Stock at 120% of the stated value (\$1,000 per share) of the Convertible preferred stock and upon notice of such redemption RBB Bank will have the right to exercise its conversion rights pursuant to the then current terms of the Convertible Preferred Stock.
4. The Company is required to register with the Commission the Common Stock issuable upon conversion of the Convertible Preferred Stock by January 31, 2000. The Company agreed that if a registration statement covering such Common Stock is not declared effective by the Commission by January 31, 2000, the Company agrees to pay to RBB Bank a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares

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of such Convertible Preferred Stock then outstanding times (b) \$1,000, payable in cash. The Company agreed that for each month thereafter which terminates without such registration statement being declared effective by the Commission before the end of the last day thereof, the Company shall pay to RBB Bank a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of Convertible Preferred Stock then outstanding times (b) \$1,000, payable in cash.

5. The remaining terms of the Convertible Preferred Stock will remain unchanged.

The Company financed the redemption of \$750,000 of Convertible Preferred Stock through borrowings under its revolving credit facility. See "Part II-Item 5. Other Information".

As discussed above, on June 1, 1999, the Company purchased all of the outstanding stock of Chem-Con and paid \$8.7 million, as follows: (i) \$1 million in cash, (ii) five (5) year promissory notes totaling the original principal amount of \$4.7 million, bearing an annual rate of interest of 5.5% for the first three years and 7% for the last two years, with principal and accrued interest payable in monthly installments of approximately \$90,000 each, and (iii) \$3 million payable in the form of 1.5 million shares of the Company's Common Stock based on each share having an agreed value of \$2.00. If the average of the closing price of the Company's Common Stock as quoted on the NASDAQ for the five (5) trading days immediately preceding the date eighteen (18) months after June 1, 1999 ("Valuation Date") is less than \$2.00 per share, the Company is to pay in cash or Common Stock or a combination thereof, at the Company's option, the difference between \$3 million and the value of the 1.5 million shares of Common Stock based on the five (5) trading day average as quoted on the NASDAQ immediately preceding the Valuation Date. Under the Company's loan

agreement, the Company may pay such amount, if any, only in Common Stock unless the lender agrees that the Company may satisfy such in whole or in part in cash. However, the Company is not to issue in connection with the acquisition of Chem-Con more than 18% of the outstanding shares of Common Stock at the closing of the acquisition of Chem-Con.

The Company funded the cash portion of the purchase price for Chem-Con through borrowings under its revolving credit facility as discussed above and will fund the payment of the promissary notes issued as a part of the purchase price by borrowings under its revolving credit facility and/or working capital generated from operations.

In addition, the Company arranged with its lenders to include within its revolving credit facility Chem-Con and, as a result, increased its credit facility from approximately \$7 million to approximately \$11 million, and used the expanded credit facility (a) to pay certain claims against Chem-Con totaling approximately \$1,192,000 million and (b) to replace approximately \$2,651,000 million of Chem-Con existing credit facilities.

Environmental Contingencies

The Company is 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, the Company is subject to rigorous federal, state and local regulations. These regulations mandate strict compliance and therefore are a cost and concern to the Company. The Company makes every reasonable attempt to maintain complete compliance with these regulations; however, even with a diligent commitment, the Company, as with many of its competitors, may be required to pay fines for violations or investigate and potentially remediate its waste management facilities.

The Company routinely uses third party disposal companies, who ultimately destroy or secure landfill residual materials generated at its facilities or at a client's site. The Company, compared to its competitors, disposes of significantly less hazardous or industrial by-products from its operations due to rendering material non-hazardous, discharging treated wastewaters to publicly-owned treatment works and/or processing wastes into saleable products. In the past, numerous third party disposal sites have improperly managed wastes and consequently require remedial action; consequently, any party utilizing these sites may be liable for some or all of the remedial costs. Despite the

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Company's aggressive compliance and auditing procedures for disposal of wastes, the Company could, in the future, be notified that it is a PRP at a remedial action site, which could have a material adverse effect on the Company.

During January 1998, PFM was notified by the EPA that it believed that PFM was a PRP regarding the remediation of a site owned and operated by W.R. Drum, Inc. ("WR Drum") in Memphis, Tennessee (the "Drum Site"), as further discussed in Item 3 "Legal Proceedings" in the Company's Annual Report on Form 10-K for the year ended December 31, 1998. During the third quarter of 1998, the government agreed to PFM's offer to pay \$225,000 (\$150,000 payable at closing and the balance payable over a twelve month period) to settle any potential liability regarding this Drum Site. During January 1999, the Company executed a "Partial Consent Decree"

pursuant to this settlement, which settlement is subject to approval of the court. It is anticipated that the settlement will be approved and the initial payment of \$150,000 will be made during the third quarter of 1999. However, there are no assurances that the settlement will be approved by the court.

In addition to budgeted capital expenditures of \$2,500,000 for 1999 at the TSD facilities, which are necessary to maintain permit compliance and improve operations, as discussed above in this Management's Discussion and Analysis, we have also budgeted for 1999 an additional \$437,000 in environmental expenditures to comply with federal, state and local regulations in connection with remediation of certain contaminants at two locations. The two locations where these expenditures will be made are a parcel of property leased by a predecessor to PFD in Dayton, Ohio (EPS), a former RCRA storage facility as operated by the former owners of PFD, and PFM's facility in Memphis, Tennessee. We have estimated the expenditures for 1999 to be approximately \$222,000 at the EPS site and \$215,000 at the PFM location of which \$39,000 and \$88,000 were spent during the first six months of 1999, respectively. Additional funds will be required for the next five to ten years to properly investigate and remediate these sites. We expect to fund these expenses to remediate these two sites from funds generated internally, however, no assurances can be made that we will be able to do so.

We also recognized long-term environmental accruals totaling \$4,319,000 related to the Chem-Con facilities acquired effective June 1, 1999, of which we anticipate spending approximately \$432,000 over the next twelve months. This amount represents management's best estimate of the long-term costs to remove contaminated soil and to undergo groundwater remediation activities at two of the Chem-Con acquired facilities, Valdosta, Georgia and Detroit, Michigan. Both facilities have pursued remedial activities for the last five years with additional studies forthcoming and potential groundwater restoration could extend for a period of ten years. No insurance or third party recovery was taken into account in determining our cost estimates or reserve, nor do our cost estimates or reserve reflect any discount for present value purposes.

Recent Accounting Pronouncements

In June, 1998 the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("FAS 133"). FAS 133 requires companies to recognize all derivative contracts as either assets or liabilities in the balance sheet and to measure them at fair value. FAS 133 is effective for periods beginning after June 15, 1999. Historically, we have not entered into derivative contracts. Accordingly, FAS 133 is not expected to affect our financial statements.

There are no additional material legal proceedings pending against the Company and/or its subsidiaries not previously reported by the Company in Item 3 of its Form 10-K for the year ended December 31, 1998, which Item 3 is incorporated herein by reference.

Item 2. Changes in Securities and Use of Proceeds

(c) During the quarter ended June 30, 1999, the Company sold or entered into an agreement to sell, equity securities that were not registered under the Securities Act of 1933, as amended (the "Securities Act"), other than as previously reported, as such term is defined under Rule 12b-2 of the Exchange Act of 1934, as amended (the "Exchange Act"), as follows:

(i) During May 1999, the Company issued to RBB Bank Aktiengesellschaft ("RBB Bank"), 3,090,563 shares of Common Stock to reflect RBB Bank's conversion on April 20, 1999, of 2,231 shares of the Company's Series 3 Class C Convertible Preferred Stock ("Series 3 Preferred") pursuant to the terms of the Series 3 Preferred. The issuance of the Common Stock was made in a private placement pursuant to an exemption from registration under Section 4(2) and/or Section 3(a)9 of the Securities Act. As of the conclusion of the described conversion, there were 1,769 shares of Series 3 Preferred remaining outstanding, all of which were held by RBB Bank.

(ii) During May 1999, the Company issued to RBB Bank 2,057,143 shares of Common Stock to reflect RBB Bank's conversion on April 20, 1999, of 1,584 shares of the Company's Series 8 Class H Convertible Preferred Stock ("Series 8 Preferred") pursuant to the terms of the Series 8 Preferred. The issuance of the Common Stock was made in a private placement pursuant to an exemption from registration under Section 4(2) and/or Section 3(a)9 of the Securities Act. As of the conclusion of the described conversion, there were 916 shares of Series 8 Preferred remaining outstanding, all of which were held by RBB Bank.

(iii) During May 1999, the Company issued to RBB Bank 971,429 shares of Common Stock to reflect RBB Bank's conversion on April 20, 1999, of 748 shares of the Company's Series 10 Class J Convertible Preferred Stock ("Series 10 Preferred") pursuant to the terms of the Series 10 Preferred. The issuance of the Common Stock was made in a private placement pursuant to an exemption from registration under Section 4(2) and/or Section 3(a)9 of the Securities Act. As of the conclusion of the described conversion, there were 2,252 shares of Series 10 Preferred remaining outstanding, all of which were held by RBB Bank.

(iv) On or about April 29, 1999, Jeffery M. Canouse, James P. Canouse, and John C. Canouse (collectively, the "Canouses") purchased 14,887, 20,020, and 12,320 shares of Common Stock, respectively, or an aggregate of 47,227 shares of Common Stock. These shares were purchased on a cashless basis pursuant to the terms, as amended, of a certain warrant ("Carey Warrant") by the Canouses tendering certain portions of the "in the money" Carey Warrant as consideration for the exercise of other portions of the Carey Warrant. The Carey Warrant had been originally issued to J.P. Carey Enterprises, Inc., a provider of investment banking services to the Company ("Carey"), allowing the purchase of 195,000 shares of Common Stock for \$0.73 per share and which was partially assigned on January 5, 1998, to the Canouses, shareholders of

Carey, allowing each of them to purchase up to 39,000 shares of Common Stock thereunder. The issuance to Carey was described in a Form D which was filed with the Securities and Exchange Commission ("SEC") under Rule 506 on August 3, 1996. The shares of Common Stock were issued to Canouses in a private placement under Section

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4(2) of the Act as the Canouses had access to the same kind of information which would be included in a registration statement and is a highly sophisticated investor. The shares issued to Canouses are restricted shares which were issued with a restrictive legend, however, such shares are covered by an effective registration statement on Form S-3, No. 333-14513 ("1996 Registration Statement"), filed with the SEC, effective November 13, 1996, registering for re-offer or resale from time to time certain shares of Common Stock including the 195,000 shares of Common Stock, to be issued from time to time upon exercise of the Carey Warrant. On January 29, 1998, a Third Supplement ("Third Supplement") to the Prospectus dated November 13, 1996, contained within the 1996 Registration Statement ("Prospectus") was filed with the SEC, which Third Supplement described, among other things, the assignment of a portion of the Carey Warrant to Canouse. The Third Supplement also served to supplement and amend the Selling Security Holders table in the Prospectus by, among other things, (i) adding Canouse as a Selling Shareholder; and (ii) adjusting the offering information applicable to Carey, to account for the assignment by Carey of the Carey Warrant. On June 4, 1999, a Fourth Supplement ("Fourth Supplement") to the Prospectus was filed with the SEC, which Fourth Supplement described, among other things, the amendment of the Carey Warrant to allow the holders thereof to exercise such warrants on a cashless basis. The Fourth Supplement also served to supplement and amend the Selling Security Holders table in the Prospectus by, among other things, adjusting the offering information applicable to the Canouses as Selling Shareholders to account for their exercises of the Carey Warrant.

(v) On or about May 4, 1999, pursuant to the terms of a certain Consulting Agreement ("Consulting Agreement") entered into effective as of January 1, 1998, the Company issued 4,000 shares of Common Stock in payment of accrued fees of \$3,000 to Alfred C. Warrington IV, an outside, independent consultant to the Company, as consideration for certain consulting services rendered to the Company by Warrington from January through March 1999. The issuance of Common Stock pursuant to the Consulting Agreement was a private placement under Section 4(2) of the Act and/or Rule 506 of Regulation D as promulgated under the Act. The Consulting Agreement provides that Warrington will be paid \$1,000 per month of service to the Company, payable, at the option of Warrington (i) all in cash, (ii) sixty-five percent in shares of Common Stock and thirty-five percent in cash, or (iii) all in Common Stock. If Warrington elects to receive part or all of his compensation in Common Stock, such will be valued at seventy-five percent of its "Fair Market Value" (as defined in the Consulting Agreement). Warrington elected to receive all of his accrued compensation from January 1999 through the end of March 1999 in Common Stock. Warrington represented and warranted in the Consulting Agreement, inter alia, as follows: (i) the Common Stock is being acquired for Warrington's own account, and not on behalf of any other persons; (ii) Warrington is acquiring the Common Stock to hold for investment, and not with a view to the resale or distribution of all or any part of the Common Stock; (iii) Warrington will not sell or otherwise transfer the Common Stock in the absence of an effective registration statement under the Act, or an opinion of counsel satisfactory to the Company, that the transfer can be made

without violating the registration provisions of the Act and the rules and regulations promulgated thereunder; (iv) Warrington is an "accredited investor" as defined in Rule 501 of Regulation D as promulgated under the Act; (v) Warrington has such knowledge, sophistication and experience in financial and business matters that he is capable of evaluating the merits and risks of the acquisition of the Common Stock; (vi) Warrington fully understands the nature, scope and duration of the limitations on transfer of the Common Stock as contained in the Consulting Agreement, (vii) Warrington understands that a restrictive legend as to transferability will be placed upon the certificates for any of the shares of Common Stock received by Warrington under the Consulting Agreement and that stop transfer instructions will be given to the Company's transfer agent regarding such certificates.

Item 5. Other Information

First Exchange Agreements

On July 15, 1999, the Company and RBB Bank entered into (i) an Exchange Agreement, dated July 15, 1999 ("Series 3 Exchange Agreement"), pursuant to which the 1,769 outstanding shares of

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Series 3 Preferred, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 11 Class K Convertible Preferred Stock par value \$.001 per share ("Series 11 Preferred"); (ii) an Exchange Agreement, dated July 15, 1999 ("Series 8 Exchange Agreement"), pursuant to which the outstanding shares of Series 8 Preferred, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 12 Class L Convertible Preferred Stock, par value \$.001 per share ("Series 12 Preferred"); and (iii) an Exchange Agreement, dated July 15, 1999 ("Series 10 Exchange Agreement"), pursuant to which the outstanding shares of Series 10 Preferred Stock, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 13 Class M Convertible Preferred Stock, par value \$.001 per share ("Series 13 Preferred").

The sales of the Series 11 Preferred, Series 12 Preferred, and Series 13 Preferred to RBB Bank were made in private placements under Section 4(2) and/or Section 3(a)(9) of the Securities Act. The terms of the newly issued securities are substantially the same as the series for which each was exchanged with the exception of certain differences as described hereafter.

Redemption Terms of Series 8 Preferred and Series 12 Preferred

The Series 8 Preferred was redeemable by the Company (a) within four (4) years from June 9, 1997 at \$1,300 per share when the average of the closing bid price of the Common Stock for ten (10) consecutive days is in excess of \$4.00 per share as quoted on the NASDAQ and (b) at \$1,000 per share after four years from June 9, 1997. The Company had to provide thirty (30) days notice to the Series 8 Preferred holder prior to any date stipulated by the Company for redemption and at such time, the Series 8 Preferred holder has the option of converting the shares which are to be redeemed.

Under the terms of the Series 12 Preferred, the Company is permitted to redeem up to 300 shares of Series 12 Preferred for

\$1,000 per share, or an aggregate of \$300,000, provided that any such redemption must occur within 120 days of issuance of the Series 12 Preferred. On July 15, 1999, the Company redeemed 300 shares of Series 12 Preferred leaving 616 shares of Series 12 Preferred issued and outstanding.

Redemption Terms of Series 10 Preferred and Series 13 Preferred

The Series 10 was not redeemable by the Company. Under the terms of the Series 13 Preferred, the Company is permitted to redeem up to 450 shares of Series 13 Preferred for \$1,000 per share, or an aggregate of \$450,000, provided that any such redemption must occur within 120 days of issuance of the Series 13 Preferred. On July 15, 1999, the Company redeemed 450 shares of Series 13 Preferred leaving 1,802 shares of Series 13 Preferred issued and outstanding.

Other Differences

In addition to the different redemption terms for the Series 12 Preferred and the Series 13 Preferred described above, the Series 11 Preferred, Series 12 Preferred and Series 13 Preferred (collectively, the "Exchange Preferred") each contain provisions, described hereafter, which are different from those provisions in the Series 3 Preferred, Series 8 Preferred and Series 10 Preferred, as applicable.

- * RBB Bank may make no conversions of the Exchange Preferred for 12 months from July 15, 1999.
- * Each of the Exchange Preferred has a minimum conversion price of \$1.50 per share for a 24 month period from July 15, 1999.
- * For 12 months from July 15, 1999, the Company may redeem at any time and from time to time any of the Exchange Preferred held by RBB Bank at 110% of its "stated value"

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of \$1,000 per share. Thereafter, the Company may redeem at any time and from time to time any of such Exchange Preferred at 120% of its "stated value" of \$1,000 per share. After 12 months from July 15, 1999, upon any notice of redemption, RBB shall have only 5 business days to exercise its conversion rights regarding the redeemed shares. For 12 months from July 15, 1999, RBB Bank cannot elect to convert shares of Exchange Preferred even if the Company redeems such shares of Exchange Preferred.

Second Exchange Agreements

On August 3, 1999, the Company and RBB Bank entered into (i) an Exchange Agreement, dated August 3, 1999 ("Series 11 Exchange Agreement"), pursuant to which the 1,769 outstanding shares of Series 11 Preferred, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 14 Class N Convertible Preferred Stock par value \$.001 per share ("Series 14 Preferred"); (ii) an Exchange Agreement, dated August 3, 1999 ("Series 12 Exchange Agreement"), pursuant to which the 616 outstanding shares of Series 12 Preferred, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 15 Class O Convertible Preferred Stock, par value \$.001 per share ("Series 15 Preferred"); and (iii) an Exchange Agreement, dated August 3, 1999 ("Series 13 Exchange

Agreement"), pursuant to which the 1,802 outstanding shares of Series 13 Preferred Stock, all of which were held by RBB Bank, were exchanged for an equal number of shares of newly created Series 16 Class P Convertible Preferred Stock, par value \$.001 per share ("Series 16 Preferred").

The sales of the Series 14 Preferred, Series 15 Preferred, and Series 16 Preferred (collectively, the "Second Exchange Preferred") to RBB Bank were made in private placements under Section 4(2) and/or Section 3(a)(9) of the Securities Act. The terms of each of the Second Exchange Preferred are substantially identical to the particular Exchange Preferred for which each was exchanged except that the July 15 dates as described above in connection with the Exchange Preferred were changed to April 20 and certain registration rights were granted regarding the shares of Common Stock issuable under the Second Exchange Preferred. Therefore, (i) RBB Bank may make no conversions of the Second Exchange Preferred for 12 months from April 20, 1999; (ii) each of the Second Exchange Preferred has a minimum conversion price of \$1.50 per share for a 24 month period from April 20, 1999; (iii) for 12 months from April 20, 1999, the Company may redeem at any time and from time to time any of the Second Exchange Preferred held by RBB Bank at 110% of its "stated value" of \$1,000 per share; and (iv) if the Company does not register with the Commission the Common Stock issuable upon conversion of the Convertible Preferred Stock by January 31, 2000, the Company agrees to pay to RBB Bank a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of such Convertible Preferred Stock then outstanding times (b) \$1,000, payable in cash. The Company further agreed that for each month thereafter which terminates without such registration statement being declared effective by the Commission before the end of the last day thereof, the Company shall pay to RBB Bank a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of Convertible Preferred Stock then outstanding times (b) \$1,000, payable in cash. After 12 months from April 20, 1999, the Company may redeem at any time and from time to time any of such Second Exchange Preferred at 120% of its "stated value" of \$1,000 per and, upon any notice of redemption, RBB shall have only 5 business days to exercise its conversion rights regarding the redeemed shares. During the 12 months after April 20, 1999, RBB Bank cannot elect to convert shares of Second Exchange Preferred even if the Company redeems such shares of Second Exchange Preferred.

As of the date of this report, RBB Bank holds 6,891,427 shares of Common Stock of, or approximately 33.8% of the outstanding shares of Common Stock.

Stockholder Proposals

The Company's 1998 Annual Meeting of Stockholders took place on May 20, 1998, however, the Company anticipates that its 1999 Annual Meeting of Stockholders will occur on November 4, 1999. Pursuant to Rule 14a-5(f) as promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), stockholder proposals submitted to the Company pursuant to Rule 14a-8 under the Exchange Act, for inclusion in the Company's proxy materials for its 1999 Annual Meeting of Stockholders must be received by the Company a reasonable time before the Company begins to print and mail its proxy materials. Any stockholder proposal submitted with respect to the Company's 1999 Annual Meeting of Stockholders which proposal

is received by the Company after such time will be considered untimely for purposes of Rule 14a-4 and 14a-5 under the Exchange Act and the Company may vote against such proposal using its discretionary voting authority as authorized by proxy.

Item 6. Exhibits and Reports on Form 8-K

(a) Exhibits

- 3(i) Restated Certificate of Incorporation, as amended, and all Certificates of Designations.
- 4.1 Exchange Agreement exchanging 1,769 shares of Series 3 Class C Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 1,769 shares of Series 11 Class K Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated July 15, 1999, between the Company and RBB Bank Aktiengesellschaft.
- 4.2 Exchange Agreement exchanging 916 shares of Series 8 Class H Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 916 shares of Series 12 Class L Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated July 15, 1999, between the Company and RBB Bank Aktiengesellschaft.
- 4.3 Exchange Agreement exchanging 2,252 shares of Series 10 Class J Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 2,252 shares of Series 13 Class Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated July 15, 1999, between the Company and RBB Bank Aktiengesellschaft.
- 4.4 Certificate of Designations of Series 11 Class K Convertible Preferred Stock, dated July 15, 1999, as contained in Exhibit 3(i) herein.
- 4.5 Specimen copy of Certificate relating to the Series 11 Class K Convertible Preferred Stock.
- 4.6 Certificate of Designations of Series 12 Class L Convertible Preferred Stock, dated July 15, 1999, as contained in Exhibit 3(i) herein.
- 4.7 Specimen copy of Certificate relating to the Series 12 Class L Convertible Preferred Stock.
- 4.8 Certificate of Designations of Series 13 Class M Convertible Preferred Stock, dated July 15, 1999, as contained in Exhibit 3(i) herein.
- 4.9 Specimen copy of Certificate relating to the Series 13 Class M Convertible Preferred Stock.

- 4.10 Exchange Agreement exchanging 1,769 shares of Series 11 Class K Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 1,769

shares of Series 14 Class N Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated August 3, 1999, between the Company and RBB Bank Aktiengesellschaft.

- 4.11 Exchange Agreement exchanging 616 shares of Series 12 Class L Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 616 shares of Series 15 Class O Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated August 3, 1999, between the Company and RBB Bank Aktiengesellschaft.
- 4.12 Exchange Agreement exchanging 1,802 shares of Series 13 Class M Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 1,802 shares of Series 16 Class P Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated August 3, 1999, between the Company and RBB Bank Aktiengesellschaft.
- 4.13 Certificate of Designations of Series 14 Class N Convertible Preferred Stock, dated August 10, 1999, as contained in Exhibit 3(i) herein.
- 4.14 Specimen copy of Certificate relating to the Series 14 Class N Convertible Preferred Stock.
- 4.15 Certificate of Designations of Series 15 Class O Convertible Preferred Stock, dated August 10, 1999, as contained in Exhibit 3(i) herein.
- 4.16 Specimen copy of Certificate relating to the Series 15 Class O Convertible Preferred Stock.
- 4.17 Certificate of Designations of Series 16 Class P Convertible Preferred Stock, dated August 10, 1999, as contained in Exhibit 3(i) herein.
- 4.18 Specimen copy of Certificate relating to the Series 16 Class P Convertible Preferred Stock.

27 Financial Data Sheet

(b) Reports on Form 8-K

A current report on Form 8-K (Item 5 - Other Events), dated June 1, 1999, was filed by the Company reporting (i) the Company's entry into a Stock Purchase Agreement ("Chem-Con Stock Purchase Agreement") with Chemical Conservation Corporation; a Florida corporation ("Chemical Florida"); Chemical Conservation of Georgia, Inc., a Georgia corporation ("Chemical Georgia"); The Thomas P. Sullivan Living Trust, dated September 6, 1978 ("TPS Trust"); The Ann L. Sullivan Living Trust, dated September 6, 1978 ("ALS Trust"); Thomas P. Sullivan, an individual ("TPS"); and Ann L. Sullivan, an individual, wherein the Company agreed to purchase all of the outstanding capital stock of Chemical Florida and Chemical Georgia from the ALS Trust pursuant to the terms of the Chem-Con Stock Purchase Agreement, and (ii) the Company's entry into a Stock Purchase Agreement ("Chem-Met Stock Purchase Agreement") with Chem-Met Services, Inc., a Michigan corporation ("Chem-Met"), the TPS Trust, the ALS Trust, TPS and ALS wherein the Company agreed to

purchase all of the outstanding capital stock of Chem-Met from the TPS Trust pursuant to the terms of the Chem-Met Stock Purchase Agreement.

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A current report on Form 8-K (Item 5 - Other Events), dated April 8, 1999, was filed by the Company reporting the amendment of the letter of intent regarding the proposed acquisition of Chemical Florida, Chemical Georgia and Chem-Met.

A current report on Form 8-K/A (Item 5 - Other Events), dated June 1, 1999, was filed on August 16, 1999, by the Company reporting (i) the audited combined financial statements of Chemical Florida, Chemical Georgia and Chem-Met and the unaudited interim combined financial statements of Chemical Florida, Chemical Georgia and Chem-Met required by Rule 3-05(b) of Regulation S-X, as promulgated pursuant to the Securities Act and the Securities Exchange Act of 1934, as amended (the "Exchange Act") and (ii) the unaudited pro forma financial information required by Article 11 of Regulation S-X, as promulgated pursuant to the Securities Act and the Exchange Act.

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SIGNATURES

Pursuant to the requirements 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.

Date: August 19, 1999

By: /s/ Louis F. Centofanti

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

By: /s/ Richard T. Kelecy

Richard T. Kelecy

EXHIBIT INDEX

Exhibit Number	Description	Sequential Page No.
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4.1	Exchange Agreement exchanging 1,769 shares of Series 3 Class C Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 1,769 shares of Series 11 Class K Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated July 15, 1999, between the Company and RBB Bank Aktiengesellschaft.	264
4.2	Exchange Agreement exchanging 916 shares of Series 8 Class H Convertible Preferred Stock, Par Value \$.001 per share of Perma- Fix Environmental Services, Inc. for 916 shares of Series 12 Class L Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated July 15, 1999, between the Company and RBB Bank Aktiengesellschaft.	285
4.3	Exchange Agreement exchanging 2,252 shares of Series 10 Class J Convertible Preferred Stock, Par Value \$.001 per share of Perma- Fix Environmental Services, Inc. for 2,252 shares of Series 13 Class Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated July 15, 1999, between the Company and RBB Bank Aktiengesellschaft.	306
4.4	Certificate of Designations of Series 11 Class K Convertible Preferred Stock, dated July 15, 1999, as contained in Exhibit 3(i) herein.	
4.5	Specimen copy of Certificate relating to the Series 11 Class K Convertible Preferred Stock.	333
4.6	Certificate of Designations of Series 12 Class L Convertible Preferred Stock, dated July 15, 1999, as contained in Exhibit 3(i) herein.	
4.7	Specimen copy of Certificate relating to the Series 12 Class L Convertible Preferred Stock.	334

4.8	Certificate of Designations of Series 13 Class M Convertible Preferred Stock, dated July 15, 1999, as contained in Exhibit 3(i) herein.	
4.9	Specimen copy of Certificate relating to the Series 13 Class M Convertible Preferred Stock.	335
4.10	Exchange Agreement exchanging 1,769 shares of Series 11 Class K Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 1,769 shares of Series 14 Class N Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated August 3, 1999, between the Company and RBB Bank Aktiengesellschaft.	336
4.11	Exchange Agreement exchanging 616 shares of Series 12 Class L Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 616 shares of Series 15 Class O Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated August 3, 1999, between the Company and RBB Bank Aktiengesellschaft.	363
4.12	Exchange Agreement exchanging 1,802 shares of Series 13 Class M Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. for 1,802 shares of Series 16 Class P Convertible Preferred Stock, Par Value \$.001 per share of Perma-Fix Environmental Services, Inc. dated August 3, 1999, between the Company and RBB Bank Aktiengesellschaft.	377
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4.14	Specimen copy of Certificate relating to the Series 14 Class N Convertible Preferred Stock.	378
4.15	Certificate of Designations of Series 15 Class O Convertible Preferred Stock, dated August 10, 1999, as contained in Exhibit 3(i) herein.	
4.16	Specimen copy of Certificate relating to the Series 15 Class O Convertible Preferred Stock.	379
4.17	Certificate of Designations of Series 16 Class P Convertible Preferred Stock, dated August 10, 1999, as contained in Exhibit 3(i) herein.	
4.18	Specimen copy of Certificate relating to	

	the Series 16 Class P Convertible Preferred Stock.	380
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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF RESTATED CERTIFICATE OF "NATIONAL ENVIRONMENTAL INDUSTRIES, LTD." FILED IN THIS OFFICE ON THE TWENTY-SIXTH DAY OF NOVEMBER, A.D. 1991 AT 10 O'CLOCK A.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244151
Date: 08-10-98

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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.

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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;

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(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;

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(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,

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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

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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 maybe 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 provisions 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

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NINTH which existed at the time of such repeal or amendment with respect to acts or omissions occurring prior to such repeal or amendment."

IN WITNESS WHEREOF, we have signed this Certificate this 22nd day of November, 1991.

/s/ Louis Centofanti

President

ATTEST:

/s/ Carol A. Dixon

Secretary

State of Delaware
Office of the Secretary of State

Page 1

I, EDWARD J. FREEL, 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 "NATIONAL ENVIRONMENTAL INDUSTRIES, LTD.," CHANGING ITS NAME FROM "NATIONAL ENVIRONMENTAL INDUSTRIES, LTD." TO "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE SEVENTEENTH DAY OF DECEMBER, A.D. 1991, AT 4:30 O'CLOCK P.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244150
Date: 08-10-98

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CERTIFICATE OF AMENDMENT
TO THE
RESTATED CERTIFICATE OF INCORPORATION
OF
NATIONAL ENVIRONMENTAL INDUSTRIES, LTD.

It is hereby certified that:

1. The name of the corporation (hereinafter called the "Corporation") is National Environmental Industries, Ltd.

2. The Restated Certificate of Incorporation 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 duly adopted in accordance with the provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware. Prompt written notice of the adoption of the amendment herein certified has been given to those stockholders who have not consented in writing thereto, as provided in Section 228 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, we have signed this Certificate this 16th day of December, 1991.

/s/ Louis Centofanti

Louis Centofanti, President

ATTEST:

/s/ Mark Zwecker

Mark Zwecker, Secretary

State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, 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 FOURTH DAY OF SEPTEMBER, A.D. 1992, AT 11:30 O'CLOCK A.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244149

Date: 05/24/1993

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

Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Corporation"), does hereby certify:

That the amendment set forth below to the Corporation's Restated Certificate of Incorporation, as amended, was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware and written notice thereof has been given as provided in Section 228 thereof:

I) The first paragraph of Article FOURTH of the Corporation's Restated Certificate of Incorporation, as amended, is hereby deleted and replaced in its entirety by the following:

Fourth: The total number of shares of capital stock that the Corporation shall have authority to

issue is 22,000,000 shares of which 20,000,000 shares of the par value of \$.001 per share shall be designated Common Stock ("Common Stock"), and 2,000,000 shares of the par value of \$.001 per share shall be designated Preferred Stock.

As of September 4, 1992 (the "Effective Time"), each share of Common Stock issued and outstanding immediately prior to the Effective Time shall automatically be changed and converted, without any action on the part of the holder thereof, into 1/3.0236956 of a share of Common Stock and, in connection with fractional interests in shares of Common Stock of the Corporation, each holder whose aggregate holdings of shares of Common stock prior to the Effective Time amounted to less than 3.0236956, or to a number not evenly divisible by

3.0236956 shares of Common Stock shall be entitled to receive for such fractional interest, and at such time, any such fractional interest in shares of Common Stock of the Corporation shall be converted into the right to receive, upon surrender of the stock certificates formerly representing shares of Common Stock of the Corporation, one whole share of Common Stock.

IN WITNESS whereof, Perma-Fix Environmental Services, Inc. has caused this Certificate to be signed and attested to by its duly authorized officers as of this first day of September, 1992.

Perma-Fix Environmental Services, Inc.

By: /s/ Louis Centofanti

Dr. Louis F. Centofanti
President

ATTEST:

By: /s/ Mark Zwecker

Secretary

State of Delaware
Office of the Secretary of State

Page 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE SIXTH DAY OF FEBRUARY, A.D. 1996, AT 4 O'CLOCK P.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244148

Date: 08-10-98

2249849 8100

981311720

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.

By /s/ Louis F. Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Mark A. Zwecker

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

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the primary stock exchange, or the Nasdaq Stock Market, if the Common Shares are quoted on the Nasdaq Stock Market, or (ii) if last sales price information is not available, the average closing bid price of Common Shares as reported by the Nasdaq Stock Market, or if not so listed or reported, then as reported by National Quotation Bureau, Incorporated, or (iii) in the event neither clause (i) nor (ii) is applicable, the average of the closing bid and asked prices as furnished by any member of the National Association of Securities Dealers, Inc., selected from time to time by the Corporation for that purpose.

3.3 Dividends on Series I Class A Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared and set aside for payment on the Common Shares until full cumulative dividends on all outstanding Series I Class A Preferred Stock shall have been paid or declared and set aside for payment.

3.4 Dividends shall be payable in arrears, at the rate of \$12.50 per share for each full calendar quarter on each February 28, May 31, August 31, and November 30 of each calendar year, to the holders of record of the Series I Class A Preferred Stock as they appear in the securities register of the Corporation on such record dates not more than sixty (60) nor less than ten (10) days preceding the payment date thereof, as shall be fixed by the Board; provided, however, that the initial dividend for the Series I Class A Preferred Stock shall accrue for the period commencing on the date of the issuance thereof to and including December 31, 1995.

3.5 If, in any quarter, insufficient funds are available to pay such dividends as are then due and payable with respect to the Series I Class A Preferred Stock and all other classes and series of the capital stock of the Corporation ranking in parity therewith (or such payment is otherwise prohibited by provisions of the GCL, such funds as are legally available to pay such dividends shall be paid or Common Shares will be issued as stock dividends to the holders of Series I Class A Preferred Stock and to the holders of any other series of Class A Preferred Stock then outstanding as provided in Part 6 hereof, in accordance with the rights of each such holder, and the balance of accrued but undeclared and/or unpaid dividends, if any, shall be declared and paid on the next succeeding dividend date to the extent that funds are then legally available for such purpose.

Part 4 - Redemption.

4.1 At any time, and from time to time, on and after one hundred twenty (120) days from the date of the issuance of any Series I Class A Preferred Stock, if the average of the closing bid prices for the Common Shares for five (5) consecutive trading days shall be in excess of \$1.50, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, the then outstanding Series I Class A Preferred Stock at a price per share of U. S. \$1,000 each (the "Redemption Price") (such price to be adjusted proportionately in the event of any change of the Series I Class A Shares into a different number of Shares).

4.2 Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series I Class A Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series I Class A Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such Shares, (ii) the number of

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Series I Class A Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated of a share certificate or share certificates representing the number of Series I Class A Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series I Class A Preferred Stock to be redeemed as provided in this Part 4, and the number of

shares to be converted into Common Shares as provided in Part 5 hereof.

4.3 Upon receipt of the Redemption Notice, any Eligible Holder (as defined in Section 5.2 hereof) shall have the option, at its sole election, to specify what portion of its Series I Class A Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 4 or converted into Common Shares in the manner provided in Part 5 hereof, except that, notwithstanding any provision of such Part 5 to the contrary, any Eligible Holder shall have the right to convert into Common Shares that number of Series I Class A Preferred Stock called for redemption in the Redemption Notice.

4.4 On or before the Redemption Date in respect of any Series I Class A Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series I Class A Shares which are not being redeemed to be registered in the names of the persons whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

4.5 On the Redemption Date in respect of any Series I Class A Shares or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series I Class A Shares in respect of which the Corporation has received notice from the Eligible Holder thereof of its election to convert Series I Class A Shares in to Common Shares), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed share shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called

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for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

Part 5 - Conversion.

5.1 For the purposes of conversion of the Series I Class A Preferred Stock shall be valued at \$1,000 per share ("Value"), and, if converted, the Series I Class A Preferred Stock shall be converted into such number of Common Shares (the "Conversion

Shares") as is obtained by dividing the aggregate Value of the shares of Series I Class A Preferred Stock being so converted, together with all accrued but unpaid dividends thereon, by the "Average Stock Price" per share of the Conversion Shares (the "Conversion Price"), subject to adjustment pursuant to the provisions of this Part 5. For purposes of this Part 5, the "Average Stock Price" means the lesser of (x) seventy percent (70%) of the average daily closing bid prices of the Common Shares for the period of five (5) consecutive trading days immediately preceding the date of subscription by the Holder or (y) seventy percent (70%) of the daily average closing bid prices of Common Shares for the period of five (5) consecutive trading days immediately preceding the date of the conversion of the Series I Class A Preferred Stock in respect of which such Average Stock Price is determined. The closing price for each trading day shall be determined as provided in the last sentence of Section 3.2.

5.2 Any holder of Series I Class A Preferred Stock (an "Eligible Holder") may at any time commencing forty-five (45) days after the issuance of any Series I Class A Preferred Stock convert up to one hundred percent (100%) of his holdings of Series I Class A Preferred Stock in accordance with this Part 5.

5.3 The conversion right granted by Section 5.2 hereof may be exercised only by an Eligible Holder of Series I Class A Preferred Stock, in whole or in part, by the surrender of the share certificate or share certificates representing the Series I Class A Preferred Stock to be converted at the principal office of the Corporation (or at such other place as the Corporation may designate in a written notice sent to the holder by first class mail, postage prepaid, at its address shown on the books of the Corporation) against delivery of that number of whole Common Shares as shall be computed by dividing (1) the aggregate Value of the Series I Class A Preferred Stock so surrendered for conversion plus any accrued but unpaid dividends thereon, if any, by (2) the Conversion Price in effect at the date of the conversion. At the time of conversion of a share of the Series I Class A Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, issue that number of whole Common Shares which is equal to the product of dividing the amount of such unpaid dividends by the Average Stock Price whether or not declared by the Board. Each Series I Class A Preferred Stock share certificate surrendered for conversion shall be endorsed by its holder. In the event of any exercise of the conversion right of the Series I Class A Preferred Stock granted herein (i) share certificate representing the Common Shares purchased by virtue of such exercise shall be delivered to such holder within three (3) days of notice of conversion, and (ii) unless the Series I Class A Preferred Stock has been fully converted, a new share certificate representing the Series I Class

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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

-6-

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.

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5.8 No Series I Class A Preferred Stock which has been converted into Common Shares shall be reissued by the Corporation; provided, however, that each such share shall be restored to the status of authorized but unissued Preferred Stock without designation as to series and may thereafter be issued as a series of Preferred Stock not designated as Series I Class A Preferred Stock.

Part 6 - Parity with Other Shares of Class A Preferred Shares.

6.1 If any cumulative dividends or accounts payable or return of capital in respect of Series I Class A Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

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.

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State of Delaware
Office of the Secretary of State

Page 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE TWENTIETH DAY OF FEBRUARY, A.D. 1996, AT 10:45 O'CLOCK A.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

2249849 8100

Authentication: 9244147
Date: 08-10-98

981311720

CERTIFICATE OF DESIGNATIONS
OF SERIES 2 CLASS B CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of

Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 2 Class B Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 2 Class B Convertible Preferred Stock as set forth in the attached resolutions.

Dated: February 16, 1996

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By /s/ Louis F. Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Mark A. Zwecker

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 2 Class B Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Except as otherwise provided herein, in the Corporation's Certificate of Incorporation (the "Articles") or the General Corporation Law of the State of Delaware (the "GCL"), each holder of Series 2 Class B Preferred Stock, by virtue of his ownership thereof, shall be entitled to cast that number of votes per share thereof on each matter submitted to the Corporation's shareholders for voting which equals the number of votes which could be cast by such holder of the number of shares of the Corporation's Common Stock, par value \$.001 per share (the "Common Shares") into which such shares of Series 2 Class B Preferred Stock would be entitled to be converted into pursuant to Part 5 hereof on the record date of such vote. The outstanding Series 2 Class B Preferred Stock, the Common Shares of the Corporation and any other series of Preferred Stock of the Corporation having voting rights shall vote together as a single class, except as otherwise expressly required by the GCL or Part 7 hereof. The Series 2 Class B Preferred Stock shall not have cumulative voting rights.

1.2 The Series 2 Class B Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

Part 2 - Liquidation Rights.

2.1 If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any Series 2 Class B Preferred Stock shall be outstanding, the holders of the then outstanding Series 2 Class B Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Common Shares equal to \$1,000 consideration per outstanding share of Series 2 Class B Preferred Stock, together with an amount equal to all unpaid dividends accrued thereon, if any, to the date of payment of such distribution, whether or not declared by the Board; provided, however, that the merger of the Corporation with any corporation or corporations in which the Corporation is not the survivor, or the sale or transfer by the Corporation of all or substantially all of its property, or a reduction by at least seventy percent (70%) of the then issued and outstanding Common Shares of the Corporation, shall be deemed to be a liquidation of the Corporation within the meaning of any of the provisions of this Part 2.

2.2 Subject to the provisions of Part 6 hereof, all amounts to be paid as preferential distributions to the holders of Series 2 Class B Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of Common Shares, whether now or hereafter authorized, in connection with such liquidation, dissolution or

winding up.

2.3 After the payment to the holders of the shares of the Series 2 Class B Preferred Stock of the full preferential amounts provided for in this Part 2, the holders of the Series 2 Class B Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 2 Class B Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 2 Class B Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 2 Class B Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 2 Class B Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

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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

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provided in Part 6 hereof, in accordance with the rights of each such holder, and the balance of accrued but undeclared and/or unpaid dividends, if any, shall be declared and paid on the next succeeding dividend date to the extent that funds are then legally available for such purpose.

Part 4 - Redemption.

4.1 At any time, and from time to time, on and after one hundred twenty (120) days from the date of the issuance of any Series 2 Class B Preferred Stock, if the average of the closing bid prices for the Common Shares for five (5) consecutive trading days shall be in excess of \$1.50 per share, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, the then outstanding Series 2 Class B Preferred Stock at a price per share of U. S. \$1,000 each (the "Redemption Price") (such price to be adjusted proportionately in the event of any change of the Series 2 Class B Preferred Stock into a different number of shares of Series 2 Class B Preferred Stock).

4.2 Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 2 Class B Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 2 Class B Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 2 Class B Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated of a share certificate or share certificates representing the number of Series 2 Class B Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 2 Class B Preferred Stock to be redeemed as provided in this Part 4, and the number of shares to be converted into Common Shares as provided in Part 5 hereof.

4.3 Upon receipt of the Redemption Notice, any Eligible Holder (as

defined in Section 5.2 hereof) shall have the option, at its sole election, to specify what portion of its Series 2 Class B Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 4 or converted into Common Shares in the manner provided in Part 5 hereof, except that, notwithstanding any provision of such Part 5 to the contrary, any Eligible Holder shall have the right to convert into Common Shares that number of Series 2 Class B Preferred Stock called for redemption in the Redemption Notice.

4.4 On or before the Redemption Date in respect of any Series 2 Class B Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 4.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the

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Corporation shall cause the Series 2 Class B Preferred Stock which are not being redeemed to be registered in the names of the persons whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

4.5 On the Redemption Date in respect of any Series 2 Class B Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 2 Class B Preferred Stock in respect of which the Corporation has received notice from the Eligible Holder thereof of its election to convert Series 2 Class B Preferred Stock in to Common Shares), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed share shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

Part 5 - Conversion.

5.1 For the purposes of conversion of the Series 2 Class B Preferred Stock shall be valued at \$1,000 per share ("Value"), and, if converted, the Series 2 Class B Preferred Stock shall be converted into such number of Common Shares (the "Conversion Shares") as is obtained by dividing the aggregate Value of the shares of Series 2 Class B Preferred Stock being so converted, together with all accrued but unpaid dividends thereon, by the

"Average Stock Price" per share of the Conversion Shares (the "Conversion Price"), subject to adjustment pursuant to the provisions of this Part 5. For purposes of this Part 5, the "Average Stock Price" means the lesser of (x) seventy percent (70%) of the average daily closing bid prices of the Common Shares for a period of five (5) consecutive trading days immediately preceding the date of subscription by the Holder or (y) seventy percent (70%) of the average daily closing bid prices of Common Shares for the period of five (5) consecutive trading days immediately preceding the date of the conversion of the Series 2 Class B Preferred Stock in respect of which such Average Stock Price is determined. The closing price for each trading day shall be determined as provided in the last sentence of Section 3.2.

5.2 Any holder of Series 2 Class B Preferred Stock (an "Eligible Holder") may at any time commencing forty-five (45) days after the issuance of any Series 2 Class B Preferred Stock convert up to one hundred percent (100%) of his holdings of Series 2 Class B Preferred Stock in accordance with this Part 5.

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5.3 The conversion right granted by Section 5.2 hereof may be exercised only by an Eligible Holder of Series 2 Class B Preferred Stock, in whole or in part, by the surrender of the share certificate or share certificates representing the Series 2 Class B Preferred Stock to be converted at the principal office of the Corporation (or at such other place as the Corporation may designate in a written notice sent to the holder by first class mail, postage prepaid, at its address shown on the books of the Corporation) against delivery of that number of whole Common Shares as shall be computed by dividing (1) the aggregate Value of the Series 2 Class B Preferred Stock so surrendered for conversion plus any accrued but unpaid dividends thereon, if any, by (2) the Conversion Price in effect at the date of the conversion. At the time of conversion of a share of the Series 2 Class B Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, issue that number of whole Common Shares which is equal to the product of dividing the amount of such unpaid dividends by the Average Stock Price whether or not declared by the Board. Each Series 2 Class B Preferred Stock share certificate surrendered for conversion shall be endorsed by its holder. In the event of any exercise of the conversion right of the Series 2 Class B Preferred Stock granted herein (i) share certificate representing the Common Shares purchased by virtue of such exercise shall be delivered to such holder within three (3) days of notice of conversion, and (ii) unless the Series 2 Class B Preferred Stock has been fully converted, a new share certificate representing the Series 2 Class B Preferred Stock not so converted, if any, shall also be delivered to such holder within three (3) days of notice of conversion. Any Eligible Holder may exercise its right to convert the Series 2 Class B Preferred Stock by telecopying an executed and completed Notice of Conversion to the Corporation, and within seventy-two (72) hours thereafter, delivering the original Notice of Conversion and the certificate representing the Series 2 Class B Preferred Stock to the Corporation by express courier. Each date on which a Notice of Conversion is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a conversion date. The Corporation will transmit the Common Shares certificates issuable upon conversion of any Series 2 Class B Preferred Stock (together with the certificates representing the Series 2 Class B Preferred Stock not so converted) to the Eligible

Holder via express courier within three (3) business days after the conversion date if the Corporation has received the original Notice of Conversion and the Series 2 Class B Shares certificates being so converted by such date.

5.4 All Common Shares which may be issued upon conversion of Series 2 Class B Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof. At all times that any Series 2 Class B Preferred Stock is outstanding, the Corporation shall have authorized, and shall have reserved for the purpose of issuance upon such conversion, a sufficient number of Common Shares to provide for the conversion into Common Shares of all Series 2 Class B Preferred Stock then outstanding at the then effective Conversion Price. Without limiting the generality of the foregoing, if, at any time, the Conversion Price is decreased, the number of Common Shares authorized and reserved for issuance upon the conversion of the Series 2 Class B Preferred Stock shall be proportionately increased.

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5.5 The number of Common Shares issued upon conversion of Series 2 Class B Preferred Stock and the Conversion Price shall be subject to adjustment from time to time upon the happening of certain events, as follows:

5.5.1 In the case of any amendment to the Articles to change the designation of the Common Shares or the rights, privileges, restrictions or conditions in respect of the Common Shares or division of the Common Shares into series the rights of the holders of the Series 2 Class B Preferred Stock shall be adjusted so as to provide that upon conversion thereof, the holder of the Series 2 Class B Preferred Stock being converted shall procure, in lieu of each Common Share theretofore issuable upon such conversion, the kind and amount of shares, other securities, money and property receivable upon such designation, change or division by the holder of one Common Share issuable upon such conversion had conversion occurred immediately prior to such designation, change or division. The Series 2 Class B Preferred Stock shall be deemed thereafter to provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 5. The provisions of this subsection 5.5.1 shall apply in the same manner to successive reclassifications, changes, consolidations, and mergers.

5.5.2 If the Corporation, at any time while any of the Series 2 Class B Preferred Stock is outstanding, shall amend the Articles so as to change the Common Shares into a different number of shares, the Conversion Price shall be proportionately reduced, in case of such change increasing the number of Common Shares, as of the effective date of such increase, or if the Corporation shall take a record of holders of its Common Shares for the purpose of such increase, as of such record date, whichever is earlier, or the Conversion Price shall be proportionately increased, in the case of such change decreasing the number of Common Shares, as of the effective date of such decrease or, if the Corporation shall take a record of holders of its Common Stock for the purpose of such decrease, as of such record date, whichever is earlier.

5.5.3 If the Corporation, at any time while any of the Series 2 Class B Preferred Stock is outstanding, shall pay a dividend payable in Common Shares (except for any dividends of Common Shares payable pursuant to Part 3 hereof), the Conversion Price shall be adjusted, as of the date the Corporation shall take a record of the holders of its Common Shares for the purposes of receiving such dividend (or if no such record is taken, as of the date of payment of such dividend), to that price determined by multiplying the Conversion Price therefor in effect by a fraction (1) the numerator of which shall be the total number of Common Shares outstanding immediately prior to such dividend, and (2) the denominator of which shall be the total number of Common Shares outstanding immediately after such dividend (plus in the event that the Corporation paid cash for fractional shares, the number of additional shares which would have been outstanding had the Corporation issued fractional shares in connection with said dividend).

5.6 Whenever the Conversion Price shall be adjusted pursuant to Section 5.5 hereof, the Corporation shall make a certificate signed by its President, or a Vice President and by its Treasurer,

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Assistant Treasurer, Secretary or Assistant Secretary, setting forth, in reasonable detail, the event requiring the adjustment, the amount of the adjustment, the method by which such adjustment was calculated (including a description of the basis on which the Board of Directors made any determination hereunder), and the Conversion Price after giving effect to such adjustment, and shall cause copies of such certificates to be mailed (by first class mail, postage prepaid) to each holder of the Series 2 Class B Preferred Stock at its address shown on the books of the Corporation. The Corporation shall make such certificate and mail it to each such holder promptly after each adjustment.

5.7 No fractional Common Shares shall be issued in connection with any conversion of Series 2 Class B Preferred Stock, but in lieu of such fractional shares, the Corporation shall make a cash payment therefor equal in amount to the product of the applicable fraction multiplied by the Conversion Price then in effect.

5.8 No Series 2 Class B Preferred Stock which has been converted into Common Shares shall be reissued by the Corporation; provided, however, that each such share shall be restored to the status of authorized but unissued Preferred Stock without designation as to series and may thereafter be issued as a series of Preferred Stock not designated as Series 2 Class B Preferred Stock.

Part 6 - Parity with Other Shares of Series 2 Class B Preferred Stock and Priority.

6.1 If any cumulative dividends or accounts payable or return of capital in respect of Series 2 Class B Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate 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 or upon liquidation, if the holders of such class or classes shall be entitled to

the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 2 Class B Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 2 Class B Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 2 Class B Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as

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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 of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of this Section 7.1.

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State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE NINETEENTH DAY OF

JULY, A.D. 1996, AT 12:30 O'CLOCK P.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244146

2249849 8100
981311720

Date: 08-10-98

CERTIFICATE OF DESIGNATIONS
OF SERIES 3 CLASS C CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 3 Class C Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 3 Class C Convertible Preferred Stock as set forth in the attached resolutions.

Dated: July 17, 1996

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By /s/ Louis F. Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

Richard T. Kelecy, Secretary

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

RESOLUTION OF THE BOARD OF DIRECTORS

FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,
RESTRICTIONS AND CONDITIONS ATTACHING TO THE
SERIES 3 CLASS C CONVERTIBLE PREFERRED STOCK

WHEREAS,

- A. The Corporation's share capital includes Preferred Stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by the Board of Directors of the Corporation (the "Board") being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences, and relative, participating, optional or other special rights, privileges, restrictions and conditions attaching to the shares of each such series; and
- B. It is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 3 Class C Convertible Preferred Stock, par value \$.001.

NOW, THEREFORE, BE IT RESOLVED, THAT:

The Series 3 Class C Convertible Preferred Stock, par value \$.001 (the "Series 3 Class C Preferred Stock") of the Corporation shall consist of 5,500 shares and no more and shall be designated as the Series 3 Class C Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 3 Class C Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Voting Rights. Except as otherwise provided herein, in the Corporation's Certificate of Incorporation (the "Articles") or the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 3 Class C Preferred Stock shall have no voting rights whatsoever. To the extent that under the GCL the vote of the holders of the Series 3 Class C Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 3 Class C Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 3 Class C Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL the holders of the Series 3 Class C Preferred Stock are

entitled to vote on a matter with holders of Corporation's Common Stock and/or any other class or series of the Corporation's voting securities, the Series 3 Class C Preferred Stock, the Corporation's Common Stock and all other classes or series of the Corporation's

voting securities shall vote together as one class, with each share of Series 3 Class C Preferred Stock entitled to a number of votes equal to the number of shares of the Corporation's Common Stock into which it is then convertible using the record date for the taking of such vote of stockholders as the date as of which the Conversion Price (as defined in Section 4.2 hereof) is calculated and conversion is effected. Holders of the Series 3 Class C Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 No Preemptive Rights. The Series 3 Class C Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 3 Class C Preferred Stock shall be outstanding, the holders of the then outstanding Series 3 Class C Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 3 Class C Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 Payment of Liquidation Preferences. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 3 Class C Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 3 Class C Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 3 Class C Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 3 Class C Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 3 Class C Preferred Stock upon such dissolution, liquidation or

winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 3 Class C Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 3 Class C Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends.

3.1 The holders of the Series 3 Class C Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), at the Corporation's election, at the rate of six percent (6%) per annum of the Liquidation Value of the Series 3 Class C Preferred Stock. The Liquidation Value of the Series 3 Class C Preferred Stock shall be \$1,000.00 per share (the "Dividend Rate"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1996 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 3 Class C Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 3 Class C Preferred Stock. In the event that the Corporation elects to pay dividends in Common Stock of the Corporation, each holder of the Series 3 Class C Preferred Stock shall receive shares of Common Stock of the Corporation equal to the quotient of (i) the Dividend Rate in effect on the applicable Dividend Declaration Date 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 dividends or other distributions shall be paid or declared or set aside for payment on the Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 3 Class C Preferred Stock shall have been paid or declared and set aside for payment.

Part 4 - Conversion. The holders of the Series 3 Class C Preferred Stock shall have rights to convert the shares of Series 3 Class C Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 Right to Convert. The Series 3 Class C Preferred Stock shall be convertible into shares of Common Stock, as follows:

- 4.1.1 Up to one thousand eight hundred thirty-three (1,833) shares of Series 3 Class C Preferred Stock may be converted at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after October 1, 1996;

- 4.1.2 Up to one thousand eight hundred thirty-three (1,833) shares of Series 3 Class C Preferred Stock may be converted at the Conversion Price at any time on or after November 1, 1996; and,
- 4.1.3 Up to one thousand eight hundred thirty-four (1,834) shares of Series 3 Class C Preferred Stock may be converted at the Conversion Price on or after December 1, 1996.

4.2 Conversion Price. As used herein, the term Conversion Price shall be the product of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by (ii) seventy-five percent (75%). Notwithstanding the foregoing, the Conversion Price shall not be (i) less than a minimum of \$.75 per share ("Minimum Conversion Price") or (ii) more than a maximum of \$1.50 per share ("Maximum Conversion Price"). If, after July 1, 1996, the Corporation sustains a net loss, on a consolidated basis, in each of two (2) consecutive quarters, as determined under generally accepted accounting principles, the Minimum Conversion Price shall be reduced \$.25 a share, but there shall be no change to, or reduction of, the Maximum Conversion Price. For the purpose of determining whether the Corporation has had a net loss in each of two (2) consecutive quarters, at no time shall a quarter that has already been considered in such determination be considered in any subsequent determination (as an example the third quarter of 1996 in which there is a net profit and the fourth quarter of 1996 in which there is a net loss shall be considered as two consecutive quarters, and, as a result, the fourth quarter of 1996 shall not be considered along with the first quarter of 1997 as two (2) consecutive quarters, but the first quarter of 1997 must be considered with the second quarter of 1997 for the purposes of such determination). For the purposes of this Section 4.2, a "quarter" is a three (3) month period ending on March 31, June 30, September 30, and December 31. If any of the outstanding shares of Series 3 Class C Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 3 Class C Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At the time of conversion of shares of the Series 3 Class C Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the product of dividing the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 3 Class C Preferred Stock so converted by the Conversion Price in effect at the date of conversion.

4.3 Mechanics of Conversion. Any holder of the Series 3 Class C Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile

transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 3 Class C Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. No Conversion Notice with respect to any shares of Series 3 Class C Preferred Stock can be given prior to the time such shares of Series 3 Class C Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 3 Class C Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 3 Class C Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 3 Class C Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion within five (5) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3, the Corporation shall pay to the holder U.S. \$1,000 for each day that the Corporation is late in delivering such certificate to the holder or its agent.

4.4 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Series 3 Class C Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate. If the Corporation shall declare or pay, without consideration, any dividend on the Common Stock payable in any right to acquire Common stock for no consideration, then the Corporation shall be deemed to have made a dividend

payable in Common Stock in an amount of shares equal to the maximum number of shares issuable upon exercise of such rights to acquire Common Stock.

4.5. Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 3 Class C Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 3 Class C Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 3 Class C Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 3 Class C Preferred Stock immediately before that change.

4.6 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 3 Class C Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.7 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 3 Class C Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.8 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 3 Class C Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 3 Class C Preferred Stock in connection with such conversion.

4.9 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 3 Class C Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 3 Class C Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 3 Class C Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.10 Fractional Shares. No fractional share shall be issued upon the conversion of any share or shares of Series 3 Class C Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 3 Class C Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.11 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 3 Class C Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.12 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or permitted to close.

Part 5 - Redemption.

5.1 Redemption During First 180 Days. At any time, and from time to time, during the first one hundred eighty (180) days from the date of issuance of the Series 3 Class C Preferred Stock, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, the then outstanding Series 3 Class C Preferred Stock at a price per share of U. S. \$1,300.00 each ("First Six Months Redemption Price"). The Company may exercise such redemption by giving the holder of the Series 3 Class C Preferred Stock written notice of such redemption at any time during such 180-day period.

5.2 Other Rights of Redemption by the Corporation. At any time, and from time to time, after one hundred eighty (180) days from the date of the issuance of any Series 3 Class C Preferred Stock, if the average of the closing bid price of the Common Stock for ten (10) consecutive days shall be in excess of \$2.50 per share, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, the then outstanding Series 3 Class C Preferred Stock at a price per share of U. S. \$1,000 each (the "Redemption Price") (such price to be adjusted proportionately in the event of any change of the Series 3 Class C Preferred Stock into a different number of shares of Series 3 Class C Preferred Stock).

5.3 Mechanics of Redemption. Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 3 Class C Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 3 Class C Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 3 Class C Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 3 Class C

Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 3 Class C Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first one hundred eighty (180) days from the date of issuance of the Series 3 Class C Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.4 Rights of Conversion Upon Redemption. If the redemption occurs pursuant to Section 5.1 hereof, the Holder of the Series 3 Class C Preferred Stock shall not have the right to convert those outstanding shares of Series 3 Class C Preferred Stock that the Company is redeeming after receipt of the Redemption Notice. If the redemption occurs pursuant to Section 5.2 hereof, then, upon receipt of the Redemption Notice, any holder of Series 3 Class C Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 3 Class C Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, such holder shall have the right to convert into Common Stock that number of Series 3 Class C Preferred Stock called for redemption in the Redemption Notice.

5.5 Surrender of Certificates. On or before the Redemption Date in respect of any Series 3 Class C Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 3 Class C Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

5.6 Payment. On the Redemption Date in respect of any Series 3 Class C Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate First Six Months Redemption Price or the Redemption Price, whichever is applicable, of all such shares called from redemption (less the aggregate Redemption Price for those Series 3 Class C Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 3 Class C Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the First Six Months Redemption Price or the Redemption Price, whichever is applicable, to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the First Six Months Redemption Price or the Redemption Price,

whichever is applicable, of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the First Six Months Redemption Price or the Redemption Price, whichever is applicable, in respect of their shares only from the Corporation.

Part 6 - Parity with Other Shares of Series 3 Class C Preferred Stock and Priority.

6.1 Rateable Participation. If any cumulative dividends or return of capital in respect of Series 3 Class C Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

6.2 Ranking. For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 3 Class C Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 3 Class C Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 3 Class C Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 3 Class C Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 3 Class C Preferred Stock; and,

6.2.3 Junior to shares of this Series 3 Class C Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 3 Class C Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

Part 7 - Amendment and Reissue.

7.1 Amendment. If any proposed amendment to the Corporation's

Certificate of Incorporation would alter or change the powers, preferences or special rights of the Series 3 Class C Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Certificate of Incorporation at a duly called and held series meeting of the holders of the Series 3 Class C Preferred Stock or written consent by the holders of a majority of the Series 3 Class C Preferred Stock then outstanding. Notwithstanding the above, the number of authorized shares of any class or classes of stock may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of this Section 7.1 or the requirements of Section 242 of the GCL.

7.2 Authorized. Any shares of Series 3 Class C Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

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State of Delaware
Office of the Secretary of State

Page 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE SIXTEENTH DAY OF DECEMBER, A.D. 1996, AT 4:30 O'CLOCK P.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244145

2249849 8100

Date: 08-10-98

981311720

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 Delaware General Corporation Law of the State of Delaware (hereinafter called the "Corporation"), hereby certifies the following:

1. That the Certificate of Designations of Series I Class A Preferred Stock of the Corporation (the "Series I Preferred") was filed on February 6, 1996 (the "Series I Certificate of Designations").

2. That all outstanding shares of the Series I Preferred have been converted into shares of common stock of the Company pursuant to the terms and conditions of the Series I Certificate of Designations.

3. That no shares of Series I Preferred remain outstanding.

4. That all shares of the Series I Preferred which have been converted have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

5. That on September 19, 1996, the Board of Directors of the company duly adopted the following resolution:

RESOLVED, that no authorized shares of Series I Class A Preferred Stock remain outstanding and no shares of Series I Class A Preferred Stock will be issued subject to the Certificate of Designation previously filed with respect to the Series I Class A Preferred Stock.

6. That the Certificate of Designations of the Series 2 Class B Convertible Preferred Stock of the Corporation (the "Series 2 Preferred") was filed on February 20, 1996 (the "Series 2 Certificate of Designations").

7. That all outstanding shares of the Series 2 Preferred have been converted into shares of common stock of the Company pursuant to the terms and conditions of the Series 2 Certificate of Designations.

8. That no shares of Series 2 Preferred remain outstanding.

9. That all shares of the Series 2 Preferred which have been converted have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

10. That on September 19, 1996, the Board of Directors of the company duly adopted the following resolution:

RESOLVED, that no authorized shares of Series 2 Class B 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 Section 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 4th day of December, 1996, by the President of the Company.

ATTEST: PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

/s/ Richard T. Kelecyc

By /s/ Louis Centofanti

Richard T. Kelecyc, Secretary

Dr. Louis F. Centofanti,
President

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State of Delaware
Office of the Secretary of State

Page 1

I, EDWARD J. FREEL, 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 SIXTH DAY OF JANUARY, A.D. 1997, AT 4:30 O'CLOCK P.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244144

2249849 8100

Date: 08-10-98

981311720

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

Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Corporation"), for purposes of amending its Restated Certificate of Incorporation, as amended ("Restated Certificate of Incorporation"), as provided by Section 242 of the Delaware General Corporation Law, does hereby certify:

1. The amendment set forth below to the Corporation's Restated Certificate of Incorporation was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware:

The first paragraph of Article Fourth of the Corporation's Restated Certificate of Incorporation is hereby deleted and replaced in its entirety by the following:

The total number of shares of capital stock that the Corporation shall have authority to issue is 52,000,000, of which 50,000,000 shall be designated as common stock of the par value of \$.001 per share ("Common Stock") and 2,000,000 shall be designated as preferred stock of the par value of \$.001 per share ("Preferred Stock").

2. Only the first paragraph of Article Fourth is amended by this Amendment, and the remainder of Article Fourth shall remain in full force and effect. No other provision, paragraph or article of the Restated Certificate of Incorporation is amended or changed by this Amendment. The Restated Certificate of Incorporation, as expressly amended by paragraph 1 of this Amendment, shall be in full force and effect.

3. At a meeting of the Board of Directors held on the 19th day of September, 1996, a resolution was duly adopted setting forth the foregoing proposed amendment to the first paragraph of Article Fourth of the Restated Certificate of Incorporation, declaring such amendment to be advisable and setting the next Annual Meeting of Stockholders for consideration thereof.

4. Thereafter, pursuant to said resolution of its Board of Directors, the Annual Meeting of Stockholders was duly called and held on December 12, 1996, at which meeting the necessary number of shares as required by statute were voted in favor of such amendment.

IN WITNESS whereof, Perma-Fix Environmental Services, Inc. has caused this Certificate to be signed and attested to by its duly authorized officers as of this 16th day of December, 1996.

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

By: /s/Louis F. Centofanti

Dr. Louis F. Centofanti

President and
Chief Executive Officer

ATTEST:

/s/ Richard T. Kelecy

Richard T. Kelecy,
Secretary

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State of Delaware
Office of the Secretary of State

Page 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE ELEVENTH DAY OF JUNE, A.D. 1997, AT 11 O'CLOCK A.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 0244143

2249849 8100

Date: 08-10-98

981311720

CERTIFICATE OF DESIGNATIONS
OF SERIES 4 CLASS D CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 4 Class D Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 4 Class

D Convertible Preferred Stock as set forth in the attached resolutions.

Dated: June 9, 1997

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

Richard T. Kelecy, Secretary

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

RESOLUTION OF THE BOARD OF DIRECTORS

FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,
RESTRICTIONS AND CONDITIONS ATTACHING TO THE
SERIES 4 CLASS C CONVERTIBLE PREFERRED STOCK

WHEREAS, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

WHEREAS, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 4 Class D Convertible Preferred Stock, par value \$.001 per share ("Series 4 Class D Preferred Stock");

NOW, THEREFORE, BE IT RESOLVED, that the Series 4 Class D Convertible Preferred Stock, par value \$.001 (the "Series 4 Class D Preferred Stock") of the Corporation shall consist of two thousand five hundred (2,500) shares and no more and shall be designated as the Series 4 Class D Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 4 Class D Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Voting Rights. Except as otherwise provided in Part 7 hereof or under the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 4 Class D Preferred Stock shall have no voting rights whatsoever. To the extent that under Part 7 hereof or the GCL the vote of the holders of the Series 4 Class D Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at

least a majority of the shares of the Series 4 Class D Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 4 Class D Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL or Part 7 hereof, the holders of the Series 4 Class D Preferred Stock are entitled to vote on a matter, each share of the Series 4 Class D Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 4 Class D Preferred Stock. Holders of the Series 4 Class D Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all

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shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 No Preemptive Rights. The Series 4 Class D Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 4 Class D Preferred Stock shall be outstanding, the holders of the then outstanding Series 4 Class D Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 4 Class D Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 Payment of Liquidation Preferences. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 4 Class D Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 4 Class D Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 4 Class D Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 4 Class D Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series

4 Class D Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 4 Class D Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 4 Class D Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

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Part 3 - Dividends.

3.1 The holders of the Series 4 Class D Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 4 Class D Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 4 Class D Preferred Stock shall be \$1,000 per outstanding share of the Series 4 Class D Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1997 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 4 Class D Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 4 Class D Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 4 Class D Preferred Stock. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 4 Class D Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Series 4 Class D Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 4 Class D Preferred Stock shall have been paid or declared and set aside for payment.

Part 4 - Conversion. The holders of the Series 4 Class D Preferred Stock shall have rights to convert the shares of Series 4 Class D Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 Right to Convert. The Series 4 Class D Preferred Stock shall be convertible into shares of Common Stock, as follows:

4.1.1 Up to one thousand two hundred fifty (1,250) shares of Series 4 Class D Preferred Stock may be converted at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after October 5, 1997; and,

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4.1.2 Up to an additional one thousand two hundred fifty (1,250) shares of Series 4 Class D Preferred Stock may be converted at the Conversion Price at any time on or after November 5, 1997.

4.2 Conversion Price. Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Series 4 Class D Preferred Stock shall be the product of the lesser of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by eighty percent (80%) or (ii) U.S. \$1.6875. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 4 Class D Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 4 Class D Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At the time of conversion of shares of the Series 4 Class D Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 4 Class D Preferred Stock so converted divided by the Stock Dividend Price, as defined in Section 3.1 hereof, in effect at the date of conversion.

4.3 Mechanics of Conversion. Any holder of the Series 4 Class D Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 4 Class D Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. No Conversion Notice with respect to any shares of Series 4 Class D Preferred Stock can be given prior to the time such shares of Series 4 Class D Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above, except as provided in Section 4.4. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 4

Class D Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the

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contrary, all shares of Common Stock issuable upon conversion of the Series 4 Class D Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 4 Class D Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion within seven (7) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3 ("Seven (7) Business Day Period"), then, upon the written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 4 Class D Preferred Stock, for payment of the penalty described below in this Section 4.3, which demand must be received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

- 4.4 Merger or Consolidation. In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 4 Class D Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,482,000 shares of Common Stock issuable upon the conversion of the

Series 4 Class D Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the

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holder of each share of Series 4 Class D Preferred Stock then outstanding shall have the right to convert such share of Series 4 Class D Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 4 Class D Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

- 4.4 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Series 4 Class D Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.
- 4.5. Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 4 Class D Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 4 Class D Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 4 Class D Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 4 Class D Preferred Stock immediately before that change.
- 4.6 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 4 Class D Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.
- 4.7 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in

accordance with the terms hereof and prepare and furnish to each holder of Series 4 Class D Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

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- 4.8 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 4 Class D Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 4 Class D Preferred Stock in connection with such conversion.
- 4.9 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 4 Class D Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 4 Class D Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 4 Class D Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.
- 4.10 Fractional Shares. No fractional shares shall be issued upon the conversion of any share or shares of Series 4 Class D Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 4 Class D Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.
- 4.11 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 4 Class D Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.
- 4.12 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

Part 5 - Redemption.

- 5.1 Redemption at Corporation's Option. Except as otherwise

provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from the date of the first issuance of the Series 4 Class D Preferred Stock, the Corporation may, at its sole option, but shall not be

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obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 4 Class D Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four (4) years from the date of the first issuance of Series 4 Class D Preferred Stock - \$1,300 per share, if at any time during such four (4) year period the average of the closing bid price of the Common Stock for ten (10) consecutive trading days shall be in excess of Four U.S. Dollars (\$4.00) per share, and (b) after four (4) years from the date of the first issuance of Series 4 Class D Preferred Stock - \$1,000 per share.

- 5.3 Mechanics of Redemption. Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 4 Class D Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 4 Class D Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 4 Class D Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 4 Class D Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 4 Class D Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first one hundred eighty (180) days from the date of issuance of the Series 4 Class D Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.
- 5.4 Rights of Conversion Upon Redemption. If the redemption occurs after the first one hundred eighty (180) days after the first issuance of Series 4 Class D Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 4 Class D Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 4 Class D Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, such holder shall have the right to convert into Common Stock that number of Series 4 Class D Preferred Stock called for redemption in the Redemption Notice.
- 5.5 Surrender of Certificates. On or before the Redemption Date in respect of any Series 4 Class D Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be

canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed

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(as described below), the Corporation shall cause the Series 4 Class D Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

- 5.6 Payment. On the Redemption Date in respect of any Series 4 Class D Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 4 Class D Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 4 Class D Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

Part 6 - Parity with Other Shares of Series 4 Class D Preferred Stock and Priority.

- 6.1 Rateable Participation. If any cumulative dividends or return of capital in respect of Series 4 Class D Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.
- 6.2 Ranking. For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:
- 6.2.1 Prior or senior to the shares of this Series 4 Class D Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 4 Class D Preferred Stock;

- 6.2.2 On a parity with, or equal to, shares of this Series 4 Class D Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 4 Class C Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 4 Class D Preferred Stock; and,
- 6.2.3 Junior to shares of this Series 4 Class D Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 4 Class D Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

Part 7 - Amendment and Reissue.

- 7.1 Amendment. If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 4 Class D Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 4 Class D Preferred Stock or written consent by the holders of a majority of the Series 4 Class D Preferred Stock then outstanding. Notwithstanding the above or the provisions of the GCL, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242 of the GCL.
- 7.2 Authorized. Any shares of Series 4 Class D Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE FOURTEENTH DAY OF JULY, A.D. 1997, AT 11:15 O'CLOCK A.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244142

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Date: 08-10-98

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CERTIFICATE OF DESIGNATIONS
OF SERIES 5 CLASS E CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 5 Class E Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 5 Class E Convertible Preferred Stock as set forth in the attached resolutions.

Dated: July 3, 1997

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti

ATTEST:

/s/ Richard T. Kelecy

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 5 CLASS E CONVERTIBLE PREFERRED STOCK

WHEREAS, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, and qualifications, limitations or restrictions attaching to the shares of each such series;

WHEREAS, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 5 Class E Convertible Preferred Stock, par value \$.001 per share ("Series 5 Class E Preferred Stock");

NOW, THEREFORE, BE IT RESOLVED, that the Series 5 Class E Convertible Preferred Stock, par value \$.001 (the "Series 5 Class E Preferred Stock") of the Corporation shall consist of three hundred fifty (350) shares and no more and shall be designated as the Series 5 Class E Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 5 Class E Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Voting Rights. Except as otherwise provided in Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 5 Class E Preferred Stock shall have no voting rights whatsoever. To the extent that under Section 242(b)(2) of the GCL the vote of the holders of the Series 5 Class E Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 5 Class E Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 5 Class E Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under Section 242(b)(2) of the GCL the holders of the Series 5 Class E Preferred Stock are entitled to vote on a matter, each share of the Series 5 Class E Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 5 Class E Preferred Stock. Holders of the Series 5 Class E Preferred Stock shall be entitled to notice of (and copies of proxy

materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes. If the holders of the Series 5 Class E Preferred Stock are required to vote under Section 242(b)(2) of the GCL as a result of the number of authorized shares of any such class or classes of stock being increased or decreased, the number of authorized shares of any of such class or classes of stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, irrespective of the provisions of Section 242(b)(2) of the GCL.

1.2 No Preemptive Rights. The Series 5 Class E Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 5 Class E Preferred Stock shall be outstanding, the holders of the then outstanding Series 5 Class E Preferred Stock shall be entitled to receive out of the assets of the Corporation available for distribution to shareholders an amount equal to \$1,000 consideration per outstanding share of Series 5 Class E Preferred Stock, and no more, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board of Directors, before any payment shall be made or any assets distributed to the holders of the Corporation's Common Stock.

2.2 Payment of Liquidation Preferences. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 5 Class E Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 5 Class E Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 5 Class E Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 5 Class E Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are

entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of

Preferred Stock ranking on a parity with the shares of this Series 5 Class E Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 5 Class E Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 5 Class E Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends.

3.1 The holders of the Series 5 Class E Preferred Stock are entitled to receive if, when and as declared by the Board of Directors of the Corporation (the "Board") out of funds legally available therefor, cumulative annual dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 5 Class E Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 5 Class E Preferred Stock shall be \$1,000 per outstanding share of the Series 5 Class E Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1997 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 5 Class E Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 5 Class E Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 5 Class E Preferred Stock. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 5 Class E Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Series 5 Class E Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 5 Class E Preferred Stock shall have been paid or declared and set aside for payment.

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Part 4 - Conversion. The holders of the Series 5 Class E Preferred Stock shall have rights to convert the shares of Series 5 Class E Preferred Stock into shares of the Corporation's Common Stock, as follows (the "Conversion Rights"):

4.1 Right to Convert. The Series 5 Class E Preferred Stock shall be convertible into shares of Common Stock, as follows:

- 4.1.1 Up to one hundred seventy-five (175) shares of Series 5 Class E Preferred Stock may be converted at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after November 3, 1997; and,
- 4.1.2 Up to an additional one hundred seventy-five (175) shares of Series 5 Class E Preferred Stock may be converted at the Conversion Price at any time on or after December 3, 1997.
- 4.2 Conversion Price. Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Series 5 Class E Preferred Stock shall be the product of the lesser of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by eighty percent (80%) or (ii) U.S. \$1.6875. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 5 Class E Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 5 Class E Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At the time of conversion of shares of the Series 5 Class E Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 5 Class E Preferred Stock so converted divided by the Stock Dividend Price, as defined in Section 3.1 hereof, in effect at the date of conversion.
- 4.3 Mechanics of Conversion. Any holder of the Series 5 Class E Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that

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it elects to convert the same (the "Conversion Notice"). No Conversion Notice with respect to any shares of Series 5 Class E Preferred Stock can be given prior to the time such shares of Series 5 Class E Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above, except as provided in Section 4.4. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within seven (7) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 5 Class E Preferred Stock or its agent a certificate for the

number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 5 Class E Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 5 Class E Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received.

- 4.4 Merger or Consolidation. In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 5 Class E Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 200,000 shares of Common Stock issuable upon the conversion of the Series 5 Class E Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 5 Class E Preferred Stock then outstanding shall have the right to convert such share of Series 5 Class E Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 5 Class E Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

- 4.4 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Series 5 Class E Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with

the effectiveness of such event, be proportionately decreased or increased, as appropriate.

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- 4.5. Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 5 Class E Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 5 Class E Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 5 Class E Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 5 Class E Preferred Stock immediately before that change.
- 4.6 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 5 Class E Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.
- 4.7 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 5 Class E Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.
- 4.8 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 5 Class E Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 5 Class E Preferred Stock in connection with such conversion.

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- 4.9 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 5 Class E Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 5 Class E Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 5 Class E Preferred Stock, the Corporation will take such corporate action as may be

necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

- 4.10 Fractional Shares. No fractional shares shall be issued upon the conversion of any share or shares of Series 5 Class E Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 5 Class E Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.
- 4.11 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 5 Class E Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.
- 4.12 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

Part 5 - Redemption.

- 5.1 Redemption at Corporation's Option. Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from the date of the first issuance of the Series 5 Class E Preferred Stock, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 5 Class E Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four (4) years from the date of the first issuance of Series 5 Class E Preferred Stock - \$1,300 per share, if at any time during such four (4) year period the average of the closing bid price of the Common Stock for ten (10) consecutive trading days shall be in excess

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of Four U.S. Dollars (\$4.00) per share, and (b) after four (4) years from the date of the first issuance of Series 5 Class E Preferred Stock - \$1,000 per share.

- 5.3 Mechanics of Redemption. Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 5 Class E Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 5 Class E Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 5 Class E Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place

designated, of a share certificate or share certificates representing the number of Series 5 Class E Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 5 Class E Preferred Stock to be redeemed as provided in this Part 5.

- 5.4 Rights of Conversion Upon Redemption. If the redemption occurs after the first one hundred eighty (180) days after the first issuance of Series 5 Class E Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 5 Class E Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 5 Class E Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof.
- 5.5 Surrender of Certificates. On or before the Redemption Date in respect of any Series 5 Class E Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 5 Class E Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.
- 5.6 Payment. On the Redemption Date in respect of any Series 5 Class E Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 5 Class E Preferred Stock in respect of which the Corporation has received notice from the holder thereof of

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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,

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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 Authorized. 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.

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State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE THIRTEENTH DAY OF NOVEMBER, A.D. 1997, AT 1:30 O'CLOCK P.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244141

2249849 8100

Date: 08-10-98

981311720

CERTIFICATE OF DESIGNATIONS
OF SERIES 6 CLASS F CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 6 Class F Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and

qualifications, limitations and restrictions of such Series 6 Class F Convertible Preferred Stock as set forth in the attached resolutions.

Dated: November 12, 1997

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

Richard T. Kelecy, Secretary

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

RESOLUTION OF THE BOARD OF DIRECTORS

FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,
RESTRICTIONS AND CONDITIONS ATTACHING TO THE
SERIES 6 CLASS F CONVERTIBLE PREFERRED STOCK

WHEREAS, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

WHEREAS, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 6 Class F Convertible Preferred Stock, par value \$.001 per share (the "Series 6 Class F Preferred Stock");

NOW, THEREFORE, BE IT RESOLVED, that the Series 6 Class F Preferred Stock shall consist of two thousand five hundred (2,500) shares and no more and shall be designated as the Series 6 Class F Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 6 Class F Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Voting Rights. Except as otherwise provided in Part 7 hereof or under the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 6 Class F Preferred Stock shall have no voting rights whatsoever. To the extent that under Part 7 hereof or the GCL the vote of the holders of the Series 6 Class F Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of

the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 6 Class F Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 6 Class F Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL or Part 7 hereof, the holders of the Series 6 Class F Preferred Stock are entitled to vote on a matter, each share of the Series 6 Class F Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 6 Class F Preferred Stock. Holders of the Series 6 Class F Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written

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consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 No Preemptive Rights. The Series 6 Class F Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 6 Class F Preferred Stock shall be outstanding, the holders of the then outstanding Series 6 Class F Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 6 Class F Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 Payment of Liquidation Preferences. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 6 Class F Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 6 Class F Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 6 Class F Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the

Corporation available for distribution to the holders of shares of the Series 6 Class F Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 6 Class F Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 6 Class F Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 6 Class F Preferred Stock, ratably, in proportion to the

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full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends. The holders of the Series 6 Class F Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 6 Class F Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 6 Class F Preferred Stock shall be \$1,000 per outstanding share of the Series 6 Class F Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1997 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 6 Class F Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 6 Class F Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from September 16, 1997. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 6 Class F Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Series 6 Class F Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or

declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 6 Class F Preferred Stock shall have been paid or declared and set aside for payment.

Part 4 - Conversion. The holders of the Series 6 Class F Preferred Stock shall have rights to convert the shares of Series 6 Class F Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 Right to Convert. The Series 6 Class F Preferred Stock shall be convertible into shares of Common Stock, as follows:

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4.1.1 Up to one thousand two hundred fifty (1,250) shares of Series 6 Class F Preferred Stock may be converted at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after October 5, 1997; and,

4.1.2 Up to an additional one thousand two hundred fifty (1,250) shares of Series 6 Class F Preferred Stock may be converted at the Conversion Price at any time on or after November 5, 1997.

4.2 Conversion Price. Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 6 Class F Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock for 20 of any 30 consecutive trading days after March 1, 1998 shall be less than \$2.50 as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, the Conversion Price shall thereafter be the product of the lesser of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by eighty percent (80%) or (ii) \$1.8125. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 6 Class F Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 6 Class F Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 6 Class F Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option,

in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 6 Class F Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

4.3 Mechanics of Conversion. Any holder of the Series 6 Class F Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 6 Class F Preferred Stock are being held in escrow by the

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Corporation's attorneys, no delivery of the certificates shall be required. No Conversion Notice with respect to any shares of Series 6 Class F Preferred Stock can be given prior to the time such shares of Series 6 Class F Preferred Stock are eligible for conversion in accordance with the provision of Section 4.1 above, except as provided in Section 4.4. Any such premature Conversion Notice shall automatically be null and void. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 6 Class F Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 6 Class F Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 6 Class F Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion within seven (7) business days after

receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3 ("Seven (7) Business Day Period"), then, upon the written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 6 Class F Preferred Stock, for payment of the penalty described below in this Section 4.3, which demand must be received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

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4.4 Merger or Consolidation. In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 6 Class F Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,379,500 shares of Common Stock issuable upon the conversion of the Series 6 Class F Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 6 Class F Preferred Stock then outstanding shall have the right to convert such share of Series 6 Class F Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 6 Class F Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to

adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

4.5 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Series 6 Class F Preferred Stock are issued and outstanding shall declare or pay, without consideration,

any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

4.6 Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 6 Class F Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 6 Class F Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 6 Class F Preferred Stock would otherwise have been entitled to receive, a number of shares of such other

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class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 6 Class F Preferred Stock immediately before that change.

4.7 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 6 Class F Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.8 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 6 Class F Preferred Stock a notice setting forth such

adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 6 Class F Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 6 Class F Preferred Stock in connection with such conversion.

4.10 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available

out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 6 Class F Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 6 Class F Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 6 Class F Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.11 Fractional Shares. No fractional shares shall be issued upon the conversion of any share or shares of Series 6 Class F Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 6 Class F Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion

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would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.12 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 6 Class F Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.13 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

Part 5 - Redemption.

5.1 Redemption at Corporation's Option. Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from June 9, 1997, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 6 Class F Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four years from June 9, 1997 - \$1,300 per share, if at any time during such four year period the average of the closing bid price of the Common Stock for ten consecutive trading days shall be in excess of Four Dollars (\$4.00) per share, and (b) after four years from June 9, 1997 - \$1,000 per share.

5.2 Mechanics of Redemption. Thirty days prior to any date stipulated by the Corporation for the redemption of Series 6 Class F Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 6 Class F Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 6 Class F Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 6 Class F Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 6 Class F Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first 180 days from the date of issuance of the Series 6 Class F Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.3 Rights of Conversion Upon Redemption. If the redemption occurs after the first 180 days after the first issuance of Series 6 Class F Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 6 Class F Preferred Stock shall have the option,

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at its sole election, to specify what portion of its Series 6 Class F Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, such holder shall have the right to convert into Common Stock that number of Series 6 Class F Preferred Stock called for redemption in the Redemption Notice.

5.4 Surrender of Certificates. On or before the Redemption Date in respect of any Series 6 Class F Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 6 Class F Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

5.5 Payment. On the Redemption Date in respect of any Series 6 Class F Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as

a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 6 Class F Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 6 Class F Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

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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.

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Part 7 - Amendment and Reissue.

7.1 Amendment. If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 6 Class F Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 6 Class F Preferred Stock or written consent by the holders of a majority of the Series 6 Class F Preferred Stock then outstanding. Notwithstanding the above or the provisions of the GCL, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242 of the GCL.

7.2 Authorized. Any shares of Series 6 Class F Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE THIRTEENTH DAY OF NOVEMBER, A.D. 1997, AT 1:31 O'CLOCK P.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244140

2249849 8100

Date: 08-10-98

981311720

CERTIFICATE OF DESIGNATIONS
OF SERIES 7 CLASS G CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 7 Class G Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 7 Class G Convertible Preferred Stock as set forth in the attached resolutions.

Dated: November 12, 1997

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis F. Centofanti

Dr. Louis F. Centofanti

ATTEST:

/s/ Richard T. Kelecy

Richard T. Kelecy, Secretary

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

RESOLUTION OF THE BOARD OF DIRECTORS

FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,
RESTRICTIONS AND CONDITIONS ATTACHING TO THE
SERIES 7 CLASS G CONVERTIBLE PREFERRED STOCK

WHEREAS, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

WHEREAS, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 7 Class G Convertible Preferred Stock, par value \$.001 per share (the "Series 7 Class G Preferred Stock");

NOW, THEREFORE, BE IT RESOLVED, that the Series 7 Class G Preferred Stock shall consist of three hundred (350) shares and no more and shall be designated as the Series 7 Class G Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 7 Class G Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Voting Rights. Except as otherwise provided in Section 242(b)(2) of 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 Section 242(b)(2) of 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 Section 242(b)(2) of the GCL 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. If the holders of the Series 7 Class G 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.

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1.2 No Preemptive Rights. The Series 7 Class G Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 7 Class G Preferred Stock shall be outstanding, the holders of the then outstanding Series 7 Class G Preferred Stock shall 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 7 Class G 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 7 Class G Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 7 Class G Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 7 Class G Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 7 Class G Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 7 Class G Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 7 Class G Preferred Stock

and shares of such other class or series ranking on a parity with the shares of this Series 7 Class G Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends.

3.1 The holders of the Series 7 Class G Preferred Stock are entitled to receive if, when and as declared by the Board of

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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 7 Class G Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 7 Class G Preferred Stock shall be \$1,000 per outstanding share of the Series 7 Class G Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1997 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 7 Class G Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 7 Class G Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 7 Class G Preferred Stock. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 7 Class G Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid, and the denominator of which is 365. Dividends on the Series 7 Class G Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 7 Class G Preferred Stock shall have been paid or declared and set aside for payment.

Part 4 - Conversion. The holders of the Series 7 Class G Preferred Stock shall have rights to convert the shares of Series 7 Class G Preferred Stock into shares of the Corporation's Common Stock, as follows (the "Conversion Rights"):

4.1 Right to Convert. The Series 7 Class G Preferred Stock shall be convertible into shares of Common Stock, as follows:

4.1.1 Up to one hundred seventy-five (175) shares of Series 7 Class G Preferred Stock may be converted

at the Conversion Price (as that term is defined in Section 4.2 below) at any time on or after November 3, 1997; and,

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4.1.2 Up to an additional one hundred seventy-five (175) shares of Series 7 Class G Preferred Stock may be converted at the Conversion Price at any time on or after December 3, 1997.

4.2 Conversion Price. Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 7 Class G Preferred Stock shall be \$1.8125 except that, in the event the average closing bid price per share of the Common Stock for 20 of any 30 consecutive trading days (a "30 Day Period") 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 and if the holders of the Series 7 Class G Preferred Stock have engaged in no sales of Common Stock of the Company during, and for 30 trading days prior to, the applicable 30 Day Period, the Conversion Price shall thereafter be the product of the lesser of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by eighty percent (80%) or (ii) \$1.8125. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 7 Class G Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 7 Class G Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 7 Class G Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 7 Class G Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

4.5 Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 7 Class G Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect 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.

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- 4.6 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 7 Class G Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.
- 4.7 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 7 Class G Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.
- 4.8 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 7 Class G Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 7 Class G Preferred Stock in connection with such conversion.
- 4.9 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 7 Class G Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 7 Class G Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 7 Class G Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.
- 4.10 Fractional Shares. No fractional shares shall be issued upon the conversion of any share or shares of Series 7 Class G Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 7 Class G Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.11 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 7 Class G Preferred Stock shall be deemed given if deposited in the

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United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.12 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

Part 5 - Redemption.

5.1 Redemption at Corporation's Option. Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from the date of the first issuance of the Series 7 Class G 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 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 (4) years from the date of the first issuance of Series 7 Class G 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 7 Class G 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 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.

5.4 Rights of Conversion Upon Redemption. If the redemption occurs after the first one hundred eighty (180) days after the first issuance of Series 7 Class G Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 7 Class G Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 7 Class G Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary,

such holder shall have the right to convert into Common Stock that number of Series 7 Class G Preferred Stock called for redemption in the Redemption Notice.

5.5 Surrender of Certificates. On or before the Redemption Date in respect of any Series 7 Class G Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 7 Class G Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

5.6 Payment. On the Redemption Date in respect of any Series 7 Class G Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least 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 7 Class G Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 7 Class G Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

Part 6 - Parity with Other Shares of Series 7 Class G Preferred Stock and Priority.

6.1 Rateable Participation. If any cumulative dividends or return of capital in respect of Series 7 Class G Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

6.2 Ranking. For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

- 6.2.1 Prior or senior to the shares of this Series 7 Class G Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 7 Class G Preferred Stock;
- 6.2.2 On a parity with, or equal to, shares of this Series 7 Class G Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 7 Class G Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 7 Class G Preferred Stock; and,
- 6.2.3 Junior to shares of this Series 7 Class G Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 7 Class G Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

Part 7 - Amendment and Reissue.

- 7.1 Amendment. If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 7 Class G Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 7 Class G Preferred Stock 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.

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State of Delaware
Office of the Secretary of State

Page 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE TWENTY-SIXTH DAY OF NOVEMBER, A.D. 1997, AT 10 O'CLOCK A.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244139

2249849 8100

Date: 08-10-98

981311720

CERTIFICATE OF ELIMINATION
OF
SERIES 4 CLASS D CONVERTIBLE PREFERRED STOCK
AND
SERIES 5 CLASS E CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

PERMA-FIX ENVIRONMENTAL SERVICES, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (hereinafter called the "Corporation"), hereby certifies the following:

1. That the Certificate of Designations of Series 4 Class D Convertible Preferred Stock of the Corporation (the "Series 4 Preferred") was filed on June 11, 1997 (the "Series 4 Certificate of Designations").

2. That all outstanding shares of the Series 4 Preferred have been delivered to the Company and exchanged upon agreement with the holder thereof pursuant to the terms and conditions of a certain Exchange Agreement between the Company and RBB Bank Aktiengesellschaft, dated effective as of September 16, 1997.

3. That no shares of Series 4 Preferred remain outstanding.

4. That all shares of the Series 4 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

5. That effective September 16, 1997, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 4 Class D Convertible Preferred Stock, no authorized shares of Series 4 Class D Convertible Preferred Stock will remain outstanding and no shares of Series 4 Class D Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 4 Class D Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to

the Secretary of State of Delaware regarding the Series 4 Class D Convertible Preferred Stock.

6. That the Certificate of Designations of the Series 5 Class E Convertible Preferred Stock of the Corporation (the "Series 5 Preferred") was filed on July 14, 1997 (the "Series 5 Certificate of Designations").

7. That all outstanding shares of the Series 5 Preferred have been delivered to the Company and exchanged upon agreement with the holder thereof pursuant to the terms and conditions of a certain Exchange Agreement between the Company and The Infinity Fund, L.P., dated effective as of September 16, 1997.

8. That no shares of Series 5 Preferred remain outstanding.

9. That all shares of the Series 5 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

10. That effective September 16, 1997, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 5 Class E

Convertible Preferred Stock, no authorized shares of Series 5 Class E Convertible Preferred Stock will remain outstanding and no shares of Series 5 Class E Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 5 Class E Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 5 Class E Convertible Preferred Stock.

11. That pursuant to the provisions of Section 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.

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IN WITNESS WHEREOF, this Certificate of Elimination has been executed this 20th day of November, 1997, by the President of the Company.

ATTEST: PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

/s/ Richard T. Kelecy

By /s/ Louis Centofanti

Richard T. Kelecy, Secretary

Dr. Louis F. Centofanti,
President

(SEAL)

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State of Delaware
Office of the Secretary of State

Page 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE TENTH DAY OF JULY, A.D. 1998, AT 12 O'CLOCK P.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244138

2249849 8100

Date: 08-10-98

981311720

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 of Shares of Common Stock of Series 10 Class J Convertible Preferred Stock

The Corporation hereby authorizes the issuance of up to 3,000 (three thousand,) shares of Series 10 Class J Convertible Preferred Stock par value \$.001 per share (the "Preferred Stock"). This Preferred Stock shall pay an annual dividend based on a 365 day calendar year of 4% of the Liquidation Value (as defined in Section 3 hereof) ("Dividend Rate"), payable semiannually within ten (10) business days after each subsequent June 30th and December 31st (each a "Dividend Declaration Date"), and shall be payable in cash or shares of the Corporation's par value \$.001 per share common stock (Common Stock) at the Corporation's option. The first Dividend Declaration Date shall be December 31st, 1998.

In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on the outstanding shares of Preferred Stock in Common Stock of the Corporation, the Holder of each share of Preferred Stock shall receive that number of shares of Common Stock equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated

Quotation system ("NASDAQ"), or if the Common Stock is not listed

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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

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where said liquidation payments shall be payable, shall be given by mail, postage prepaid or by telex or facsimile to non-U.S. residents, not less than 10 days prior to the payment date stated

therein, to the Holders of record of Preferred Stock, such notice to be addressed to each such Holder at its address as shown by the records of the Corporation. For purposes hereof the shares of Common Stock, shall rank on liquidation junior to the Preferred Stock.

4. Restrictions.

The Corporation will not amend or modify the terms of its Restated Certificate of Incorporation so as to adversely alter or change the Preferred Stock at any time when shares of Preferred Stock are outstanding, without the approval of the Holders of at least a majority of the then outstanding shares of Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a series, except where the vote or written consent of the Holders of a greater number of shares of Common Stock of the Corporation is required by law or by the Corporation's Certificate of Incorporation, as amended.

5. Optional Conversion.

The Holders of shares of Preferred Stock shall have the following conversion rights to convert the shares of Preferred Stock into shares of Common Stock of the Corporation:

(a) Conversion Dates, The Holder of any share or shares of Preferred Stock may convert cumulatively any of such Preferred Stock at any time subsequent to 180 days after the Closing Date.

(b) Right to Convert; Conversion Price. Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Preferred Stock shall be One Dollar and 875/1000 (\$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

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shall be determined by dividing (a) the aggregate Stated Value of the Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect on the date of that particular Conversion Notice relating to such conversion. At the time of conversion of shares of the Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon on the shares of Preferred so converted to the date of the Conversion Notice relating to such conversion, or, at the Corporation's option, in

lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of the Conversion Notice relating to such conversion of the shares of Preferred Stock so converted divided by the Stock Dividend Price, in effect at the date of the Conversion Notice relating to such conversion.

(c) Conversion Notice. The right of conversion shall be exercised by the Holder thereof by telecopying or faxing an executed and completed written notice signed by an authorized representative of the Holder, ("Conversion Notice") to the Corporation that the Holder elects to convert a specified number of shares of Preferred Stock representing a specified Stated Value thereof into shares of Common Stock and by delivering by express courier the certificate or certificates of Preferred Stock being converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the Holders of the Preferred Stock). The business date indicated on a Conversion Notice which is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a Conversion Date. The Conversion Notice shall include therein the Stated Value of shares of Preferred Stock to be converted, and a calculation (a) of the Stock Dividend Price, (b) the Conversion Price, and (c) the number of Shares of Common Stock to be issued in connection with such conversion. The Corporation shall have the right to review the calculations included in the Conversion Notice, and shall provide notice of any discrepancy or dispute therewith within three (3) business days of the receipt thereof. The Holder shall deliver to the Corporation an original Conversion Notice and the original Preferred to be converted within three (3) business days from the date of the Conversion Notice.

(d) Issuance of Certificates - Time Conversion Effected. Promptly, but in no event more than six (6) business days, after the receipt by facsimile of the Conversion Notice referred to in Subparagraph (5)(c); and provided within the six (6) business days the Corporation receives the certificate or certificates for the shares of Preferred Stock to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the Holder, registered in the name of the Holder, a certificate or certificates for the number of whole shares of Common Stock into which such shares of Preferred Stock are converted. Such conversion shall be deemed to have been effected as of the close of business on the date on which the telecopy or facsimile Conversion Notice shall have been received by the Corporation, and the rights of the Holder of such share or shares of Preferred Stock shall cease, at such time, and the Holder or Holders shall be deemed to have become the Holder or Holders of record of the shares of Common Stock represented thereby.

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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

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Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 5.

In the event of a Merger or Sale, where the Corporation is not the surviving Corporation, the Holder shall have the right to redeem all of the outstanding shares of Preferred Stock at 120% of the Liquidation Value of each share of Preferred Stock then outstanding plus all accrued and unpaid dividends (the "Redemption Amount"). The Corporation shall pay this Redemption Amount in cash within ten (10) business days of receipt by the Corporation of notice from the Holder, and receipt by the Corporation of all outstanding shares of

Preferred Stock duly endorsed by the Holder to the Corporation.

(g) Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Preferred Stock are issued and outstanding shall declare or pay, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

(h) Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of Common Stock of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination 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.

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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

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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 does not obtain Shareholder Approval within ninety (90) days of the earlier of the Corporation's receipt of (i) the Current Conversion Notice or (ii) the Holder's Notice, and the Holder has not breached its covenant to vote all shares of Common Stock over which they have voting control in favour of Shareholder Approval, the Corporation shall pay in cash to the Holder liquidated damages, in an amount of 4% per month of the Liquidation Value of each share of Preferred Stock then outstanding, commencing on the 91st day of the Corporation's receipt of the Holder's Current Conversion Notice, and continuing every thirty (30) days pro-rata until such time the Corporation receives Shareholder Approval.

8. No Reissuance of Series 10 Class J Convertible Preferred Stock.

Shares of Preferred Stock which are converted into shares of Common Stock as provided herein shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred stock hereafter created.

9. Closing of Books.

The Corporation will at no time close its transfer books against the transfer of any Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of

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Common Stock of Preferred Stock in any manner which interferes with the timely conversion of such Preferred Stock, except as may otherwise be required to comply with applicable securities laws.

10. No Preemptive Rights.

The Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

11. Definition of Shares.

As used in this Certificate of Designations, the term "shares of Common Stock" shall mean and include the Corporation's authorized common stock, par value \$.001, as constituted on the date of filing of these terms of the Preferred Stock, or in case of any reorganization, reclassification, or stock split of the outstanding shares of Common Stock thereof, the stock, securities or assets provided for hereof. The term "Warrants" as used herein shall have the same meaning as defined in Section 1 of the Private Securities Subscription Agreement, dated June 30th 1998, between the Company and RBB Bank Aktiengesellschaft.

The said determination of the designations, preferences and relative, participating, optional or other rights, and the qualifications, limitations or restrictions thereof, relating to the Preferred Stock was duly made by the Board of Directors pursuant to the provisions of the Corporation's Restated

Certificate of Incorporation and in accordance with the provisions
of the Delaware General Corporation Law.

IN WITNESS HEREOF, this Certificate of Designations has been
signed by:

Dr. Louis F. Centofanti, President on this 30th day of June,
1998.

/s/ Louis Centofanti

President, Perma-Fix Environmental Services, Inc.

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

/s/ Richard T. Kelecy

Secretary, Perma-Fix Environmental Services, Inc.

;9

State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF
DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY
OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL
SERVICES, INC.," FILED IN THIS OFFICE ON THE SIXTEENTH DAY OF JULY,
A.D. 1998, AT 1:30 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244137

2249849 8100

Date: 08-10-98

981311720

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 Section 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.

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IN WITNESS WHEREOF, this Certificate of Elimination has been executed this 30th day of April, 1998, by the President of the Company.

ATTEST: PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

/s/ Richard T. Kelecy

By /s/ Louis Centofanti

Richard T. Kelecy, Secretary

Dr. Louis F. Centofanti,
President

(SEAL)

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE SIXTEENTH DAY OF JULY, A.D. 1998, AT 1:31 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244136

2249849 8100

Date: 08-10-98

981311720

CERTIFICATE OF DESIGNATIONS
OF SERIES 8 CLASS H CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 8 Class H Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 8 Class H Convertible Preferred Stock as set forth in the attached resolutions.

Dated: April 30, 1998

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

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 best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 8 Class H Convertible Preferred Stock, par value \$.001 per share (the "Series 8 Class H Preferred Stock");

NOW, THEREFORE, BE IT RESOLVED, that the Series 8 Class H Preferred Stock shall consist of two thousand five hundred (2,500) shares and no more and shall be designated as the Series 8 Class H Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 8 Class H Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Voting Rights. Except as otherwise provided in Part 7 hereof or under Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 8 Class H Preferred Stock shall have no voting rights whatsoever. To the extent that under Section 242(b)(2) of the GCL or Part 7 hereof, the holders of the Series 8 Class H Preferred Stock are entitled to vote on a matter, each share of the Series 8 Class H Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 8 Class H Preferred Stock. Holders of the Series 8 Class H Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 No Preemptive Rights. The Series 8 Class H Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 8 Class H Preferred Stock shall be outstanding, the holders of the then outstanding Series 8 Class H Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 8 Class H Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 Payment of Liquidation Preferences. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 8 Class H Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 8 Class H Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 8 Class H Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 8 Class H Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 8 Class H Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 8 Class H Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 8 Class H Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends. The holders of the Series 8 Class H Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%)

per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 8 Class H Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 8 Class H Preferred Stock shall be \$1,000 per outstanding share of the Series 8 Class H Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing June 30, 1998 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 8 Class H Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 8 Class H Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from March 1, 1998. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 8 Class H Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid and the denominator of which is 365. Dividends on the Series 8 Class H Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 8 Class H Preferred Stock shall have been paid or declared and set aside for payment.

Part 4 - Conversion. The holders of the Series 8 Class H Preferred Stock shall have rights to convert the shares of Series 8 Class H Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 Right to Convert. The Series 8 Class H Preferred Stock shall be convertible into shares of Common Stock at any time.

4.2 Conversion Price. Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 8 Class H Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days prior to the particular date of conversion

shall be less than \$2.265, the Conversion Price for only such particular conversion shall be the product of the average closing bid quotation of the Common Stock as

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reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below in connection with such conversion multiplied by eighty percent (80%). Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 8 Class H Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 8 Class H Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 8 Class H Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 8 Class H Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

4.3 Mechanics of Conversion. Any holder of the Series 8 Class H Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 8 Class H Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 8 Class H Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 8 Class H Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the

shares of Series 8 Class H Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice)

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(the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion of the Series 8 Class H Preferred Stock within seven (7) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3 ("Seven (7) Business Day Period"), then, upon the written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 8 Class H Preferred Stock, for payment of the penalty described below in this Section 4.3, which demand must be received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

4.4 Merger or Consolidation. In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 8 Class H Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,379,311 shares of Common Stock issuable upon the conversion of the Series 8 Class H Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 8

Class H Preferred Stock then outstanding shall have the right to convert such share of Series 8 Class H Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 8 Class H Preferred Stock could have been converted into

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immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

- 4.5 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Series 8 Class H Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.
- 4.6 Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 8 Class H Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 8 Class H Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 8 Class H Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 8 Class H Preferred Stock immediately before that change.
- 4.7 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 8 Class H Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.
- 4.8 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series

8 Class H Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

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- 4.9 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 8 Class H Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 8 Class H Preferred Stock in connection with such conversion.
- 4.10 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 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 Fractional Shares. 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 Notices. 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.

- 5.1 Redemption at Corporation's Option. Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from June 9, 1997, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole

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or in part, at any time, and from time to time, the then outstanding Series 8 Class H Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four years from June 9, 1997 - \$1,300 per share, if at any time during such four year period the average of the closing bid price of the Common Stock for ten consecutive trading days shall be in excess of Four Dollars (\$4.00) per share, and (b) after four years from June 9, 1997 - \$1,000 per share.

- 5.2 Mechanics of Redemption. Thirty days prior to any date stipulated by the Corporation for the redemption of Series 8 Class H Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 8 Class H Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 8 Class H Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 8 Class H Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 8 Class H Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first 180 days from the date of issuance of the Series 8 Class H Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

- 5.3 Rights of Conversion Upon Redemption. If the redemption occurs after the first 180 days after the first issuance of Series 8 Class H Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 8 Class H Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 8 Class H Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, such holder shall have the right to convert into Common Stock that number of Series 8 Class H Preferred Stock called for redemption in the Redemption Notice.

- 5.4 Surrender of Certificates. On or before the Redemption Date in respect of any Series 8 Class H Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in

Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not

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being redeemed (as described below), the Corporation shall cause the Series 8 Class H Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

- 5.5 Payment. On the Redemption Date in respect of any Series 8 Class H Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 8 Class H Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 8 Class H Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

Part 6 - Parity with Other Shares of Series 8 Class H Preferred Stock and Priority.

- 6.1 Rateable Participation. If any cumulative dividends or return of capital in respect of Series 8 Class H Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.
- 6.2 Ranking. For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:
- 6.2.1 Prior or senior to the shares of this Series 8 Class H Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of

dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 8 Class H Preferred Stock;

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6.2.2 On a parity with, or equal to, shares of this Series 8 Class H Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 8 Class H Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 8 Class H Preferred Stock; and,

6.2.3 Junior to shares of this Series 8 Class H Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 8 Class H Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

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Part 7 - Amendment and Reissue.

7.1 Amendment. If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 8 Class H Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 8 Class H Preferred Stock or written consent by the holders of a majority of the Series 8 Class H Preferred Stock then outstanding. Notwithstanding the above or the provisions of Section 242(b)(2) of the GCL, the number of authorized shares of

any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242(b)(2) of the GCL.

7.2 Authorized. Any shares of Series 8 Class H Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

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State of Delaware
Office of the Secretary of State

Page 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE SIXTEENTH DAY OF JULY, A.D. 1998, AT 1:32 O'CLOCK P.M.

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9244135

2249849 8100

Date: 08-10-98

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CERTIFICATE OF DESIGNATIONS
OF SERIES 9 CLASS I CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of

Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 9 Class I Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 9 Class I Convertible Preferred Stock as set forth in the attached resolutions.

Dated: April 30, 1998

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

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 9 CLASS I CONVERTIBLE PREFERRED STOCK

WHEREAS, the Corporation's capital includes preferred stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

WHEREAS, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 9 Class I Convertible Preferred Stock, par value \$.001 per share (the "Series 9 Class I Preferred Stock");

NOW, THEREFORE, BE IT RESOLVED, that the Series 9 Class I Preferred Stock shall consist of three hundred (350) shares and no more and shall be designated as the Series 9 Class I Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 9 Class I Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Voting Rights. Except as otherwise provided in Part 7 hereof or under Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 9 Class I Preferred Stock shall have no voting rights whatsoever. To the extent that under Section 242(b)(2) of the GCL or Part 7 hereof, the holders of the Series 9 Class I Preferred Stock are entitled to vote on a matter, each share of the Series 9 Class I Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 9 Class I Preferred Stock. Holders of the Series 9 Class I Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes. If the holders of the Series 9 Class I Preferred Stock are required to vote under Section 242(b)(2) of the GCL as a result of the number of authorized shares of any such class or classes of stock being increased or decreased, the number of authorized shares of any of such class or classes of stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, irrespective of the provisions of Section 242(b)(2) of the GCL.

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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 on any assets distributed to the holders of the Corporation's Common Stock.

2.2 Payment of Liquidation Preferences. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 9 Class I Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 9 Class I Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 9 Class I Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 9 Class I Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 9 Class I Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 9 Class I Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 9 Class I Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends.

3.1 The holders of the Series 9 Class I Preferred Stock are entitled to receive if, when and as declared by the Board of Directors of the Corporation (the "Board") out of funds legally

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available therefor, cumulative annual dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 9 Class I Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 9 Class I Preferred Stock shall be \$1,000 per outstanding share of the Series 9 Class I Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing June 30, 1998 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 9 Class I Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 9 Class I Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from March 1, 1998. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 9 Class I Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid and the denominator of which is 365. Dividends on the Series 9 Class I Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 9 Class I Preferred Stock shall have been paid or declared and set

aside for payment.

Part 4 - Conversion. The holders of the Series 9 Class I Preferred Stock shall have rights to convert the shares of Series 9 Class I Preferred Stock into shares of the Corporation's Common Stock, as follows (the "Conversion Rights"):

4.1 Right to Convert. The Series 9 Class I Preferred Stock shall be convertible into shares of Common Stock at any time.

4.2 Conversion Price. Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 9 Class I Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days prior to the particular date of conversion shall be less than \$2.265, the Conversion Price for only such particular conversion shall be the product of the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below in connection with such conversion multiplied by eighty

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percent (80%). Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$.75 per share ("Minimum Conversion Price"), which Minimum Conversion Price shall be eliminated from and after September 6, 1998. If any of the outstanding shares of Series 9 Class I Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 9 Class I Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 9 Class I Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 9 Class I Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

4.3 Mechanics of Conversion. Any holder of the Series 9 Class I Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). The Corporation shall, within seven (7) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 9 Class I Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the

holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 9 Class I Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of Series 9 Class I Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received.

- 4.4 Merger or Consolidation. In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation

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(collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 9 Class I Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 200,000 shares of Common Stock issuable upon the conversion of the Series 9 Class I Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 9 Class I Preferred Stock then outstanding shall have the right to convert such share of Series 9 Class I Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 9 Class I Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

- 4.5 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Series 9 Class I Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased

or increased, as appropriate.

4.6 Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 9 Class I Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 9 Class I Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 9 Class I Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 9 Class I Preferred Stock immediately before that change.

4.7 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 9 Class I Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

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4.8 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 9 Class I Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 9 Class I Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 9 Class I Preferred Stock in connection with such conversion.

4.10 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 9 Class I Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 9 Class I Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 9 Class I Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of

Incorporation.

- 4.11 Fractional Shares. No fractional shares shall be issued upon the conversion of any share or shares of Series 9 Class I Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 9 Class I Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.
- 4.12 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 9 Class I Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.
- 4.13 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

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Part 5 - Redemption.

- 5.1 Redemption at Corporation's Option. Except as otherwise provided in this Section 5.1, at any time, and from time to time, after the expiration of one (1) year from the date of the first issuance of the Series 9 Class I Preferred Stock, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 9 Class I Preferred Stock at the following cash redemption prices per share (the "Redemption Price") if redeemed during the following periods: (a) within four (4) years from the date of the first issuance of Series 9 Class I Preferred Stock - \$1,300 per share, if at any time during such four (4) year period the average of the closing bid price of the Common Stock for ten (10) consecutive trading days shall be in excess of Four U.S. Dollars (\$4.00) per share, and (b) after four (4) years from the date of the first issuance of Series 9 Class I Preferred Stock - \$1,000 per share.
- 5.2 Mechanics of Redemption. Thirty (30) days prior to any date stipulated by the Corporation for the redemption of Series 9 Class I Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 9 Class I Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 9 Class I Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 9 Class I Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 9 Class I Preferred Stock to be redeemed as provided in this Part 5.
- 5.3 Rights of Conversion Upon Redemption. If the redemption

occurs after the first one hundred eighty (180) days after the first issuance of Series 9 Class I Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 9 Class I Preferred Stock shall have the option, at its sole election, to specify what portion of its Series 9 Class I Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof.

- 5.4 Surrender of Certificates. On or before the Redemption Date in respect of any Series 9 Class I Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 9 Class I Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

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- 5.5 Payment. On the Redemption Date in respect of any Series 9 Class I Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 9 Class I Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 9 Class I Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

Part 6 - Parity with Other Shares of Series 9 Class I Preferred Stock and Priority.

- 6.1 Rateable Participation. If any cumulative dividends or return of capital in respect of Series 9 Class I Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of

accumulated dividends and return of capital.

6.2 Ranking. For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 9 Class I Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 9 Class I Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 9 Class I Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 9 Class I Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates

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or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 9 Class I Preferred Stock; and,

6.2.3 Junior to shares of this Series 9 Class I Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 9 Class I Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

Part 7 - Reissue.

7.1 Authorized. Any shares of Series 9 Class I Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE FIFTEENTH DAY OF JULY, A.D. 1999, AT 12:30 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9867930

2249849 8100

Date: 07-16-99

991291288

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
INC.

PERMA-FIX ENVIRONMENTAL SERVICES,

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

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.

1.1 Voting Rights. Except as otherwise provided herein, in the Corporation's Certificate of Incorporation (the "Articles") or the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 11 Class K Preferred Stock shall have no voting rights whatsoever. To the extent that under the GCL the vote of the holders of the Series 11 Class K Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 11 Class K Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 11 Class K Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such

action by the series. To the extent that under the GCL the holders of the Series 11 Class K Preferred Stock are entitled to vote on a matter with holders of Corporation's Common Stock and/or any other class or series of the Corporation's voting securities, the Series 11 Class K Preferred Stock, the Corporation's Common Stock and all other classes or series of the Corporation's voting securities shall vote together as one class, with each share of Series 11 Class K Preferred Stock entitled to a number of votes equal to the number of shares of the Corporation's Common Stock into which it is then convertible using the record date for the taking of such vote of stockholders as the date as of which the Conversion Price (as defined in Section 4.2 hereof) is calculated and conversion is effected. Holders of the Series 11 Class K Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 No Preemptive Rights. The Series 11 Class K Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 11 Class K Preferred Stock shall be outstanding, the holders of the then outstanding Series 11 Class K Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 11 Class K Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 Payment of Liquidation Preferences. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 11 Class K Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 11 Class K Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 11 Class K Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 11 Class K Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be

insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made

on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 11 Class K Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 11 Class K Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 11 Class K Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends.

3.1 The holders of the Series 11 Class K Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), at the Corporation's election, at the rate of six percent (6%) per annum of the Liquidation Value of the Series 11 Class K Preferred Stock. The Liquidation Value of the Series 11 Class K Preferred Stock shall be \$1,000.00 per share (the "Dividend Rate"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1996 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 11 Class K Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from the date of issuance of the Series 11 Class K Preferred Stock. In the event that the Corporation elects to pay dividends in Common Stock of the Corporation, each holder of the Series 11 Class K Preferred Stock shall receive shares of Common Stock of the Corporation equal to the quotient of (i) the Dividend Rate in effect on the applicable Dividend Declaration Date dividend by (ii) the average of the closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"). Dividends on the Series 11 Class K Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 11 Class K Preferred Stock shall have been paid or declared and set aside for payment.

Part 4 - Conversion. The holders of the Series 11 Class K Preferred Stock shall have rights to convert the shares of Series 11 Class K Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 No Right to Convert. The Series 11 Class K Preferred shall not be convertible into shares of Common Stock until after July 15, 2000.

4.2 Right to Convert. The Series 11 Class K Preferred Stock may be convertible into shares of Common Stock at any time on or after July 15, 2000.

4.3 Conversion Price. As used herein, the term Conversion Price shall be the product of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the

closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below multiplied by (ii) seventy-five percent (75%), subject to the provisions of this Section 4.3. Notwithstanding the foregoing, the Conversion Price shall not be (i) less than a minimum of \$1.50 per share for a period of twenty-four (24) months from the date of issuance of the Series 11 Class K Preferred Stock, or, after twenty-four (24) months from the date of issuance of the Series 11 Class K Preferred Stock, a minimum of \$.50 per share (as applicable, the "Minimum Conversion Price") or (ii) more than a maximum of \$1.50 per share ("Maximum Conversion Price"). If, after July 1, 1996, the Corporation sustains a net loss, on a consolidated basis, in each of two (2) consecutive quarters, as determined under generally accepted accounting principles, the Minimum Conversion Price shall be reduced \$.25 a share, but there shall be no change to, or reduction of, the Maximum Conversion Price. For the purpose of determining whether the Corporation has had a net loss in each of two (2) consecutive quarters, at no time shall a quarter that has already been considered in such determination be considered in any subsequent determination (as an example the third quarter of 1996 in which there is a net profit and the fourth quarter of 1996 in which there is a net loss shall be considered as two consecutive quarters, and, as a result, the fourth quarter of 1996 shall not be considered along with the first quarter of 1997 as two (2) consecutive quarters, but the first quarter of 1997 must be considered with the second quarter of 1997 for the purposes of such determination). For the purposes of this Section 4.2, a "quarter" is a three (3) month period ending on March 31, June 30, September 30, and December 31. If any of the outstanding shares of Series 11 Class K Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 11 Class K Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At the time of conversion of shares of the Series 11 Class K Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the product of dividing the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 11 Class K Preferred Stock so converted by the Conversion Price in effect at the date of conversion.

4.4 Mechanics of Conversion. Any holder of the Series 11 Class K Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the

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"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

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be deemed to have made a dividend payable in Common Stock in an amount of shares equal to the maximum number of shares issuable upon exercise of such rights to acquire Common Stock.

4.6. Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 11 Class K Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital

reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 11 Class K Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 11 Class K Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 11 Class K Preferred Stock immediately before that change.

4.7 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 11 Class K Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.8 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 11 Class K Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 11 Class K Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 11 Class K Preferred Stock in connection with such conversion.

4.10 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 11 Class K Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 11 Class K Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 11 Class K Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

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4.11 Fractional Shares. No fractional share shall be issued upon the conversion of any share or shares of Series 11 Class K Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 11 Class K Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of

Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.12 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 11 Class K Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.13 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or permitted to close.

Part 5 - Redemption.

5.1 Redemption at Corporation's Option. Except as otherwise provided in this Section 5.1, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 11 Class K Preferred Stock at the following cash redemption prices if redeemed during the following periods: (i) within one year from July 15, 1999 - \$1,100 per share, and (ii) after one year from July 15, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

5.2 Mechanics of Redemption. Prior to any date stipulated by the Corporation for the redemption of Series 11 Class K Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 11 Class K Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 11 Class K Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 11 Class K Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 11 Class K Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first year from the date of issuance of the Series 11 Class K Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.3 Mechanics of Redemption. Prior to any date stipulated by the Corporation for the redemption of Series 11 Class K Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 11 Class K Preferred Stock. The Redemption

Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 11 Class K Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 11 Class K Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 11 Class K Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first year from the date of issuance of the Series 11 Class K Preferred Stock, the number of shares to be

converted into Common Stock as provided in Part 4 hereof.

5.4 Rights of Conversion Upon Redemption. If the redemption occurs during the first 12 months after the issuance of the Series 11 Class K Preferred Stock, the holder may not convert any redeemed shares. If the redemption occurs pursuant to Section 5.1 hereof, the Holder of the Series 11 Class K Preferred Stock shall not have the right to convert those outstanding shares of Series 11 Class K Preferred Stock that the Company is redeeming after receipt of the Redemption Notice. If the redemption occurs pursuant to Section 5.2 hereof, then, upon receipt of the Redemption Notice, any holder of Series 11 Class K Preferred Stock shall have the next five business days during which it may exercise the option, at its sole election, to specify what portion of its Series 11 Class K Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, after one year from the date of first issuance of the Series 11 Class K Preferred Stock, such holder shall have the right to convert into Common Stock that number of Series 11 Class K Preferred Stock called for redemption in the Redemption Notice.

5.5 Surrender of Certificates. On or before the Redemption Date in respect of any Series 11 Class K Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 11 Class K Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

5.6 Payment. On the Redemption Date in respect of any Series 11 Class K Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate First Year Redemption Price or the Redemption Price, whichever is applicable, of all such shares called from redemption (less the aggregate Redemption Price for those Series 11 Class K Preferred Stock in respect of which the Corporation has received notice from the

holder thereof of its election to convert Series 11 Class K Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the First Year Redemption Price or the Redemption Price, whichever is applicable, to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments

of the First Year Redemption Price or the Redemption Price, whichever is applicable, of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the First Year Redemption Price or the Redemption Price, whichever is applicable, in respect of their shares only from the Corporation.

Part 6 - Parity with Other Shares of Series 11 Class K Preferred Stock and Priority.

6.1 Rateable Participation. If any cumulative dividends or return of capital in respect of Series 11 Class K Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

6.2 Ranking. For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 11 Class K Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 11 Class K Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 11 Class K Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 3 Class C Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 11 Class K Preferred Stock; and,

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6.2.3 Junior to shares of this Series 11 Class K Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 11 Class K Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

Part 7 - Amendment and Reissue.

7.1 Amendment. If any proposed amendment to the Corporation's Certificate of Incorporation would alter or change the powers,

preferences or special rights of the Series 11 Class K Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Certificate of Incorporation at a duly called and held series meeting of the holders of the Series 11 Class K Preferred Stock or written consent by the holders of a majority of the Series 11 Class K Preferred Stock then outstanding. Notwithstanding the above, the number of authorized shares of any class or classes of stock may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of this Section 7.1 or the requirements of Section 242 of the GCL.

7.2 Authorized. Any shares of Series 11 Class K Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

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State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE FIFTEENTH DAY OF JULY, A.D. 1999, AT 12:31 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9868060

2249849 8100

Date: 07-16-99

991291289

CERTIFICATE OF DESIGNATIONS
OF SERIES 12 CLASS L CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 12 Class L Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 12 Class L Convertible Preferred Stock as set forth in the attached resolutions.

Dated: July 15, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

Richard T. Kelecy, Secretary

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

RESOLUTION OF THE BOARD OF DIRECTORS

FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,
RESTRICTIONS AND CONDITIONS ATTACHING TO THE
SERIES 12 CLASS L CONVERTIBLE PREFERRED STOCK

WHEREAS, the Corporation's capital includes preferred stock, par

value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by resolutions adopted by the directors, and with the directors being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences and relative, participating, optional or other special rights and privileges, restrictions and conditions attaching to the shares of each such series;

WHEREAS, it is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 12 Class L Convertible Preferred Stock, par value \$.001 per share (the "Series 12 Class L Preferred Stock");

NOW, THEREFORE, BE IT RESOLVED, that the Series 12 Class L Preferred Stock shall consist of nine hundred sixteen (916) shares and no more and shall be designated as the Series 12 Class L Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 12 Class L Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Voting Rights. Except as otherwise provided in Part 7 hereof or under Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 12 Class L Preferred Stock shall have no voting rights whatsoever. To the extent that under Section 242(b)(2) of the GCL or Part 7 hereof, the holders of the Series 12 Class L Preferred Stock are entitled to vote on a matter, each share of the Series 12 Class L Preferred Stock shall be entitled one (1) vote for each outstanding share of Series 12 Class L Preferred Stock. Holders of the Series 12 Class L Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 No Preemptive Rights. The Series 12 Class L Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

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Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 12 Class L Preferred Stock shall be outstanding, the holders of the then outstanding Series 12 Class L Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 12 Class L Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 Payment of Liquidation Preferences. Subject to the

provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 12 Class L Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 12 Class L Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 12 Class L Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 12 Class L Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 12 Class L Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 12 Class L Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 12 Class L Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends. The holders of the Series 12 Class L Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%)

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per annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 12 Class L Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 12 Class L Preferred Stock shall be \$1,000 per outstanding share of the Series 12 Class L Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing June 30, 1998 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 12 Class L Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 12 Class L Preferred Stock as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from March 1, 1998. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 12 Class L Preferred Stock in Common

Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid and the denominator of which is 365. Dividends on the Series 12 Class L Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 12 Class L Preferred Stock shall have been paid or declared and set aside for payment.

Part 4 - Conversion. The holders of the Series 12 Class L Preferred Stock shall have rights to convert the shares of Series 12 Class L Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 No Right to Convert. The Series 12 Class L Preferred shall not be convertible into shares of Common Stock until after July 15, 2000.

4.2 Right to Convert. The Series 12 Class L Preferred Stock may be convertible into shares of Common Stock at any time after July 15, 2000.

4.3 Conversion Price. Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 12 Class L Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock as reported on the over-the-counter

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market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days prior to the particular date of conversion shall be less than \$2.265, the Conversion Price for only such particular conversion shall be the product of the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.3 below in connection with such conversion multiplied by eighty percent (80%), subject to the provisions of this Section 4.3. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$1.50 per share ("Minimum Conversion Price") for a period of twenty-four (24) months from the date of issuance of the Series 12 Class L Preferred Stock. If any of the outstanding shares of Series 12 Class L Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 12 Class L Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 12 Class L Preferred Stock,

the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 12 Class L Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

4.3 Mechanics of Conversion. Any holder of the Series 12 Class L Preferred Stock who wishes to exercise its Conversion Rights pursuant to Section 4.1 of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 12 Class L Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 12 Class L Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 12 Class L Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been

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made only after both the certificate for the shares of Series 12 Class L Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion of the Series 12 Class L Preferred Stock within seven (7) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.3 ("Seven (7) Business Day Period"), then, upon the written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 12 Class L Preferred Stock, for payment of the penalty described below in this Section 4.3, which demand must be

received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

4.4 Merger or Consolidation. In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 12 Class L Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,379,311 shares of Common Stock issuable upon the conversion of the Series 12 Class L Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.1, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 12 Class L Preferred Stock then outstanding shall have the right to convert such share of

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Series 12 Class L Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Series 12 Class L Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

4.5 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Series 12 Class L Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

4.6 Adjustments for Reclassification and Reorganization.

If the Common Stock issuable upon conversion of the Series 12 Class L Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.4 hereof), the Conversion Price shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 12 Class L Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 12 Class L Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 12 Class L Preferred Stock immediately before that change.

4.7 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 12 Class L Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.8 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and

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prepare and furnish to each holder of Series 12 Class L Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 12 Class L Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 12 Class L Preferred Stock in connection with such conversion.

4.10 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 12 Class L Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 12 Class L Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 12 Class L Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.11 Fractional Shares. No fractional shares shall be issued upon the conversion of any share or shares of Series 12 Class L Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 12 Class L Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.12 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 12 Class L Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.13 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

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Part 5 - Redemption.

5.1 Redemption at Corporation's Option. Except as otherwise provided in this Section 5.1, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, (i) for a period of 120 days from the date of issuance of the Series 12 Class L Preferred Stock up to an aggregate of 300 shares of the Series 12 Class L Preferred Stock at the cash redemption price of \$1,000 per share, and (ii) the then outstanding Series 12 Class L Preferred Stock at the following cash redemption prices if redeemed during the following periods: (a) within one year from July 15, 1999 - \$1,100 per share, except as otherwise provided in (i) above and (b) after one year from July 15, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,000, \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

5.2 Mechanics of Redemption. Prior to any date stipulated by the Corporation for the redemption of Series 12 Class L Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 12 Class L Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 12 Class L Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 12 Class L Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 12 Class L Preferred Stock to be redeemed as provided in this Part 5 and, if the

Redemption Notice is mailed to the Holder after the first year from the date of issuance of the Series 12 Class L Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.3 Rights of Conversion Upon Redemption. If the redemption occurs during the first 12 months after the issuance of the Series 12 Class L Preferred Stock, the holder may not convert any redeemed shares. If the redemption occurs after the first twelve months after the first issuance of Series 12 Class L Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 12 Class L Preferred Stock shall have five business days during which it may exercise the option, at its sole election, to specify what portion of its Series 12 Class L Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, after one year from the date of first issuance of the Series 12 Class L Preferred Stock, such holder shall have the right to convert into Common Stock that number of Series 12 Class L Preferred Stock called for redemption in the Redemption Notice.

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5.4 Surrender of Certificates. On or before the Redemption Date in respect of any Series 12 Class L Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 12 Class L Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

5.5 Payment. On the Redemption Date in respect of any Series 12 Class L Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 12 Class L Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 12 Class L Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer

outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

Part 6 - Parity with Other Shares of Series 12 Class L Preferred Stock and Priority.

6.1 Rateable Participation. If any cumulative dividends or return of capital in respect of Series 12 Class L Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

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6.2 Ranking. For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

6.2.1 Prior or senior to the shares of this Series 12 Class L Preferred Stock either as to dividends or upon liquidation, if the holders of such class or classes shall be entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of this Series 12 Class L Preferred Stock;

6.2.2 On a parity with, or equal to, shares of this Series 12 Class L Preferred Stock, either as to dividends or upon liquidation, whether or not the dividend rates, dividend payment dates, or redemption or liquidation prices per share or sinking fund provisions, if any, are different from those of this Series 12 Class L Preferred Stock, if the holders of such stock are entitled to the receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, in proportion to their respective dividend rates or liquidation prices, without preference or priority, one over the other, as between the holders of such stock and over the other, as between the holders of such stock and the holders of shares of this Series 12 Class L Preferred Stock; and,

6.2.3 Junior to shares of this Series 12 Class L

Preferred Stock, either as to dividends or upon liquidation, if such class or series shall be Common Stock or if the holders of shares of this Series 12 Class L Preferred Stock shall be entitled to receipt of dividends or of amounts distributable upon dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

Part 7 - Amendment and Reissue.

7.1 Amendment. If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 12 Class L Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 12 Class L Preferred Stock or written consent by the holders of a majority of the Series 12 Class L Preferred Stock then outstanding. Notwithstanding the above or the provisions of Section 242(b)(2) of the GCL, the number of

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authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242(b)(2) of the GCL.

7.2 Authorized. Any shares of Series 12 Class L Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE FIFTEENTH DAY OF JULY, A.D. 1999, AT 12:32 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9868192

2249849 8100

Date: 07-16-92

991291291

CERTIFICATE OF DESIGNATIONS
OF SERIES 13 CLASS M CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 13 Class M Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 13 Class M Convertible Preferred Stock as set forth in the attached resolutions.

Dated: July 15, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By /s/ Louis F. Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

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.

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2. Voting.

Except as provided under Section 242 of the GCL, holders of Preferred Stock (the "Holders") shall not have the right to vote on any matter. Notwithstanding the provisions of Section 242 of the GCL or Section 4 hereof, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of Section 242 of the GCL.

3. Liquidation.

In the event of a voluntary or involuntary dissolution, liquidation, or winding up of the Corporation, the Holders of Preferred Stock shall be entitled to receive out of the assets of the Corporation legally available for distribution to holders of its capital stock, before any payment or distribution shall be made to holders of shares of Common Stock or any other class of stock ranking junior to the Preferred Stock, an amount per share of Preferred Stock equal to \$1,000 (the "Liquidation Value") plus any accrued and unpaid dividends on the Preferred Stock. If upon such liquidation, dissolution, or winding up of the Corporation, whether voluntary or involuntary, the assets to be distributed among the Holders of Preferred Stock shall be insufficient to permit payment to the Holders of Preferred Stock of the amount distributable as aforesaid, then the entire assets of the Corporation to be so distributed shall be distributed ratably among the Holders of Preferred Stock and shares of such other classes or series ranking on a parity with the shares of this Preferred Stock in proportion to the full distributable amounts for which holders of all such parity shares are entitled upon such distribution, liquidation, or winding up. Upon any such liquidation, dissolution or winding up of the Corporation, after the Holders of Preferred Stock shall have been paid in full the amounts to which they shall be entitled, the remaining net assets of the Corporation may be distributed to the holders of stock ranking on liquidation junior to the Preferred Stock and the Holders of the Preferred Stock shall have no right or claim to any of the remaining assets of the Corporation. Written notice of such liquidation, dissolution or winding up, stating a payment date, the amount of the liquidation payments and the place where said liquidation payments shall be payable, shall be given by mail, postage prepaid or by telex or facsimile to non-U.S. residents, not less than 10 days prior to the payment date stated therein, to the Holders of record of Preferred Stock, such notice to be addressed to each such Holder at its address as shown by the records of the Corporation. For purposes hereof the shares of Common Stock, shall rank on liquidation junior to the Preferred Stock.

4. Restrictions.

The Corporation will not amend or modify the terms of its Restated Certificate of Incorporation so as to adversely alter or change the Preferred Stock at any time when shares of Preferred Stock are outstanding, without the approval of the Holders of at least a majority of the then outstanding shares of Preferred Stock given in writing or

by vote at a meeting, consenting or voting (as the case may be) separately as a series, except where the vote or written consent of the Holders of a greater number of shares of Common Stock of the Corporation is required by law or by the Corporation's Certificate of Incorporation, as amended.

5. Optional Conversion.

The Holders of shares of Preferred Stock shall have the following conversion rights to convert the shares of Preferred Stock into shares of Common Stock of the Corporation:

(a) No Right to Convert. The Preferred Stock shall not be convertible into shares of Common Stock until after July 15, 2000.

(b) Conversion Dates. The Preferred Stock may be convertible into shares of Common Stock at any time after July 15, 2000.

(c) Right to Convert; Conversion Price. Subject to the terms hereof, as used herein, the term Conversion Price per outstanding share of Preferred Stock shall be One Dollar and 875/100 (\$1.875); except that after the expiration of one hundred and eighty (180) days after the Closing Date if the average of the closing bid price per share of Common Stock quoted on the NASDAQ (or the closing bid price of the Common Stock as quoted on the national securities exchange if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange) for the five (5) trading days immediately prior to the particular date of each Conversion Notice (as defined below) is less than Two Dollars and 34/100 (\$2.34), then the Conversion Price for that particular conversion shall be eighty percent (80%) of the average of the closing bid price of the Common Stock on the NASDAQ (or if the Common Stock is not listed for trading on the NASDAQ but is listed for trading on a national securities exchange then eighty percent (80%) of the average of the closing bid price of the Common Stock on the national securities exchange) for the five (5) trading days immediately prior to the particular date of the Conversion Notice. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$1.50 per share ("Minimum Conversion Price") for a period of twenty-four (24) months from the date of issuance of the Preferred Stock.

If any of the outstanding shares of Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Section 5(b), the number of shares of whole Common Stock to be issued to the Holder as a result of such conversion shall be determined by dividing (a) the aggregate Stated Value of the Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect on the date of that particular Conversion Notice relating to such conversion. At the time of conversion of shares of the Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon on the shares of Preferred so converted to the date of the Conversion Notice relating to such conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of the Conversion Notice

relating to such conversion of the shares of Preferred Stock so converted divided by the Stock Dividend Price, in effect at the date of the Conversion Notice relating to such conversion.

(c) Conversion Notice. The right of conversion shall be exercised by the Holder thereof by telecopying or faxing an executed and completed written notice signed by an authorized representative of the Holder, ("Conversion Notice") to the Corporation that the Holder elects to convert a specified number of shares of Preferred Stock representing a specified Stated Value thereof into shares of Common Stock and by delivering by express courier the certificate or certificates of Preferred Stock being converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the Holders of the Preferred Stock). The business date indicated on a Conversion Notice which is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a Conversion Date. The Conversion Notice shall include therein the Stated Value of shares of Preferred Stock to be converted, and a calculation (a) of the Stock Dividend Price, (b) the Conversion Price, and (c) the number of Shares of Common Stock to be issued in connection with such conversion. The Corporation shall have the right to review the calculations included in the Conversion Notice, and shall provide notice of any discrepancy or dispute therewith within three (3) business days of the receipt thereof. The Holder shall deliver to the Corporation an original Conversion Notice and the original Preferred to be converted within three (3) business days from the date of the Conversion Notice.

(d) Issuance of Certificates - Time Conversion Effected. Promptly, but in no event more than six (6) business days, after the receipt by facsimile of the Conversion Notice referred to in Subparagraph (5)(c); and provided within the six (6) business days the Corporation receives the certificate or certificates for the shares of Preferred Stock to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the Holder, registered in the name of the Holder, a certificate or certificates for the number of whole shares of Common Stock into which such shares of Preferred Stock are converted. Such conversion shall be deemed to have been effected as of the close of business on the date on which the telecopy or facsimile Conversion Notice shall have been received by the Corporation, and the rights of the Holder of such share or shares of Preferred Stock shall cease, at such time, and the Holder or Holders shall be deemed to have become the Holder or Holders of record of the shares of Common Stock represented thereby.

In the event that the shares of Common Stock issuable upon conversion of the Preferred, is not delivered within six (6) business days of the date the Company receives the Conversion Notice, the Company shall pay to the Buyer, by wire transfer, as liquidated damages for such failure and not as a penalty, for each \$100,000 of Preferred sought to be converted, \$500 for each of the first five (5) calendar days and \$1,000 per calendar day thereafter that the shares of Common Stock are not delivered, which liquidated damages shall begin to run from the seventh (7th) business day after the Conversion Date. Any and all payments required pursuant to this paragraph shall be payable only in cash. Notwithstanding the above, liquidated damages shall not exceed \$2,000.00 per day. In addition to the liquidated damages set forth herein, in the event the Company fails to deliver the shares of Common Stock within six (6) business days after the Conversion date, the

Company agrees to issue the larger number of shares of Common Stock derived from (i) the original Conversion Notice, or (ii) utilizing the five lowest closing bid prices of the Company's shares of Common Stock beginning on the Conversion Date and ending on the day the shares of

Common Stock are delivered. The Company understands that a delay in the issuance of the shares of Common Stock could result in economic loss to the Holder. Nothing contained herein, or in the Preferred shall limit the Holder's rights to pursue actual damages for the Company's failure to issue and deliver shares of Common Stock to the Holder in accordance with the terms of the Certificate of Designations, and this Agreement.

(e) Fractional Shares of Common Stock. No fractional shares of Common Stock shall be issued upon conversion of any Preferred Stock into shares of Common Stock. All fractional shares of Common Stock shall be aggregated and then rounded down to the nearest whole share of Common Stock. In case the number of shares of Preferred Stock represented by the certificate or certificates surrendered pursuant to Subparagraph 5(b) exceeds the number of shares of Common Stock converted, the Corporation shall, upon such conversion, execute and deliver to the Holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Preferred Stock represented by the certificate or certificates surrendered which are not to be converted.

(f) Merger or Consolidation. In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering all the shares of Common Stock issuable upon the conversion of the Preferred Stock is declared effective by the U.S. Securities and Exchange Commission ("Commission"), the Corporation or such successor corporation as the case may be, shall make appropriate provision so that the Holder of each share of Preferred Stock then outstanding shall have the right to convert such share of Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number of shares of Common Stock into which such shares of Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 5.

In the event of a Merger or Sale, where the Corporation is not the surviving Corporation, the Holder shall have the right to redeem all of the outstanding shares of Preferred Stock at 120% of the Liquidation Value of each share of Preferred Stock then outstanding plus all accrued and unpaid dividends (the "Redemption Amount"). The Corporation shall pay this Redemption Amount in cash within ten (10) business days of receipt by the Corporation of notice from the Holder, and receipt by the Corporation of all outstanding shares of Preferred Stock duly endorsed by the Holder to the Corporation.

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(g) Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Preferred Stock are issued and outstanding shall declare or pay, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the

Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

(h) Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of Common Stock of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination 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 Redemption.

(a) Redemption at Corporation's Option. Except as otherwise provided in this Section 6, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time (i) for a period of 120 days from the date of issuance of the Preferred Stock up to an aggregate of 450 shares of Series 13 Class M Preferred Stock at the cash redemption price of \$1,000 per share and (ii) the then outstanding Series 13 Class M Preferred Stock at the following cash redemption prices if redeemed during the following periods: (a) within one year from July 15, 1999 - \$1,100 per share, except as otherwise provided in (i) above, and (b) after one year from July 15, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,000, \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

(b) Mechanics of Redemption. Prior to any date stipulated by the Corporation for the redemption of Series 13 Class M Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 13 Class M Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 13 Class M Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 13 Class M Preferred Stock to be redeemed from such holder, and (iv)

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instructions as to how to specify to the Corporation the number of Series 13 Class M Preferred Stock to be redeemed as provided in this Part 6 and, if the Redemption Notice is mailed to the Holder after the first year from the date of issuance of the Series 13 Class M Preferred Stock, the number of shares to be converted into Common Stock as provided in Part 5 hereof.

(c) Rights of Conversion Upon Redemption. If the redemption occurs during the first 12 months after the issuance of the Preferred Stock, the holder may not convert any redeemed shares. If the redemption occurs after the first year after the first issuance of Series 13 Class M Preferred Stock, then, upon receipt of the Redemption Notice, any holder of Series 13 Class M Preferred Stock shall have five business

days during which it may exercise the option, at its sole election, to specify what portion of its Series 13 Class M Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 6 or converted into Common Stock in the manner provided in Part 5 hereof, except that, notwithstanding any provision of such Part 5 to the contrary, after one year from the date of first issuance of the Preferred Stock, such holder shall have the right to convert into Common Stock that number of Series 13 Class M Preferred Stock called for redemption in the Redemption Notice.

(d) Surrender of Certificates. On or before the Redemption Date in respect of any Series 13 Class M Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 13 Class M Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

(e) Payment. On the Redemption Date in respect of any Series 13 Class M Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called 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. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid

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to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

7. Assignment.

Subject to all applicable restrictions on transfer, the rights and obligations of the Corporation and the Holder of the Preferred Stock shall be binding upon and benefit the successors, assigns, heirs, administrators, and transferees of the parties.

8. Shares of Common Stock to be Reserved.

The Corporation, upon the effective date of this Certificate of Designations, has a sufficient number of shares of Common Stock

available to reserve for issuance upon the conversion of all outstanding shares of Preferred Stock, pursuant to the terms and conditions set forth in Section 5, and exercise of the Warrants as defined in Section 12. The Corporation will at all times reserve and keep available out of its authorized shares of Common Stock, solely for the purpose of issuance upon the conversion of Preferred Stock, and exercise of the Warrants, as herein provided, such number of shares of Common Stock as shall then be issuable upon the conversion of all outstanding shares of Preferred Stock, and exercise of the Warrants. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued, fully paid and non assessable. The Corporation will take such action as may be required, if the total number of shares of Common Stock issued and issuable after such action upon conversion of the Preferred Stock, and exercise of the Warrants would exceed the total number of shares of Common Stock then authorized by the Corporation's Certificate of Incorporation, as amended, or would exceed 19.99% of the shares of Common Stock then outstanding if required by law or the Rules and Regulations of NASDAQ or the National Securities Exchange applicable to the Corporation to take such action as a result of exceeding such 19.99%, in order to increase the number of shares of Common Stock to permit the Corporation to issue the number of shares of Common Stock required to effect conversion of the Preferred, and exercise of the Warrants, to a number sufficient to permit conversion of the Preferred Stock, and exercise of the Warrants, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to the Corporation's Restated Certificate of Incorporation, and to obtain shareholders approval in order to effect conversion of the Preferred Stock, and exercise of the Warrants, if required by law or the rules or regulations of the NASDAQ or National Securities Exchange applicable to the Corporation.

8(a) Shareholder Approval. In connection with the issuance to the Holder of the shares of Preferred Stock, pursuant to this Certificate of Designations, the Corporation is also issuing (i) certain warrants ("RBB Warrants") to the Holder pursuant to the terms of that certain Private Securities Subscription Agreement dated June 30, 1998 (the "Agreement"), providing for the purchase of up to 150,000 shares of Common Stock at an exercise price of \$2.50 per share and (ii) certain warrants (collectively, the "Liviakis Warrants") to Liviakis Financial Communication, Inc. ("Liviakis") and Robert B. Prag providing for the

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purchase of up to an aggregate of 2,500,000 shares of Common Stock at an exercise price of \$1.875 per share pursuant to the terms of that Liviakis Agreement dated June 30, 1998, between Liviakis and the Corporation.

If (i) the aggregate number of shares of Common Stock issued by the Corporation as a result of any or all of the following: (a) conversion of the Preferred Stock, (b) payment of dividends accrued on the Preferred Stock (c) exercise of the RBB Warrants, and (d) exercise of the Liviakis Warrants exceeds 2,388,347 shares of Common Stock (which equals 19.9% of the outstanding shares of Common Stock of the Corporation as of the date of this Certificate of Designations) and (ii) the Holder has converted or elects to convert any of the then outstanding shares of Preferred Stock pursuant to the terms of Section 5 at a Conversion Price less than \$ 1.875 (\$1.875 being the market value per share of Common Stock as quoted on the NASDAQ as of the close of business on June 30, 1998) pursuant to the terms of Section 5(b) hereof, other than if the Conversion Price is less than \$ 1.875 solely as a result of the anti-dilution provisions of Section 5(g) and (h)

hereof, then, notwithstanding anything in Section 5 to the contrary, the Corporation shall not issue any shares of Common Stock as a result of receipt of a Conversion Notice unless and until the Corporation shall have obtained approval of its shareholders entitled to vote on the transactions in accordance with subparagraphs (25)(H)(i)d, (iv) and (v) of Rule 4310 of the NASDAQ Marketplace Rules ("Shareholder Approval").

If Shareholder Approval is required as set forth in the above paragraph, the Corporation shall take all necessary steps to obtain such Shareholder Approval upon receipt of the Conversion Notice triggering the need for Shareholder Approval ("Current Conversion Notice"). If the Corporation has not received from the Holder a Current Conversion Notice, the Holder, subsequent to January 1st, 1999 may, if the Corporation's shares of Common Stock trade, subsequent to January 1st, 1999, at a five (5) day average closing bid price below Two Dollars and 34/100 (\$2.34), upon written notice to the Corporation, require the Corporation to obtain Shareholder Approval ("Holder's Notice"). The Holder and the Corporation's officers and directors covenant to vote all shares of Common Stock over which they have voting control in favor of Shareholder Approval. If the Corporation does not obtain Shareholder Approval within ninety (90) days of the earlier of the Corporation's receipt of (i) the Current Conversion Notice or (ii) the Holder's Notice, and the Holder has not breached its covenant to vote all shares of Common Stock over which they have voting control in favor of Shareholder Approval, the Corporation shall pay in cash to the Holder liquidated damages, in an amount of 4% per month of the Liquidation Value of each share of Preferred Stock then outstanding, commencing on the 91st day of the Corporation's receipt of the Holder's Current Conversion Notice, and continuing every thirty (30) days pro-rata until such time the Corporation receives Shareholder Approval.

9. No Reissuance of Series 13 Class M Convertible Preferred Stock.

Shares of Preferred Stock which are converted into shares of Common Stock as provided herein shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred stock hereafter created.

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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.

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State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE FIFTEENTH DAY OF JULY, A.D. 1999, AT 12:33 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9868302

2249849 8100

Date: 07-16-99

991291292

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

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with the holder thereof in accordance to the terms and conditions of a certain Exchange Agreement between the Company and RBB Bank, dated as of July 15, 1999.

13. That no shares of Series 10 Preferred remain outstanding.

14. That all shares of the Series 10 Preferred which have been exchanged have the status of authorized and unissued shares of the Preferred Stock of the Corporation without designation as to series, until such shares are once more designated as part of a particular series by the Board of Directors.

15. That effective July 15, 1999, the Board of Directors of the Company duly adopted the following resolutions:

RESOLVED, that upon completion of the exchange with the holder of the Series 10 Class J

Convertible Preferred Stock, no authorized shares of Series 10 Class J Convertible Preferred Stock will remain outstanding and no shares of Series 10 Class J Convertible Preferred Stock will be issued subject to the Certificate of Designations previously filed with respect to the Series 10 Class J Convertible Preferred Stock.

FURTHER RESOLVED, that upon completion of the exchange, the officers of the Company are hereby authorized and directed, for and on behalf of the Company, to execute and deliver an appropriate Certificate of Elimination to the Secretary of State of Delaware regarding the Series 10 Class J Convertible Preferred Stock.

16. That pursuant to the provisions of Section 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: PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

/s/ Richard T. Kelecyc

By /s/ Louis Centofanti

Richard T. Kelecyc, Secretary
(SEAL)

Dr. Louis F. Centofanti, President

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State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE TENTH DAY OF AUGUST, A.D. 1999, AT 12:30 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,

Secretary of State

Authentication: 9913783

2249849 8100

Date: 08-10-99

991331578

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

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 14 Class N Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 14 Class N Convertible Preferred Stock as set forth in the attached resolutions.

Dated: August 10, 1999

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

Richard T. Kelecy, Secretary

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

RESOLUTION OF THE BOARD OF DIRECTORS

FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,
RESTRICTIONS AND CONDITIONS ATTACHING TO THE
SERIES 14 CLASS N CONVERTIBLE PREFERRED STOCK

WHEREAS,

A. The Corporation's share capital includes Preferred Stock, par value \$.001 per share ("Preferred Stock"), which Preferred Stock may be issued in one or more series by the Board of Directors of

the Corporation (the "Board") being entitled by resolution to fix the number of shares in each series and to designate the rights, designations, preferences, and relative, participating, optional or other special rights, privileges, restrictions and conditions attaching to the shares of each such series; and

B. It is in the best interests of the Corporation for the Board to create a new series from the Preferred Stock designated as the Series 14 Class N Convertible Preferred Stock, par value \$.001.

NOW, THEREFORE, BE IT RESOLVED, THAT:

The Series 14 Class N Convertible Preferred Stock, par value \$.001 (the "Series 14 Class N Preferred Stock") of the Corporation shall consist of 1,769 shares and no more and shall be designated as the Series 14 Class N Convertible Preferred Stock, and the preferences, rights, privileges, restrictions and conditions attaching to the Series 14 Class N Preferred Stock shall be as follows:

Part 1 - Voting and Preemptive Rights.

1.1 Voting Rights. Except as otherwise provided herein, in the Corporation's Certificate of Incorporation (the "Articles") or the General Corporation Law of the State of Delaware (the "GCL"), the holders of the Series 14 Class N Preferred Stock shall have no voting rights whatsoever. To the extent that under the GCL the vote of the holders of the Series 14 Class N Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series 14 Class N Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series 14 Class N Preferred Stock (except as otherwise may be required under the GCL) shall constitute the approval of such action by the series. To the extent that under the GCL the holders of the Series 14 Class N

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Preferred Stock are entitled to vote on a matter with holders of Corporation's Common Stock and/or any other class or series of the Corporation's voting securities, the Series 14 Class N Preferred Stock, the Corporation's Common Stock and all other classes or series of the Corporation's voting securities shall vote together as one class, with each share of Series 14 Class N Preferred Stock entitled to a number of votes equal to the number of shares of the Corporation's Common Stock into which it is then convertible using the record date for the taking of such vote of stockholders as the date as of which the Conversion Price (as defined in Section 4.3 hereof) is calculated and conversion is effected. Holders of the Series 14 Class N Preferred Stock shall be entitled to notice of (and copies of proxy materials and other information sent to stockholders) for all shareholder meetings or written consents with respect to which they would be entitled to vote, which notice would be provided pursuant to the Corporation's bylaws and applicable statutes.

1.2 No Preemptive Rights. The Series 14 Class N Preferred Stock shall not give its holders any preemptive rights to acquire any other securities issued by the Corporation at any time in the future.

Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 14 Class N Preferred Stock shall be outstanding,

the holders of the then outstanding Series 14 Class N Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series 14 Class N Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 Payment of Liquidation Preferences. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 14 Class N Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 14 Class N Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 14 Class N Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 14 Class N Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all

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amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 14 Class N Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 14 Class N Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 14 Class N Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends.

3.1 The holders of the Series 14 Class N Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), at the Corporation's election, at the rate of six percent (6%) per annum of the Liquidation Value of the Series 14 Class N Preferred Stock. The Liquidation Value of the Series 14 Class N Preferred Stock shall be \$1,000.00 per share (the "Dividend Rate"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1999 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 14 Class N Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record as of the Dividend Declaration Date. Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from August 3, 1999. In the event that the Corporation elects to pay dividends in Common Stock of the Corporation, each holder of the Series 14 Class N Preferred Stock shall receive shares of Common

Stock of the Corporation equal to the quotient of (i) the Dividend Rate in effect on the applicable Dividend Declaration Date divided by (ii) the average of the closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"). Dividends on the Series 14 Class N Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 14 Class N Preferred Stock shall have been paid or declared and set aside for payment.

Part 4 - Conversion. The holders of the Series 14 Class N Preferred Stock shall have rights to convert the shares of Series 14 Class N Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 No Right to Convert. The Series 14 Class N Preferred shall not be convertible into shares of Common Stock until after April 20, 2000.

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4.2 Right to Convert. The Series 14 Class N Preferred Stock may be convertible into shares of Common Stock at any time on or after April 20, 2000.

4.3 Conversion Price. As used herein, the term Conversion Price shall be the product of (i) the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.4 below multiplied by (ii) seventy-five percent (75%), subject to the provisions of this Section 4.3. Notwithstanding the foregoing, the Conversion Price shall not be (i) less than a minimum of \$1.50 per share for a period of twenty-four (24) months from April 20, 1999, or, after twenty-four (24) months from April 20, 1999, a minimum of \$.50 per share (as applicable, the "Minimum Conversion Price") or (ii) more than a maximum of \$1.50 per share ("Maximum Conversion Price"). If, after July 1, 1996, the Corporation sustains a net loss, on a consolidated basis, in each of two (2) consecutive quarters, as determined under generally accepted accounting principles, the Minimum Conversion Price shall be reduced \$.25 a share, but there shall be no change to, or reduction of, the Maximum Conversion Price. For the purpose of determining whether the Corporation has had a net loss in each of two (2) consecutive quarters, at no time shall a quarter that has already been considered in such determination be considered in any subsequent determination (as an example the third quarter of 1996 in which there is a net profit and the fourth quarter of 1996 in which there is a net loss shall be considered as two consecutive quarters, and, as a result, the fourth quarter of 1996 shall not be considered along with the first quarter of 1997 as two (2) consecutive quarters, but the first quarter of 1997 must be considered with the second quarter of 1997 for the purposes of such determination). For the purposes of this Section 4.3, a "quarter" is a three (3) month period ending on March 31, June 30, September 30, and December 31. If any of the outstanding shares of Series 14 Class N Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a) the aggregate Liquidation Value of the Series 14 Class N Preferred Stock so surrendered for conversion by (b) the Conversion Price in effect at the date of the conversion. At

the time of conversion of shares of the Series 14 Class N Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of shares of whole Common Stock which is equal to the product of dividing the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 14 Class N Preferred Stock so converted by the Conversion Price in effect at the date of conversion.

4.4 Mechanics of Conversion. Any holder of the Series 14 Class N Preferred Stock who wishes to exercise its Conversion Rights pursuant to the terms of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 14 Class

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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.

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4.6. Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 14 Class N Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.5 hereof), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 14 Class N Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 14 Class N Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 14 Class N Preferred Stock immediately before that change.

4.7 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 14 Class N Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.8 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 14 Class N Preferred Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.9 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 14 Class N Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 14 Class N Preferred Stock in connection with such conversion.

4.10 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 14 Class N Preferred Stock, such number of its shares of Common Stock as shall, from time to time,

be sufficient to effect the conversion of all outstanding shares of the Series 14 Class N Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 14 Class N Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

4.11 Fractional Shares. No fractional share shall be issued upon the conversion of any share or shares of Series 14 Class N Preferred Stock.

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All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 14 Class N Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.12 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 14 Class N Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.13 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or permitted to close.

Part 5 - Redemption.

5.1 Redemption at Corporation's Option. Except as otherwise provided in this Section 5.1, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 14 Class N Preferred Stock at the following cash redemption prices if redeemed during the following periods: (i) within twelve (12) months from April 20, 1999 - \$1,100 per share, and (ii) after twelve (12) months from April 20, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

5.2 Mechanics of Redemption. Prior to any date stipulated by the Corporation for the redemption of Series 14 Class N Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 14 Class N Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 14 Class N Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 14 Class N Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 14 Class N Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first twelve (12) months from April 20, 1999, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.3 Mechanics of Redemption. Prior to any date stipulated by the Corporation for the redemption of Series 14 Class N Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 14 Class N Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 14 Class N

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Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 14 Class N Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 14 Class N Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first 12 months from April 20, 1999, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.4 Rights of Conversion Upon Redemption. If the redemption occurs during the first 12 months after April 20, 1999, the holder may not convert any redeemed shares. If the redemption occurs pursuant to Section 5.1 (i) hereof, the Holder of the Series 14 Class N Preferred Stock shall not have the right to convert those outstanding shares of Series 14 Class N Preferred Stock that the Company is redeeming after receipt of the Redemption Notice. If the redemption occurs pursuant to Section 5.1 (ii) hereof, then, upon receipt of the Redemption Notice, any holder of Series 14 Class N Preferred Stock shall have the next five business days during which it may exercise the option, at its sole election, to specify what portion of its Series 14 Class N Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, after twelve (12) months from April, 20, 1999, such holder shall have the right to convert into Common Stock that number of Series 14 Class N Preferred Stock called for redemption in the Redemption Notice.

5.5 Surrender of Certificates. On or before the Redemption Date in respect of any Series 14 Class N Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.6 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 14 Class N Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

5.6 Payment. On the Redemption Date in respect of any Series 14 Class N Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least U. S. \$50,000,000, as a trust fund, a sum equal to the aggregate First Year Redemption Price or the Redemption Price, whichever is applicable, of all such shares called from redemption (less the aggregate Redemption Price for those Series 14 Class N Preferred Stock in respect of which the Corporation has received notice from the holder thereof of

its election to convert Series 14 Class N Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares

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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

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involuntary, as the case may be, in preference or priority to the holders of shares of such class or series.

Part 7 - Amendment and Reissue.

7.1 Amendment. If any proposed amendment to the Corporation's Certificate of Incorporation would alter or change the powers, preferences or special rights of the Series 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 Authorized. 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.

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State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE TENTH DAY OF AUGUST, A.D. 1999, AT 12:31 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9913988

2249849 8100

Date: 08-10-99

991331579

CERTIFICATE OF DESIGNATIONS
OF SERIES 15 CLASS O CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of Directors by the Corporation's Restated Certificate of Incorporation, as amended, and pursuant to the provisions of Section 151 of the Delaware Corporation Law, the Board of Directors of the Corporation has adopted resolutions, a copy of which is attached hereto, establishing and providing for the issuance of a series of Preferred Stock designated as Series 15 Class O Convertible Preferred Stock and has established and fixed the voting powers, designations, preferences and relative participating, optional and other special rights and qualifications, limitations and restrictions of such Series 15 Class O Convertible Preferred Stock as set forth in the attached resolutions.

Dated: August 10, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecy

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 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.

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Part 2 - Liquidation Rights.

2.1 Liquidation. If the Corporation shall be voluntarily or involuntarily liquidated, dissolved or wound up at any time when any shares of the Series 15 Class O Preferred Stock shall be outstanding, the holders of the then outstanding Series 15 Class O Preferred Stock shall have a preference in distribution of the Corporation's property available for distribution to the holders of the Corporation's Common Stock equal to \$1,000 consideration per outstanding share of Series

15 Class O Preferred Stock, plus an amount equal to all unpaid dividends accrued thereon to the date of payment of such distribution ("Liquidation Preference"), whether or not declared by the Board.

2.2 Payment of Liquidation Preferences. Subject to the provisions of Part 6 hereof, all amounts to be paid as Liquidation Preference to the holders of Series 15 Class O Preferred Stock, as provided in this Part 2, shall be paid or set apart for payment before the payment or setting apart for payment of any amount for, or the distribution of any of the Corporation's property to the holders of the Corporation's Common Stock, whether now or hereafter authorized, in connection with such liquidation, dissolution or winding up.

2.3 No Rights After Payment. After the payment to the holders of the shares of the Series 15 Class O Preferred Stock of the full Liquidation Preference amounts provided for in this Part 2, the holders of the Series 15 Class O Preferred Stock as such shall have no right or claim to any of the remaining assets of the Corporation.

2.4 Assets Insufficient to Pay Full Liquidation Preference. In the event that the assets of the Corporation available for distribution to the holders of shares of the Series 15 Class O Preferred Stock upon any dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, shall be insufficient to pay in full all amounts to which such holders are entitled pursuant to this Part 2, no such distribution shall be made on account of any shares of any other class or series of Preferred Stock ranking on a parity with the shares of this Series 15 Class O Preferred Stock upon such dissolution, liquidation or winding up unless proportionate distributive amounts shall be paid on account of the shares of this Series 15 Class O Preferred Stock and shares of such other class or series ranking on a parity with the shares of this Series 15 Class O Preferred Stock, ratably, in proportion to the full distributable amounts for which holders of all such parity shares are respectively entitled upon such dissolution, liquidation or winding up.

Part 3 - Dividends. The holders of the Series 15 Class O Preferred Stock are entitled to receive if, when and as declared by the Board out of funds legally available therefor, cumulative dividends, payable in cash or Common Stock of the Corporation, par value \$.001 per share (the "Common Stock"), or any combination thereof, at the Corporation's election, at the rate of four percent (4%) per

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annum of the Liquidation Value (as defined below) of each issued and outstanding share of Series 15 Class O Preferred Stock (the "Dividend Rate"). The Liquidation Value of the Series 15 Class O Preferred Stock shall be \$1,000 per outstanding share of the Series 15 Class O Preferred Stock (the "Liquidation Value"). The dividend is payable semi-annually within seven (7) business days after each of December 31 and June 30 of each year, commencing December 31, 1999 (each, a "Dividend Declaration Date"). Dividends shall be paid only with respect to shares of Series 15 Class O Preferred Stock actually issued and outstanding on a Dividend Declaration Date and to holders of record of the Series 15 Class O Preferred Stock as of the Dividend Declaration Date.

Dividends shall accrue from the first day of the semi-annual period in which such dividend may be payable, except with respect to the first semi-annual dividend which shall accrue from August 3, 1999. In the event that the Corporation elects to pay the accrued dividends due as of a Dividend Declaration Date on an outstanding share of the Series 15 Class O Preferred Stock in Common Stock of the Corporation, the holder of such share shall receive that number of shares of Common Stock of the Corporation equal to the product of (a) the quotient of (i) the Dividend Rate divided by (ii) the average of the closing bid quotation of the Corporation's Common Stock as reported on the National Association of Securities Dealers Automated Quotation system ("NASDAQ"), or the average closing sale price if listed on a national securities exchange, for the five (5) trading days immediately prior to the Dividend Declaration Date (the "Stock Dividend Price"), times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid and the denominator of which is 365. Dividends on the Series 15 Class O Preferred Stock shall be cumulative, and no dividends or other distributions shall be paid or declared or set aside for payment on the Corporation's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 15 Class O Preferred Stock shall have been paid or declared and set aside for payment.

Part 4 - Conversion. The holders of the Series 15 Class O Preferred Stock shall have rights to convert the shares of Series 15 Class O Preferred Stock into shares of the Corporation's Common Stock, par value \$.001 per share ("Common Stock"), as follows (the "Conversion Rights"):

4.1 No Right to Convert. The Series 15 Class O Preferred shall not be convertible into shares of Common Stock until after April 20, 2000.

4.2 Right to Convert. The Series 15 Class O Preferred Stock may be convertible into shares of Common Stock at any time after April 20, 2000.

4.3 Conversion Price. Subject to the terms hereof, as used herein, the Conversion Price per outstanding share of Series 15 Class O Preferred Stock shall be \$1.8125, except that, in the event the average closing bid price per share of the Common Stock as reported on the over-the-counter market, or

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the closing sale price if listed on a national securities exchange, for the five (5) trading days prior to the particular date of conversion shall be less than \$2.265, the Conversion Price for only such particular conversion shall be the product of the average closing bid quotation of the Common Stock as reported on the over-the-counter market, or the closing sale price if listed on a national securities exchange, for the five (5) trading days immediately preceding the date of the Conversion Notice referred to in Section 4.4 below in connection with such conversion multiplied by eighty percent (80%), subject to the provisions of this Section 4.2. Notwithstanding the foregoing, the Conversion Price shall not be less than a minimum of \$1.50 per share ("Minimum Conversion Price") for a period of twenty-four (24) months from April 20, 1999. If any of the outstanding shares of Series 15 Class O Preferred Stock are converted, in whole or in part, into Common Stock pursuant to the terms of this Part 4, the number of shares of whole Common Stock to be issued to the holder as a result of such conversion shall be determined by dividing (a)

the aggregate Liquidation Value of the Series 15 Class O Preferred Stock so surrendered for conversion by (b) the Conversion Price as of such conversion. At the time of conversion of shares of the Series 15 Class O Preferred Stock, the Corporation shall pay in cash to the holder thereof an amount equal to all unpaid and accrued dividends, if any, accrued thereon to the date of conversion, or, at the Corporation's option, in lieu of paying cash for the accrued and unpaid dividends, issue that number of whole shares of Common Stock which is equal to the quotient of the amount of such unpaid and accrued dividends to the date of conversion on the shares of Series 15 Class O Preferred Stock so converted divided by the Stock Dividend Price, as defined in Part 3 hereof, in effect at the date of conversion.

4.4 Mechanics of Conversion. Any holder of the Series 15 Class O Preferred Stock who wishes to exercise its Conversion Rights pursuant to the terms of this Part 4 must, if such shares are not being held in escrow by the Corporation's attorneys, surrender the certificate therefor at the principal executive office of the Corporation, and give written notice, which may be via facsimile transmission, to the Corporation at such office that it elects to convert the same (the "Conversion Notice"). In the event that the shares of Series 15 Class O Preferred Stock are being held in escrow by the Corporation's attorneys, no delivery of the certificates shall be required. The Corporation shall, within five (5) business days after receipt of an appropriate and timely Conversion Notice (and certificate, if necessary), issue to such holder of Series 15 Class O Preferred Stock or its agent a certificate for the number of shares of Common Stock to which he shall be entitled; it being expressly agreed that until and unless the holder delivers written notice to the Corporation to the contrary, all shares of Common Stock issuable upon conversion of the Series 15 Class O Preferred Stock hereunder are to be delivered by the Corporation to a party designated in writing by the holder in the Conversion Notice for the account of the holder and such shall be deemed valid delivery to the holder of such shares of Common Stock. Such conversion shall be deemed to have been made only after both the certificate for the shares of

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Series 15 Class O Preferred Stock to be converted have been surrendered and the Conversion Notice is received by the Corporation (or in the event that no surrender of the Certificate is required, then only upon the receipt by the Corporation of the Conversion Notice) (the "Conversion Documents"), and the person or entity whose name is noted on the certificate evidencing such shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock at and after such time. In the event that the Conversion Notice is sent via facsimile transmission, the Corporation shall be deemed to have received such Conversion Notice on the first business day on which such facsimile Conversion Notice is actually received. If the Corporation fails to deliver to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion of the Series 15 Class O Preferred Stock within seven (7) business days after receipt by the Corporation from the holder of an appropriate and timely Conversion Notice and certificates pursuant to the terms of this Section 4.4 ("Seven (7) Business Day Period"), then, upon the

written demand of RBB Bank Aktiengesellschaft ("RBB Bank"), the holder of the Series 15 Class O Preferred Stock, for payment of the penalty described below in this Section 4.4, which demand must be received by the Corporation no later than ten (10) calendar days after the expiration of such Seven (7) Business Day Period, the Corporation shall pay to RBB Bank the following penalty for each business day after the Seven (7) Business Day Period until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion: business day eight (8) - U.S. \$1,000; business day nine (9) - U.S. \$2,000, and each business day thereafter an amount equal to the penalty due on the immediately preceding business day times two (2) until the Corporation delivers to the holder or its agent the certificate representing the shares of Common Stock that the holder is entitled to receive as a result of such conversion.

4.5 Merger or Consolidation. In case of either (a) any merger or consolidation to which the Corporation is a party (collectively, the "Merger"), other than a Merger in which the Corporation is the surviving or continuing corporation, or (b) any sale or conveyance to another corporation of all, or substantially all, of the assets of the Corporation (collectively, the "Sale"), and such Merger or Sale becomes effective (x) while any shares of Series 15 Class O Preferred Stock are outstanding and prior to the date that the Corporation's Registration Statement covering up to 1,379,311 shares of Common Stock issuable upon the conversion of the Series 15 Class O Preferred Stock is declared effective by the U. S. Securities and Exchange Commission or (y) prior to the end of the restriction periods in Section 4.3, then, in such event, the Corporation or such successor corporation, as the case may be, shall make appropriate provision so that the holder of each share of Series 15 Class O Preferred Stock then outstanding shall have the right to convert such share of Series 15 Class O Preferred Stock into the kind and amount of shares of stock or other securities and property receivable upon such Merger or Sale by a holder of the number

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of shares of Common Stock into which such shares of Series 15 Class O Preferred Stock could have been converted into immediately prior to such Merger or Sale, subject to adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Part 4.

4.6 Adjustments to Conversion Price for Stock Dividends and for Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time while shares of Series 15 Class O Preferred Stock are issued and outstanding shall declare or pay, without consideration, any dividend on the Common Stock payable in Common Stock, or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by payment of a dividend in Common Stock or in any right to acquire Common Stock), or if the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Conversion Price in effect immediately before such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

4.7 Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the Series 15 Class O Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for in Section 4.6 hereof), the Conversion Price shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the Series 15 Class O Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders of Series 15 Class O Preferred Stock would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Series 15 Class O Preferred Stock immediately before that change.

4.8 Common Stock Duly Issued. All Common Stock which may be issued upon conversion of Series 15 Class O Preferred Stock will, upon issuance, be duly issued, fully paid and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

4.9 Notice of Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Part 4, the Corporation, at its expense, within a reasonable period of time, shall compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series 15 Class O Preferred

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Stock a notice setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment is based.

4.10 Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series 15 Class O Preferred Stock pursuant thereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder of Series 15 Class O Preferred Stock in connection with such conversion.

4.11 Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series 15 Class O Preferred Stock, such number of its shares of Common Stock as shall, from time to time, be sufficient to effect the conversion of all outstanding shares of the Series 15 Class O Preferred stock, and, if at any time, the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series 15 Class O Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its

Certificate of Incorporation.

4.12 Fractional Shares. No fractional shares shall be issued upon the conversion of any share or shares of Series 15 Class O Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series 15 Class O Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fractional share of Common Stock, such fractional share shall be rounded up to the nearest whole share.

4.13 Notices. Any notices required by the provisions of this Part 4 to be given to the holders of shares of Series 15 Class O Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

4.14 Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday or a day when the federal and state banks located in the State of New York are required or is permitted to close.

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Part 5 - Redemption.

5.1 Redemption at Corporation's Option. Except as otherwise provided in this Section 5.1, at any time, and from time to time, the Corporation may, at its sole option, but shall not be obligated to, redeem, in whole or in part, at any time, and from time to time, the then outstanding Series 15 Class O Preferred Stock at the following cash redemption prices if redeemed during the following periods: (i) within twelve (12) months from April 20, 1999 - \$1,100 per share and (ii) after twelve (12) months from April 20, 1999 - \$1,200 per share (as applicable, the redemption price of \$1,100 or \$1,200 is referred to herein as the "Redemption Price").

5.2 Mechanics of Redemption. Prior to any date stipulated by the Corporation for the redemption of Series 15 Class O Preferred Stock (the "Redemption Date"), written notice (the "Redemption Notice") shall be mailed to each holder of record on such notice date of the Series 15 Class O Preferred Stock. The Redemption Notice shall state: (i) the Redemption Date of such shares, (ii) the number of Series 15 Class O Preferred Stock to be redeemed from the holder to whom the Redemption Notice is addressed, (iii) instructions for surrender to the Corporation, in the manner and at the place designated, of a share certificate or share certificates representing the number of Series 15 Class O Preferred Stock to be redeemed from such holder, and (iv) instructions as to how to specify to the Corporation the number of Series 15 Class O Preferred Stock to be redeemed as provided in this Part 5 and, if the Redemption Notice is mailed to the Holder after the first twelve (12) months from April 20, 1999, the number of shares to be converted into Common Stock as provided in Part 4 hereof.

5.3 Rights of Conversion Upon Redemption. If the redemption occurs during the first twelve (12) months after April 20,

1999, the holder may not convert any redeemed shares. If the redemption occurs after the first twelve (12) months after April 20, 1999, then, upon receipt of the Redemption Notice, any holder of Series 15 Class O Preferred Stock shall have five business days during which it may exercise the option, at its sole election, to specify what portion of its Series 15 Class O Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 5 or converted into Common Stock in the manner provided in Part 4 hereof, except that, notwithstanding any provision of such Part 4 to the contrary, after twelve (12) months from April 20, 1999, such holder shall have the right to convert into Common Stock that number of Series 15 Class O Preferred Stock called for redemption in the Redemption Notice.

5.4 Surrender of Certificates. On or before the Redemption Date in respect of any Series 15 Class O Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the

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Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in the manner provided in Section 5.5 hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 15 Class O Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

5.5 Payment. On the Redemption Date in respect of any Series 15 Class O Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 15 Class O Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 15 Class O Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

Part 6 - Parity with Other Shares of Series 15 Class O Preferred Stock and Priority.

6.1 Rateable Participation. If any cumulative dividends or return of capital in respect of Series 15 Class O Preferred Stock are not paid in full, the owners of all series of outstanding Preferred Stock shall participate rateably in respect of accumulated dividends and return of capital.

6.2 Ranking. For purposes of this resolution, any stock of any class or series of the Corporation shall be deemed to rank:

- 6.2.1 Prior or senior to the shares of this Series 15 Class O Preferred Stock either as to dividends or upon liquidation, if the holders

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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.

7.1 Amendment. If any proposed amendment to the Corporation's Certificate of Incorporation (the "Articles") would alter or change the powers, preferences or special rights of the Series 15 Class O Preferred Stock so as to affect such adversely, then the Corporation must obtain the affirmative vote of such amendment to the Articles at a duly called and held series meeting of the holders of the Series 15 Class O Preferred Stock or written consent by the holders of a majority of the Series 15 Class O Preferred Stock then outstanding. Notwithstanding the above or the provisions of Section 242(b)(2) of the GCL, the number of authorized shares of any class or classes of stock of the Corporation may be increased or decreased (but not below the number of shares thereof outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote thereon, voting together as a single class, irrespective of the provisions of this Section 7.1 or Section 242(b)(2) of the GCL.

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7.2 Authorized. Any shares of Series 15 Class O Preferred Stock acquired by the Corporation by reason of purchase, conversion, redemption or otherwise shall be retired and shall become authorized but unissued shares of Preferred Stock, which may be reissued as part of a new series of Preferred Stock hereafter created.

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State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE TENTH DAY OF AUGUST,

A.D. 1999, AT 12:32 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9914002

2249849 8100

Date: 08-10-99

991331580

CERTIFICATE OF DESIGNATIONS
OF SERIES 16 CLASS P CONVERTIBLE PREFERRED STOCK
OF
PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Perma-Fix Environmental Services, Inc. (the "Corporation"), a
corporation organized and existing under the General Corporation Law of
the State of Delaware, does hereby certify:

That, pursuant to authority conferred upon by the Board of
Directors by the Corporation's Restated Certificate of Incorporation,
as amended, and pursuant to the provisions of Section 151 of the
Delaware Corporation Law, the Board of Directors of the Corporation has
adopted resolutions, a copy of which is attached hereto, establishing
and providing for the issuance of a series of Preferred Stock
designated as Series 16 Class P Convertible Preferred Stock and has
established and fixed the voting powers, designations, preferences and
relative participating, optional and other special rights and
qualifications, limitations and restrictions of such Series 16 Class P
Convertible Preferred Stock as set forth in the attached resolutions.

Dated: August 10, 1999

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chairman of the Board

ATTEST:

/s/ Richard T. Kelecyc

Richard T. Kelecyc, Secretary

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

RESOLUTION OF THE BOARD OF DIRECTORS

FIXING THE NUMBER AND DESIGNATING THE RIGHTS, PRIVILEGES,
RESTRICTIONS AND CONDITIONS ATTACHING TO THE
SERIES 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.

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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

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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.

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(d) Conversion Notice. The right of conversion shall be exercised by the Holder thereof by telecopying or faxing an executed and completed written notice signed by an authorized representative of the Holder, ("Conversion Notice") to the Corporation that the Holder elects to convert a specified number of shares of Preferred Stock representing a specified Stated Value thereof into shares of Common Stock and by delivering by express courier the certificate or certificates of Preferred Stock being converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the Holders of the

Preferred Stock). The business date indicated on a Conversion Notice which is telecopied to and received by the Corporation in accordance with the provisions hereof shall be deemed a Conversion Date. The Conversion Notice shall include therein the Stated Value of shares of Preferred Stock to be converted, and a calculation (a) of the Stock Dividend Price, (b) the Conversion Price, and (c) the number of Shares of Common Stock to be issued in connection with such conversion. The Corporation shall have the right to review the calculations included in the Conversion Notice, and shall provide notice of any discrepancy or dispute therewith within three (3) business days of the receipt thereof. The Holder shall deliver to the Corporation an original Conversion Notice and the original Preferred to be converted within three (3) business days from the date of the Conversion Notice.

(e) Issuance of Certificates - Time Conversion Effected. Promptly, but in no event more than six (6) business days, after the receipt by facsimile of the Conversion Notice referred to in Subparagraph (5)(c); and provided within the six (6) business days the Corporation receives the certificate or certificates for the shares of Preferred Stock to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the Holder, registered in the name of the Holder, a certificate or certificates for the number of whole shares of Common Stock into which such shares of Preferred Stock are converted. Such conversion shall be deemed to have been effected as of the close of business on the date on which the telecopy or facsimile Conversion Notice shall have been received by the Corporation, and the rights of the Holder of such share or shares of Preferred Stock shall cease, at such time, and the Holder or Holders shall be deemed to have become the Holder or Holders of record of the shares of Common Stock represented thereby.

In the event that the shares of Common Stock issuable upon conversion of the Preferred, are not delivered within six (6) business days of the date the Corporation receives the Conversion Notice, the Corporation shall pay to the Holder, by wire transfer, as liquidated damages for such failure and not as a penalty, for each \$100,000 of Preferred sought to be converted, \$500 for each of the first five (5) calendar days and \$1,000 per calendar day thereafter that the shares of Common Stock are not delivered, which liquidated damages shall begin to run from the seventh (7th) business day after the Conversion Date. Any and all payments required pursuant to this paragraph shall be payable only in cash. Notwithstanding the above, liquidated damages shall not exceed \$2,000.00 per day. In addition to the liquidated damages set forth herein, in the event the Corporation fails to deliver the shares of Common Stock within six (6) business days after the Conversion date, the Corporation agrees to issue the larger number of shares of Common Stock derived from (i) the original Conversion Notice, or (ii) utilizing the five lowest closing bid prices of the Corporation's shares of Common Stock beginning on the Conversion Date and ending on the day the shares of Common Stock are delivered. The Corporation

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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

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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

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option, at its sole election, to specify what portion of its Series 16 Class P Preferred Stock called for redemption in the Redemption Notice shall be redeemed as provided in this Part 6 or converted into Common Stock in the manner provided in Part 5 hereof, except that, notwithstanding any provision of such Part 5 to the contrary, after twelve (12) months from April 20, 1999, such holder shall have the right to convert into Common Stock that number of Series 16 Class P Preferred Stock called for redemption in the Redemption Notice.

(d) Surrender of Certificates. On or before the Redemption Date in respect of any Series 16 Class P Preferred Stock, each holder of such shares shall surrender the required certificate or certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and upon the Redemption Date, the Redemption Price for such shares shall be made payable, in

the manner provided hereof, to the order of the person whose name appears on such certificate or certificates as the owner thereof, and each surrendered share certificate shall be canceled and retired. If a share certificate is surrendered and all the shares evidenced thereby are not being redeemed (as described below), the Corporation shall cause the Series 16 Class P Preferred Stock which are not being redeemed to be registered in the names of the persons or entity whose names appear as the owners on the respective surrendered share certificates and deliver such certificate to such person.

(e) Payment. On the Redemption Date in respect of any Series 16 Class P Preferred Stock or prior thereto, the Corporation shall deposit with any bank or trust company having a capital and surplus of at least \$50,000,000, as a trust fund, a sum equal to the aggregate Redemption Price of all such shares called from redemption (less the aggregate Redemption Price for those Series 16 Class P Preferred Stock in respect of which the Corporation has received notice from the holder thereof of its election to convert Series 16 Class P Preferred Stock into Common Stock), with irrevocable instructions and authority to the bank or trust company to pay, on or after the Redemption Date, the Redemption Price to the respective holders upon the surrender of their share certificates. The deposit shall constitute full payment for the shares to their holders, and from and after the date of the deposit the redeemed shares shall be deemed to be no longer outstanding, and holders thereof shall cease to be shareholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust company payments of the Redemption Price of the shares, without interest, upon surrender of their certificates thereof. Any funds so deposited and unclaimed at the end of one year following the Redemption Date shall be released or repaid to the Corporation, after which the former holders of shares called for redemption shall be entitled to receive payment of the Redemption Price in respect of their shares only from the Corporation.

7. Assignment.

Subject to all applicable restrictions on transfer, the rights and obligations of the Corporation and the Holder of the Preferred Stock shall be binding upon and benefit the successors, assigns, heirs, administrators, and transferees of the parties.

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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

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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.

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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.

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State of Delaware
Office of the Secretary of State

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I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "PERMA-FIX ENVIRONMENTAL SERVICES, INC.," FILED IN THIS OFFICE ON THE TENTH DAY OF AUGUST, A.D. 1999, AT 12:33 O'CLOCK P.M.

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

/s/ Edward J. Freel

Edward J. Freel,
Secretary of State

Authentication: 9914031

2249849 8100

Date: 08-10-99

991331581

EXCHANGE AGREEMENT

exchanging

1,769 SHARES OF SERIES 3 CLASS C CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

for

1,769 SHARES OF SERIES 11 CLASS K CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

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Exhibit "A" Certificate of Designations

THIS EXCHANGE AGREEMENT (the "Agreement") is entered on the 15th day of July 1999, by and between PERMA-FIX ENVIRONMENTAL SERVICES, INC., a Delaware corporation, having offices at 1940 Northwest 67th Place, Gainesville, Florida 32653 (the "Company"), and RBB BANK AKTIENGESELLSCHAFT, organized under the laws of Austria, and having its principal offices at Burgring 16, 8101 Graz, Austria (the "Subscriber").

W I T N E S S E T H:

WHEREAS, the Company and the Subscriber previously entered into a certain Subscription and Purchase Agreement dated July 17, 1996 ("Subscription Agreement") under which (i) 5,500 shares of "Series 3 Class C Convertible Preferred Stock," par value \$.001 per share (the "Series 3 Preferred"), and (ii) an aggregate of 2,000,000 common stock purchase warrants were issued to the Subscriber in the form of one common stock purchase warrant dated July 19, 1996, providing for the purchase of 1,000,000 shares of the Company's common stock, par value \$.001 per share (the "Common Stock"), at an exercise price of \$2.00 per share, and one common stock warrant dated July 19, 1996, providing for the purchase of 1,000,000 shares of Common Stock at an exercise price of \$3.50 per share (collectively, the "Series 3 Warrants") (the Common Stock issuable upon the exercise of the Series 6 Warrants is referred to hereinafter as the "Warrant Shares");

WHEREAS, pursuant to the terms of the Series 3 Preferred, the Subscriber has previously converted three thousand seven hundred thirty-one (3,731) shares of Series 3 Preferred into Common Stock, leaving 1,769 shares of Series 3 Preferred remaining issued and outstanding as of the date of this Agreement;

WHEREAS, Subscriber owns all of the issued and outstanding share of Series 3 Preferred as of the date of this Agreement;

WHEREAS, the Company and the Subscriber both desire to enter into this Agreement, under which all of the issued and outstanding shares of the Series 3 Preferred will be delivered and tendered to the Company in exchange (the "Exchange") for an aggregate of 1,769 shares of a new series of convertible preferred stock, par value \$.001 per share, to be designated by the Company's Board of Directors as "Series 11 Class K Convertible Preferred Stock" (the "Series 11 Preferred"), with the Series 11 Preferred containing such terms, conditions, restrictions and provisions as set forth in the Series 11 Preferred Certificate of Designations, attached hereto as Exhibit "A," ("Series 11 Preferred Certificate of Designations");

WHEREAS, the Subscription Agreement is not terminated, except from and after the date of this Agreement (i) the Subscriber shall have no rights under the Subscription Agreement or otherwise arising out of or in connection with or relating to the Series 3 Preferred or to subscribe for Series 3 Preferred or any shares of Common Stock issuable or obtainable upon conversion of the Series 3 Preferred and (ii) if the Subscription Agreement is in conflict with this Agreement, this Agreement shall control in all respects;

WHEREAS, the terms, conditions, restrictions and provisions of the Series 11 Preferred shall be the same as the terms, conditions, restrictions and provisions of the Series 3 Preferred, except that (i) the Series 11 Preferred shall not be convertible for a period of twelve months from the date of this Agreement, (ii) the Minimum Conversion Price (as defined herein) shall be \$1.50 for a period of two years from the date of issuance of the Series 11 Preferred, (iii) for the first twelve months from the date of issuance of the Series 11 Preferred, the Company shall have the option of redeeming the Series 11 Preferred for \$1,100 per share, at any time and from time to time during the first twelve months from the date of issuance of the Series 11 Preferred, and if the Company does redeem the Series 11 Preferred during the first twelve months from the date of this Agreement, the holder of the Series 11 Preferred shall not have the right to convert such Series 11 Preferred, (iv) after one year from the date of issuance of the Series 11 Preferred, the Company shall have the option of redeeming the Series 11 Preferred for \$1,200 per share, at any time and from time to time, and (v) after one year from the date of issuance of the Series 11 Preferred, upon receipt of notice of redemption, the holder of the Series 11 Preferred being redeemed shall have five business days in which to exercise an option to convert some or all of the shares of Series 11 Preferred being redeemed by the Company,

WHEREAS, the Series 3 Warrants shall not be affected by this Agreement and shall remain issued and outstanding pursuant to the terms, provisions and conditions of the Series 3 Warrants;

WHEREAS, the shares of Common Stock issuable upon conversion of the Series 11 Preferred ("Conversion Shares") and the Series 11 Preferred are collectively referred to hereinafter as the "Securities;"

WHEREAS, the Company and the Subscriber each desire that the Exchange and the execution of the Agreement act to fully and completely terminate the Subscriber's rights under the Series 3 Preferred, terminate the Series 3 Preferred, and will act to fully and completely release all obligations of the Company under the Series 3 Preferred;

WHEREAS, the Common Stock is listed for trading on the Boston Stock Exchange and the National Association of Securities Dealers Automated Quotation SmallCap market ("NASDAQ"), and the Company is subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and has been subject to such filing requirements for the past ninety (90) days;

WHEREAS, the Subscriber is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Securities Act") and the Subscriber received all information as required under Rule 502 of Regulation D;

WHEREAS, the Subscriber is not a "U. S. Person," as such term is defined in Regulation S promulgated under the Securities Act;

WHEREAS, in reliance upon the representations made by the Subscriber in this Agreement, the transactions contemplated by this

Agreement are such that the offer and exchange of securities by the Company hereunder will be exempt from registration under applicable federal (U. S.) securities laws since this is an exchange offer pursuant to Section 3(a)(9) of the Securities Act, and it is a private placement and intended to be a nonpublic offering pursuant to Sections 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act; and,

WHEREAS, the Securities will not be quoted or listed for trading on any securities exchange, organized market or quotation system at the time of acquisition hereunder.

NOW, THEREFORE, for and in consideration of the premises, and the mutual representations, warranties, covenants and agreements set forth herein, and for other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Exchange and Subscription for Purchase of Securities.

1.1 Issuance of Common Stock and Warrants. In full and complete termination of the Series 3 Preferred and the Subscriber's rights, and the interest in and to the Series 3 Preferred, and in full and complete release of any and all obligations of the Company under the Series 3 Preferred and to the Subscriber under the Series 3 Preferred, at the Closing (as defined herein) the Subscriber shall deliver all of the issued and outstanding shares of the Series 3 Preferred to the Company in exchange for 1,769 shares of Series 11 Preferred, containing such terms, conditions and provisions as set forth in the Series 11 Preferred Certificate of Designations, pursuant to the terms and conditions set forth in this Agreement. Dividends on the Series 3 Preferred shall cease to accrue as of the close of business on the day immediately preceding the date of this Agreement, and dividends on the Series 11 Preferred shall begin to accrue on the date of this Agreement.

1.1.1 Delivery. Upon receipt by the Company of the canceled Series 3 Preferred duly assigned to the Company, the Company shall deliver or cause to be delivered: (a) to Conner & Winters, A Professional Corporation ("Conner & Winters"), a certificate or certificates representing the 1,769 shares of Series 11 Preferred issued in the name of the Subscriber, in such denominations as Subscriber requests in writing, to be held in escrow by Conner & Winters, for the Subscriber; and (b) to the Subscriber, written evidence from the Secretary of State of the State of Delaware that the Series 11 Preferred Certificate of Designations has been filed in the Office of the Secretary of State of the State of Delaware on or before the Closing Date.

1.1.2 Cancellation of Series 3 Preferred. At the Closing, RBB Bank does hereby assign and transfer unto the Company all of the Series 3 Preferred and the Series 3 Preferred shall be terminated and rendered null and void in all

respects, and Conner & Winters is directed to deliver to the Company the Series 3 Preferred marked "Canceled."

- 1.1.3 Restrictive Legends. Subscriber agrees that all certificates representing the Securities shall bear the restrictive legend substantially in the form set forth in Section 6 below which shall include, but not be limited to, a legend to the effect that (a) the Securities represented by such certificate have not been registered under the Securities Act, and (b) unless there is an effective registration statement relating to the Securities, the Securities may not be offered, sold, transferred, mortgaged, pledged or hypothecated without an exemption from registration and an opinion of counsel to the Company with respect thereto, or an opinion from counsel for the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.
- 1.2 Discharge. As of the Closing, the Series 3 Preferred shall be fully terminated in all respects. From and after the Closing, the Subscriber releases, acquits and forever discharges the Company, and all of its respective subsidiaries, affiliates, agents, employees, officers, and directors, as well as their respective heirs, successors, legal and personal representatives, and assigns of any and all of them, from and against any and all claims, liabilities, losses, damages, cause or causes of action of any kind or character whatsoever, whether liquidated, unliquidated or disputed, asserted or assertable, known or unknown, in contract or in tort, at law or in equity, which the Subscriber might now or hereafter have arising out of or in connection with or relating to the Series 3 Preferred.
- 1.3 Exchange. On the basis of the representations, warranties, covenants and agreements, and subject to the terms and conditions set forth herein, at the Closing, the Company agrees to exchange and deliver to the Subscriber, and the Subscriber agrees to accept in such exchange the delivery from the Company, of the Series 11 Preferred in exchange for the transfer of the Series 3 Preferred from the Subscriber to the Company.
- 1.4 Reporting Company. The Company is a reporting company under the Exchange Act and has filed with the United States Securities and Exchange Commission (the "SEC") all reports required to be filed by the Company under Section 13 or 15(d) of the Exchange Act. The Subscriber has had the opportunity to review, and has reviewed, all such reports and information which the Subscriber deemed material to an investment decision regarding the purchase of the Series 11 Preferred.

1.5 Terms of the Series 11 Preferred. The Series 11 Preferred shall contain and be subject to the terms, conditions, preferences and restrictions set forth in the Series 11 Preferred Certificate of Designations attached hereto as Exhibit "A."

1.6 No Effect on Series 3 Warrants. Nothing contained in this Agreement shall have any effect on the Series 3 Warrants.

2. Closing.

2.1 Closing. The consummation of this Agreement (the "Closing") will occur on at the time and on the date that the 1,769 shares of Series 11 Preferred are delivered by the Company to Conner & Winters (the "Closing Date").

3. Representations, Warranties and Covenants of Subscriber. The Subscriber hereby represents, warrants and covenants to the Company as follows:

3.1 Investment Intent. The Subscriber represents and warrants that the shares of Series 11 Preferred are being, and any underlying Conversion Shares will be, purchased or acquired solely for the Subscriber's own account, for investment purposes only and not with a view toward the distribution or resale to others. The Subscriber acknowledges, understands and appreciates that the Securities have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in large part, upon the Subscriber's representations as to investment intention, investor status, and related and other matters set forth herein. Subscriber understands that, in the view of the SEC, among other things, a purchase now with an intent to distribute or resell would represent a purchase and acquisition with an intent inconsistent with its representation to the Company, and the SEC might regard such a transfer as a deferred sale for which the registration exemption is not available.

3.2 Certain Risk. The Subscriber recognizes that the purchase of the Series 11 Preferred involves a high degree of risk in that (a) the Company has sustained losses through December 31, 1998, from its operations, and may require substantial funds in addition to the proceeds of this private placement; (b) that the Company has a substantial accumulated deficit; (c) an investment in the Company is highly speculative and only investors who can afford the loss of their entire investment should consider investing in the Company and the Series 11 Preferred; (d) an investor may not be able to liquidate his investment; (e) transferability of the Series 11 Preferred is extremely limited; (f) in the event of a disposition an investor could sustain the loss of his entire investment; (g) the Series 11 Preferred represent non-voting equity securities, and the right to convert into and purchase shares of voting equity securities in a corporate entity that has an accumulated deficit; (h) no return on investment, whether through distributions, appreciation, transferability or otherwise, and no

performance by, through or of the Company, has been promised, assured, represented or warranted by the Company, or by any director, officer, employee, agent or representative thereof; and, (i) while the Common Stock is presently quoted and traded on the Boston Stock Exchange and the NASDAQ and while the Subscriber is a beneficiary of certain registration rights provided herein, the Series 11 Preferred subscribed for and that are purchased under this Agreement and the Conversion Shares (i) are not registered under applicable federal (U. S.) or state securities laws, and thus may not be sold, conveyed, assigned or transferred unless registered under such laws or unless an exemption from registration is available under such laws, as more fully described herein, and (ii) the Series 11 Preferred subscribed for and that are to be purchased under this Agreement are not quoted, traded or listed for trading or quotation on the NASDAQ, or any other organized market or quotation system, and there is therefore no present public or other market for the Series 11 Preferred, nor can there be any assurance that the Common Stock of the Company will continue to be quoted, traded or listed for trading or quotation on the Boston Stock Exchange or the Nasdaq SmallCap Market or on any other organized market or quotation system.

- 3.3 Prior Investment Experience. The Subscriber acknowledges that it has prior investment experience, including investment in non-listed and non-registered securities, or has employed the services of an investment advisor, attorney or accountant to read all of the documents furnished or made available by the Company to it and to evaluate the merits and risks of such an investment on its behalf, and that it recognizes the highly speculative nature of this investment.
- 3.4 No Review by the SEC. The Subscriber hereby acknowledges that this offering of the Series 11 Preferred has not been reviewed by the SEC because this private placement is intended to be an exchange offer under Section 3(a)(9) of the Securities Act and a nonpublic offering pursuant to Section 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act.
- 3.5 Not Registered. The Subscriber understands that the Series 11 Preferred and the Conversion Shares have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in part, upon the Subscriber's investment intention. In this connection, the Subscriber understands that it is the position of the SEC that the statutory basis for such exemption would not be present if its representation merely meant that its present intention was to hold such securities for a short period, such as the capital gains period of tax statutes, for a deferred sale, for a market rise (assuming that a market develops), or for any other fixed period.
- 3.6 No Public Market. The Subscriber understands that there is no public market for the Series 11 Preferred. The Subscriber understands that although there is presently

a public market for the Common Stock, including the Conversion Shares, Rule 144 (the "Rule") promulgated under the Securities Act requires, among other conditions, a one-year holding period following full payment of the consideration therefor prior to the resale (in limited amounts) of securities acquired in a nonpublic offering without having to satisfy the registration requirements under the Securities Act. The Subscriber understands that the Company makes no representation or warranty regarding its fulfillment in the future of any reporting requirements under the Exchange Act, or its dissemination to the public of any current financial or other information concerning the Company, as is required by the Rule as one of the conditions of its availability. The Subscriber understands and hereby acknowledges that the Company is under no obligation to register the Series 11 Preferred or the Conversion Shares under the Securities Act. The Subscriber agrees to hold the Company and its directors, officers and controlling persons and their respective heirs, representatives, successors and assigns harmless and to indemnify them against all liabilities, costs and expenses incurred by them as a result of any misrepresentation made by the Subscriber contained herein or any sale or distribution by the Subscriber in violation of the Securities Act or any applicable state securities or "blue sky" laws (collectively, "Securities Laws").

- 3.7 Sophisticated Investor. That (a) the Subscriber has adequate means of providing for the Subscriber's current financial needs and possible contingencies and has no need for liquidity of the Subscriber's investment in the Series 11 Preferred; (b) the Subscriber is able to bear the economic risks inherent in an investment in the Series 11 Preferred and that an important consideration bearing on its ability to bear the economic risk of the purchase of Series 11 Preferred is whether the Subscriber can afford a complete loss of the Subscriber's investment in the Series 11 Preferred and the Subscriber represents and warrants that the Subscriber can afford such a complete loss; and (c) the Subscriber has such knowledge and experience in business, financial, investment and banking matters (including, but not limited to, investments in restricted, non-listed and non-registered securities) that the Subscriber is capable of evaluating the merits, risks and advisability of an investment in the Series 11 Preferred.
- 3.8 Tax Consequences. The Subscriber acknowledges that the Company has made no representation regarding the potential or actual tax consequences for the Subscriber which will result from entering into the Agreement and from consummation of the Exchange. The Subscriber acknowledges that it bears complete responsibility for obtaining adequate tax advice regarding the Agreement and the Exchange.
- 3.9 SEC Filing. The Subscriber acknowledges that it has been previously furnished with true and complete copies of the following documents which have been filed with the SEC

pursuant to Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act, and that such have been furnished to the Subscriber a reasonable time prior to the date hereof:

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(i) Annual Report on Form 10-K for the year ended December 31, 1998 (the "Form 10-K"); (ii) Current Report on Form 8-K, date of earliest event reported April 8, 1999; (iii) Quarterly Report on Form 10-Q for the quarter ended March 31, 1999; and (iv) the information contained in any reports or documents required to be filed by the Company under Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act since the distribution of the Form 10-K.

- 3.10 Documents, Information and Access. The Subscriber's decision to purchase the Series 11 Preferred is not based on any promotional, marketing or sales materials, and the Subscriber and its representatives have been afforded, prior to purchase thereof, the opportunity to ask questions of, and to receive answers from, the Company and its management, and has had access to all documents and information which Subscriber deems material to an investment decision with respect to the purchase of Series 11 Preferred hereunder.
- 3.11 No Registration, Review or Approval. The Subscriber acknowledges and understands that the private offering and sale of securities pursuant to this Agreement has not been reviewed or approved by the SEC or by any state securities commission, authority or agency, and is not registered under the Securities Laws. The Subscriber acknowledges, understands and agrees that the shares of Series 11 Preferred are being offered and exchanged hereunder pursuant to (i) an exchange offer exemption under Section 3(a)(9) of the Securities Act and (ii) (x) a private placement exemption to the registration provisions of the Securities Act pursuant to Section 4(2) of such Securities Act and/or Regulation D promulgated under the Securities Act) and (y) a similar exemption to the registration provisions of applicable state securities laws.
- 3.12 Transfer Restrictions. The Subscriber will not transfer any Series 11 Preferred Securities purchased under this Agreement or any Conversion Shares purchased under this Agreement unless such are registered under the Securities Laws, or unless an exemption is available under such Securities Laws, and the Company may, if it chooses, where an exemption from registration is claimed by such Subscriber, condition any transfer of Series 11 Preferred or Conversion Shares out of the Subscriber's name on receipt of an opinion of the Company's counsel, to the effect that the proposed transfer is being effected in accordance with, and does not violate, an applicable exemption from registration under the Securities Laws, or an opinion of counsel to the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.
- 3.13 No Short Sale. The Subscriber expressly agrees that until such time that it has sold all of the Securities

that it shall not, directly or indirectly, through an affiliate (as that term is defined under Rule 405 promulgated under the Securities Act) or by, with or through an unrelated third party or entity, whether or not pursuant to a written or oral understanding,

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agreement, arrangement, scheme, or artifice of nature whatsoever, engage in the short selling of the Company's Common Stock or any other equity securities of the Company, whether now existing or hereafter issued, or engage in any other activity of any nature whatsoever that has the same effect as a short sale, or is a de facto or de jure short sale, of the Company's Common Stock or any other equity security of the Company, whether now existing or hereafter issued, including, but not limited to, the sale of any rights pursuant to any understanding, agreement, arrangement, scheme or artifice of any nature whatsoever, whether oral or in writing, relative to the Company's Common Stock or any other equity securities of the Company whether now existing or hereafter created.

- 3.14 No Commission. The Subscriber agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Exchange.
- 3.15 Reliance. The Subscriber understands and acknowledges that the Company is relying upon all of the representations, warranties, covenants, understandings, acknowledgments and agreements contained in this Agreement in determining whether to accept this subscription and to sell and issue the Series 11 Preferred to the Subscriber.
- 3.16 Accuracy or Representations and Warranties. All of the representations, warranties, understandings and acknowledgments that Subscriber has made herein are true and correct in all material respects as of the date of execution hereof. The Subscriber will perform and comply fully in all material respects with all covenants and agreements set forth herein, and the Subscriber covenants and agrees that until the acceptance of this Agreement by the Company, the Subscriber shall inform the Company immediately in writing of any changes in any of the representations or warranties provided or contained herein.
- 3.17 Indemnity. The Subscriber hereby agrees to indemnify and hold harmless the Company, and the Company's successors and assigns, from, against and in all respects of any demands, claims, actions or causes of action, assessments, liabilities, losses, costs, damages, penalties, charges, fines or expenses (including, without limitation, interest, penalties, and attorney and accountants' fees, disbursements and expenses), arising out of or relating to any breach by Subscriber of any representations, warranty, covenant or agreement made by Subscriber in this Agreement. Such right to indemnification shall be in addition to any and all other rights of the Company under this Agreement or otherwise, at law or in equity.

3.18 Survival. The Subscriber expressly acknowledges and agrees that all of its representations, warranties, agreements and covenants set forth in this Agreement shall be of the essence hereof and shall survive the

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execution, delivery and Closing of this Agreement, the sale, purchase, and conversion, if any, of the Series 11 Preferred, the sale of the Conversion Shares, the exercise of the Series 3 Warrants, and the sale of the Warrant Shares.

4. Representations, Warranties and Covenants of the Company. In order to induce Subscriber to enter into this Agreement and to exchange the Series 3 Preferred for the Series 11 Preferred, the Company hereby represents, warrants and covenants to Subscriber as follows:

- 4.1 Organization, Authority, Qualification. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware. The Company has full corporate power and authority to own and operate its properties and assets and to conduct and carry on its business as it is now being conducted and operated.
- 4.2 Authorization. The Company has full power and authority to execute and deliver this Agreement and to perform its obligations under and consummate the transactions contemplated by this Agreement. Upon the execution of this Agreement by the Company and delivery of the Securities, this Agreement shall have been duly and validly executed and delivered by the Company and shall constitute the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.
- 4.3 No Commission. The Company agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Exchange.
- 4.4 Ownership of, and Title to, Securities. The Series 11 Preferred to be exchanged for the Series 3 Preferred by the Subscriber are, and all Conversion Shares, when issued, will be, duly authorized, validly issued, fully paid and nonassessable shares of the capital stock of the Company, free of personal liability. Upon consummation of the exchange of the Series 11 Preferred (and upon the conversion of the Series 11 Preferred, in whole or in part) pursuant to this Agreement, the Subscriber will own and acquire title to the Series 11 Preferred (and the Conversion Shares, as the case may be) free and clear of any and all proxies, voting trusts, pledges, options, restrictions, or other legal or equitable encumbrance of any nature whatsoever (other than the restrictions on transfer due to Securities Laws or as otherwise provided for in this Agreement or the Series 11 Preferred Certificate of Designations).
- 4.5 Exemption from Registration. The offer and exchange of securities with the Subscriber in accordance with the terms and provisions of this Agreement is being affected

in accordance with the Securities Act, pursuant to an exchange offer exemption to the registration provision of the Securities Act pursuant to Section 3(a)(9) thereunder and to a private placement exemption to the registration

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provisions of the Act pursuant to Section 4(2) of such Act and/or Regulation D promulgated under the Securities Act, based on the representations, warranties and covenants made by the Subscriber contained in this Agreement.

5. Indemnification.

5.1 By the Company. Subject to the terms of this Section 5, the Company will indemnify and hold harmless the Subscriber, its directors and officers, and any underwriter (as defined in the Securities Act) for the Subscriber and each person, if any, who controls the Subscriber or such underwriter within the meaning of the Act, from and against, and will reimburse the Subscriber and each such underwriter and controlling person with respect to, any and all loss, damage, liability, cost and expense to which such holder or any such underwriter or controlling person may become subject under the Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement filed with the SEC in connection with the Conversion Shares, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made not misleading; provided, however, that the Company will not be liable in any such case to the extent that any such loss, damage, liability, cost or expense arises out of, or is based upon, an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by the Subscriber, such underwriter or such controlling person in writing specifically for use in the preparation thereof.

5.2 By the Subscriber. Subject to the terms of this Section 5, the Subscriber will indemnify and hold harmless the Company, its directors and officers, any controlling person and any underwriter from and against, and will reimburse the Company, its directors and officers, any controlling person and any underwriter with respect to, any and all loss, damage, liability, cost or expense to which the Company or any controlling person and/or any underwriter may become subject under the Securities Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in a Registration Statement filed with the SEC in connection to the Conversion Shares, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a

material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was so made in reliance

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upon, and in strict conformity with, written information furnished by, or on behalf of, the Subscriber specifically for use in the preparation thereof.

5.3 Procedure. Promptly after receipt by an indemnified party pursuant to the provisions of Section 5.1 or 5.2 of notice of the commencement of any action involving the subject matter of the foregoing indemnity provisions, such indemnified party will, if a claim thereof is to be made against the indemnifying party pursuant to the provisions of Section 5.1 or 5.2, promptly notify the indemnifying party of the commencement thereof; but the omission to so notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to any indemnified party otherwise than hereunder. In case such action is brought against any indemnified party and the indemnified party notifies the indemnifying party of the commencement thereof, the indemnifying party shall have the right to participate in, and, to the extent that it may wish, assume the defense thereof; or, if there is a conflict of interest which would prevent counsel for the indemnifying party from also representing the indemnified party, the indemnified parties have the right to select only one (1) separate counsel to participate in the defense of such action on behalf of all such indemnified parties. After notice from the indemnifying parties to such indemnified party of the indemnifying parties' election so to assume the defense thereof, the indemnifying parties will not be liable to such indemnified parties pursuant to the provisions of said Section 5.1 or 5.2 for any legal or other expense subsequently incurred by such indemnified parties in connection with the defense thereof, other than reasonable costs of investigation, unless (a) the indemnified parties shall have employed counsel in accordance with the provisions of the preceding sentence; (b) the indemnifying parties shall not have employed counsel satisfactory to the indemnified parties to represent the indemnified parties within a reasonable time after the notice of the commencement of the action or (c) the indemnifying party has authorized the employment of counsel for the indemnified party at the expense of the indemnifying parties.

6. Securities Legends and Notices. Subscriber represents and warrants that it has read, considered and understood the following legends, and agrees that such legends, substantially in the form and substance set forth below, shall be placed on all of the certificates representing the Series 11 Preferred:

Series 11 Preferred Legends

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF

1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS PREFERRED STOCK AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD, PLEDGED,

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HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

Conversion Shares Legends

THE SHARES OF COMMON STOCK REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS COMMON STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

7. Miscellaneous.

7.1 Assignment and Power of Attorney. For purposes of affecting the exchange of the Series 3 Preferred in accordance with the terms of this Agreement, at the Closing the Subscriber does hereby assign all of its right, title and interest in and to the Series 3 Preferred to the Company and irrevocably makes, constitutes and appoints the Company as the true and lawful agents and attorneys-in-fact of the Subscriber ("Attorney-In-Fact") with full power and authority (except as provided below) to act hereunder individually, or through duly appointed successor attorneys-in-fact, in its sole discretion, all as hereinafter provided, in the name of, for and on behalf of the Subscriber, as fully as could the Subscriber if present and acting in person, with respect to all matters in connection with the transfer of the Series 3 Preferred.

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7.2 Amendment; Waiver. Neither this Agreement nor the Warrants shall be changed, modified or amended in any respect except by the mutual written agreement of the parties hereto. Any provision of this Agreement or the Warrants may be waived in writing by the party which is

entitled to the benefits thereof. No waiver of any provision of this Agreement or the Series 3 Warrants shall be deemed to, or shall constitute a waiver of, any other provision hereof or thereof (whether or not similar), nor shall any such waiver constitute a continuing waiver.

- 7.3 Binding Effect; Assignment. Neither this Agreement nor the Series 3 Warrants, or any rights or obligations hereunder or thereunder, are assignable by the Subscriber.
- 7.4 Governing Law; Litigation Costs. This Agreement and its validity, construction and performance shall be governed in all respects by the internal laws of the State of Delaware without giving effect to such State's conflicts of laws provisions. Each of the Company and the Subscriber expressly and irrevocably consent to the jurisdiction and venue of the federal courts located in Wilmington, Delaware. Each of the parties agrees that in the event either party brings an action to enforce any of the provisions of this Agreement or to recover for an alleged breach of any of the provisions of this Agreement, each party shall be responsible for its own legal costs and disbursements during the pendency of any such action; provided, however, that after any such action has been reduced to a final, unappealable judgment, the prevailing party shall be entitled to recover from the other party all reasonable, documented attorneys' fees and disbursements and court costs from the other party.
- 7.5 Severability. Any term or provisions of this Agreement or the Series 3 Warrants which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction only, be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or thereof affecting the validity or enforceability of such provision in any other jurisdiction.
- 7.6 Headings. The captions, headings and titles preceding the text of each or any Section, subsection or paragraph hereof are for convenience of reference only and shall not affect the construction, meaning or interpretation of this Agreement or the Warrants or any term or provisions hereof or thereof.
- 7.7 Counterparts. This Agreement may be executed in one or more original or facsimile counterparts, each of which shall be deemed an original and all of which shall be considered one and the same agreement, binding on all of the parties hereto, notwithstanding that all parties are not signatories to the same counterpart. Upon delivery of an executed counterpart by the undersigned Subscriber to the Company, which in turn is executed and delivered by the Company, this Agreement shall be binding as one original agreement between Subscriber and the Company.
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- 7.8 Transfer Taxes. Each party hereto shall pay all such sales, transfer, use, gross receipts, registration and similar taxes arising out of, or in connection with, the

transactions contemplated by this Agreement (collectively, the "Transfer Taxes") as are payable by such party under applicable law, and the Company shall pay the cost of any documentary stock transfer stamps, if any, to be affixed to the certificates representing the Shares to be sold.

7.9 Entire Agreement. This Agreement, along with the Series 3 Warrants and the Series 11 Preferred Certificate of Designations, merges and supersedes any and all prior agreements, understandings, discussions, assurances, promises, representations or warranties among the parties with respect to the subject matter hereof, and contains the entire agreement among the parties with respect to the subject matter set forth herein and therein.

7.10 Authority; Enforceability. The Subscriber is duly authorized to enter into this Agreement and to perform all of its obligations hereunder. Upon the execution and delivery of this Agreement by the Subscriber, this Agreement shall be enforceable against the Subscriber in accordance with its terms.

7.11 Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or by fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (i) on the business day actually received if given by hand or by fax, (ii) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (iii) five (5) business days following the mailing thereof, if mailed by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 7.11:

If to the Company: Dr. Louis F. Centofanti
Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32653
Fax No.: (352) 373-0040

with copies Irwin H. Steinhorn, Esquire
simultaneously Conner & Winters
by like means to: One Leadership Square, Suite 1700

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211 North Robinson
Oklahoma City, Oklahoma 73102
Fax No.: (405) 232-2695

[illegible]

7.12 No Third Party Beneficiaries. This Agreement and the rights, benefits, privileges, interests, duties and obligations contained or referred to herein shall be solely for the benefit of the parties hereto and no third party shall have any rights or benefits hereunder as a third party beneficiary or otherwise hereunder.

7.13 Public Announcements. Neither Subscriber nor any officer, director, stockholder, employee, affiliate or affiliated person or entity of Subscriber, shall make or issue any press releases or otherwise make any public statements or make any disclosures to any third person or entity with respect to the transactions contemplated herein and will not make or issue any press releases or otherwise make any public statements of any nature whatsoever with respect to the Company without the express prior approval of the Company.

7.14 Conflicts with Subscription Agreement. In the event of a conflict between the terms of the Subscription Agreement and the terms of this Agreement, this Agreement shall control in all respects.

IN WITNESS WHEREOF, the Company and the undersigned Subscriber have each duly executed this Agreement on the 15th day of July 1999.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chief Executive Officer

RBB BANK AKTIENGESSELLSCHAFT

By /s/ Herbert Strauss

Herbert Strauss
Headtrader

EXCHANGE AGREEMENT

exchanging

916 SHARES OF SERIES 8 CLASS H CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

for

916 SHARES OF SERIES 12 CLASS L CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

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Exhibit "A" Certificate of Designations

THIS EXCHANGE AGREEMENT (the "Agreement") is entered on the 15th day of July 1999, by and between PERMA-FIX ENVIRONMENTAL SERVICES, INC., a Delaware corporation, having offices at 1940 Northwest 67th Place, Gainesville, Florida 32653 (the "Company"), and RBB BANK AKTIENGESSELLSCHAFT, organized under the laws of Austria, and having its principal offices at Burgring 16, 8101 Graz, Austria (the "Subscriber").

W I T N E S S E T H:

WHEREAS, the Company and the Subscriber previously entered into a certain Subscription and Purchase Agreement dated as of the 9th day of June, 1997 ("Subscription Agreement") under which (i) 2,500 shares of "Series 4 Class D Convertible Preferred Stock," par value \$.001 per share (the "Series 4 Preferred"), and (ii) an aggregate of 375,000 common stock purchase warrants were issued to the Subscriber in the form of one common stock purchase warrant dated June 9, 1997, providing for the purchase of 187,500 shares of the Company's common stock, par value \$.001 per share (the "Common Stock"), at an exercise price of \$2.10 per share, and one common stock warrant dated June 9, 1997, providing for the purchase of 187,500 shares of Common Stock at an exercise price of \$2.50 per share (collectively, the "June 1997 Warrants");

WHEREAS, the Company and the Subscriber previously entered into a certain Exchange Agreement dated as of the 6th day of November, 1997, but effective as of the 16th day of September, 1997 ("First Exchange Agreement"), under which the Subscription Agreement was terminated in all respects and all of the Series 4 Preferred and the June 1997 Warrants were delivered and tendered to the Company in exchange (the "First Exchange") for (i) an aggregate of 2,500 shares of "Series 6 Class F Convertible Preferred Stock," par value \$.001 per share (the "Series 6 Preferred") and (ii) an aggregate of 656,250 common stock purchase warrants (the "Series 6 Warrants"), each providing for the purchase of one share of the Company's Common Stock, 375,000 of which are exercisable at \$1.8125 per share and 281,250 of which are exercisable at \$2.125 per share (the Common Stock issuable upon the exercise of the Series 6 Warrants is referred to hereinafter as the "Warrant Shares");

WHEREAS, the Company and the Subscriber previously entered into a certain Exchange Agreement dated as of the 30th day of April, 1998, but effective as of the 28th day of February, 1998 ("Second Exchange Agreement"), under which all of the Series 6 Preferred were delivered and tendered to the Company in exchange (the "Second Exchange") for an aggregate of 2,500 shares of "Series 8 Class H Convertible Preferred Stock," par value \$.001 per share (the "Series 8 Preferred");

WHEREAS, the First Exchange Agreement is not terminated, except from and after the date of this Agreement, (i) the Subscriber shall have no rights under the First Exchange Agreement or otherwise arising out of or in connection with or relating to the Series 6 Preferred or to subscribe for Series 6 Preferred or any shares of Common Stock issuable or obtainable upon conversion of the Series 6 Preferred and (ii) if the First Exchange Agreement is in conflict with this Agreement, this Agreement shall control in all respects;

WHEREAS, pursuant to the terms of the Series 8 Preferred, the Subscriber has previously converted 1,584 shares of Series 8 Preferred into Common Stock leaving 916 shares remaining issued and outstanding as of the date of this Agreement;

WHEREAS, the Subscriber owns all of the issued and outstanding shares of Series 8 Preferred as of the date of this Agreement;

WHEREAS, the Company and the Subscriber both desire to enter into this Agreement, under which all of the issued and outstanding shares of the Series 8 Preferred will be delivered and tendered to the Company in exchange (the "Third Exchange") for an aggregate of 916 shares of a new series of convertible preferred stock, par value \$.001 per share, to be designated by the Company's Board of Directors as "Series 12 Class L Convertible Preferred Stock" (the "Series 12 Preferred"), with the Series 12 Preferred containing such terms, conditions, restrictions and provisions as set forth in the Series 12 Preferred Certificate of Designations, attached hereto as Exhibit "A," ("Series 12 Preferred Certificate of Designations");

WHEREAS, upon execution of this Agreement, the Second Exchange Agreement is to be terminated in all respects;

WHEREAS, the terms, conditions, restrictions and provisions of the Series 12 Preferred shall be the same as the terms, conditions, restrictions and provisions of the Series 8 Preferred, except that (i) the Series 12 Preferred shall not be convertible for a period of twelve months from the date of this Agreement, (ii) the Minimum Conversion Price (as defined herein) shall be \$1.50 for a period of twenty-four months from the date of issuance of the Series 12 Preferred, (iii) the Company shall, at any time and from time to time within 120 days from the date of issuance of the Series 12 Preferred, have the option to redeem up to 300 shares of Series 12 Preferred of the 916 currently outstanding for \$1,000 per share, and upon such redemption the holder of the Series 12 Preferred so redeemed shall not have the right to convert such redeemed shares; (iv) for a period of twelve months from the date of issuance of the Series 12 Preferred, the Company shall, at any time and from time to time, have the option of redeeming the Series 12 Preferred for \$1,100 per share, except as otherwise provided in (iii) above, and upon such date of redemption the holder of the Series 12 Preferred so redeemed shall not have the right to convert such redeemed shares; (v) after a period of twelve months from the issuance of the Series 12 Preferred, the Company shall, at any time and from time to time, have the option of redeeming the outstanding shares of Series 12 Preferred for \$1,200 per share, and (vi) after a period of twelve months from the date of this Agreement, upon receipt of notice of redemption, the holder of the Series 12 Preferred being redeemed shall have five business days in which to exercise an option to convert some or all of the shares of Series 12 Preferred being redeemed by the Company;

WHEREAS, the Series 6 Warrants shall not be affected by this Agreement and shall remain issued and outstanding pursuant to the terms, provisions and conditions of the Series 6 Warrants;

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WHEREAS, the shares of Common Stock issuable upon conversion of the Series 12 Preferred ("Conversion Shares") and the Series 12 Preferred are collectively referred to hereinafter as the "Securities;"

WHEREAS, the Company and the Subscriber each desire that the Third Exchange and the execution of the Agreement act to fully and completely terminate the Subscriber's rights under the Series 8 Preferred, terminate the Series 8 Preferred, and will act to fully and completely release all obligations of the Company under the Series 8 Preferred;

WHEREAS, the Common Stock is listed for trading on the Boston Stock Exchange and the National Association of Securities Dealers Automated Quotation SmallCap market ("NASDAQ"), and the Company is subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and has been subject to such filing requirements for the past ninety (90) days;

WHEREAS, the Subscriber is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Securities Act") and the Subscriber received all information as required under Rule 502 of Regulation D;

WHEREAS, the Subscriber is not a "U. S. Person," as such term is defined in Regulation S promulgated under the Securities Act;

WHEREAS, in reliance upon the representations made by the Subscriber in this Agreement, the transactions contemplated by this Agreement are such that the offer and exchange of securities by the Company hereunder will be exempt from registration under applicable federal (U. S.) securities laws since this is an exchange offer pursuant to Section 3(a)(9) of the Securities Act, and it is a private placement and intended to be a nonpublic offering pursuant to Sections 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act; and,

WHEREAS, the Securities will not be quoted or listed for trading on any securities exchange, organized market or quotation system at the time of acquisition hereunder.

NOW, THEREFORE, for and in consideration of the premises, and the mutual representations, warranties, covenants and agreements set forth herein, and for other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Exchange and Subscription for Purchase of Securities.

- 1.1 Issuance of Common Stock and Warrants. In full and complete termination of the Series 8 Preferred and the Subscriber's rights, and the interest in and to the Series 8 Preferred, and in full and complete release of any and all obligations of the Company under the Series 8 Preferred and to the Subscriber under the Series 8 Preferred, at the Closing (as defined herein) the

Subscriber shall deliver all of the issued and outstanding shares of the Series 8 Preferred to the Company in exchange for 916 shares of Series 12 Preferred, containing such terms, conditions and provisions as set forth in the Series 12 Preferred Certificate of Designations, pursuant to the terms and conditions set forth in this Agreement. Dividends on the

Series 8 Preferred shall cease to accrue as of the close of business on the day immediately preceding the date of this Agreement and dividends on the Series 12 Preferred shall begin to accrue on the date of this Agreement.

- 1.1.1 Delivery. Upon receipt by the Company of the canceled Series 8 Preferred duly assigned to the Company, the Company shall deliver or cause to be delivered: (a) to Conner & Winters, A Professional Corporation ("Conner & Winters"), a certificate or certificates representing the 916 shares of Series 12 Preferred issued in the name of the Subscriber, in such denominations as Subscriber requests in writing, to be held in escrow by Conner & Winters, for the Subscriber; and (b) to the Subscriber, written evidence from the Secretary of State of the State of Delaware that the Series 12 Preferred Certificate of Designations has been filed in the Office of the Secretary of State of the State of Delaware on or before the Closing Date.
- 1.1.2 Cancellation of Series 8 Preferred. At the Closing, the Subscriber does hereby assign and transfer unto the Company all of the Series 8 Preferred and the Series 8 Preferred shall be terminated and rendered null and void in all respects, and Conner & Winters is directed to deliver to the Company the Series 8 Preferred marked "Canceled."
- 1.1.3 Termination of Second Exchange Agreement. The Second Exchange Agreement is hereby terminated in its entirety.
- 1.1.4 Restrictive Legends. Subscriber agrees that, subject to the provisions of Section 5 below, all certificates representing the Securities shall bear the restrictive legend substantially in the form set forth in Section 7 below which shall include, but not be limited to, a legend to the effect that (a) the Securities represented by such certificate have not been registered under the Securities Act, and (b) unless there is an effective registration statement relating to the Securities, the Securities may not be offered, sold, transferred, mortgaged, pledged or hypothecated without an exemption from registration and an opinion of counsel to the Company with respect thereto, or an opinion from counsel for the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor. The legend on all such certificates shall make reference to the registration rights set forth in Section 5 hereof.

1.2 Discharge. As of the Closing, the Series 8 Preferred shall be fully terminated in all respects. From and after the Closing, the Subscriber releases, acquits and forever discharges the Company, and all of its respective subsidiaries, affiliates, agents, employees, officers, and directors, as well as their respective heirs, successors, legal and personal representatives, and assigns of any and all of them, from and against any and all claims, liabilities, losses, damages, cause or causes of action of any kind or character whatsoever, whether liquidated, unliquidated or disputed, asserted or assertable, known or unknown, in contract or in tort, at law or in equity, which the Subscriber might now or hereafter have arising out of or in connection with or relating to the Series 8 Preferred.

1.3 Exchange. On the basis of the representations, warranties, covenants and agreements, and subject to the terms and conditions set forth herein, at the Closing, the Company agrees to exchange and deliver to the Subscriber, and the Subscriber agrees to accept in such exchange the delivery from the Company, of the Series 12 Preferred in exchange for the transfer of the Series 8 Preferred from the Subscriber to the Company.

1.4 Reporting Company. The Company is a reporting company under the Exchange Act and has filed with the United States Securities and Exchange Commission (the "SEC") all reports required to be filed by the Company under Section 13 or 15(d) of the Exchange Act. The Subscriber has had the opportunity to review, and has reviewed, all such reports and information which the Subscriber deemed material to an investment decision regarding the purchase of the Series 12 Preferred.

1.5 Terms of the Series 12 Preferred. The Series 12 Preferred shall contain and be subject to the terms, conditions, preferences and restrictions set forth in the Series 12 Preferred Certificate of Designations attached hereto as Exhibit "A."

1.6 No Effect on Series 6 Warrants. Nothing contained in this Agreement shall have any effect on the Series 6 Warrants.

2. Closing.

2.1 Closing. The consummation of this Agreement (the "Closing") will occur on at the time and on the date that the 916 shares of Series 12 Preferred are delivered by the Company to Conner & Winters (the "Closing Date").

3. Representations, Warranties and Covenants of Subscriber. The Subscriber hereby represents, warrants and covenants to the Company as follows:

3.1 Investment Intent. The Subscriber represents and warrants that the shares of Series 12 Preferred are being, and any underlying Conversion Shares will be,

account, for investment purposes only and not with a view toward the distribution or resale to others. The Subscriber acknowledges, understands and appreciates that the Securities have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in large part, upon the Subscriber's representations as to investment intention, investor status, and related and other matters set forth herein. Subscriber understands that, in the view of the SEC, among other things, a purchase now with an intent to distribute or resell would represent a purchase and acquisition with an intent inconsistent with its representation to the Company, and the SEC might regard such a transfer as a deferred sale for which the registration exemption is not available.

- 3.2 Certain Risk. The Subscriber recognizes that the purchase of the Series 12 Preferred involves a high degree of risk in that (a) the Company has sustained losses through December 31, 1998, from its operations, and may require substantial funds in addition to the proceeds of this private placement; (b) that the Company has a substantial accumulated deficit; (c) an investment in the Company is highly speculative and only investors who can afford the loss of their entire investment should consider investing in the Company and the Series 12 Preferred; (d) an investor may not be able to liquidate his investment; (e) transferability of the Series 12 Preferred is extremely limited; (f) in the event of a disposition an investor could sustain the loss of his entire investment; (g) the Series 12 Preferred represent non-voting equity securities, and the right to convert into and purchase shares of voting equity securities in a corporate entity that has an accumulated deficit; (h) no return on investment, whether through distributions, appreciation, transferability or otherwise, and no performance by, through or of the Company, has been promised, assured, represented or warranted by the Company, or by any director, officer, employee, agent or representative thereof; and, (i) while the Common Stock is presently quoted and traded on the Boston Stock Exchange and the NASDAQ and while the Subscriber is a beneficiary of certain registration rights provided herein, the Series 12 Preferred subscribed for and that are purchased under this Agreement and the Conversion Shares (i) are not registered under applicable federal (U. S.) or state securities laws, and thus may not be sold, conveyed, assigned or transferred unless registered under such laws or unless an exemption from registration is available under such laws, as more fully described herein, and (ii) the Series 12 Preferred subscribed for and that are to be purchased under this Agreement are not quoted, traded or listed for trading or quotation on the NASDAQ, or any other organized market or quotation system, and there is therefore no present public or other market for the Series 12 Preferred, nor can there be any assurance that the Common Stock of the Company will continue to be quoted, traded or listed for trading or quotation on the Boston Stock Exchange or the NASDAQ or on any other organized market or quotation system.

- 3.3 Prior Investment Experience. The Subscriber acknowledges

that it has prior investment experience, including investment in non-listed and non-registered securities, or has employed the services of an investment advisor, attorney or accountant to read all of the documents furnished or made available by the Company to it and to evaluate the merits and risks of such an investment on its behalf, and that it recognizes the highly speculative nature of this investment.

- 3.4 No Review by the SEC. The Subscriber hereby acknowledges that this offering of the Series 12 Preferred has not been reviewed by the SEC because this private placement is intended to be an exchange offer under Section 3(a)(9) of the Securities Act and a nonpublic offering pursuant to Section 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act.
- 3.5 Not Registered. The Subscriber understands that the Series 12 Preferred and the Conversion Shares have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in part, upon the Subscriber's investment intention. In this connection, the Subscriber understands that it is the position of the SEC that the statutory basis for such exemption would not be present if its representation merely meant that its present intention was to hold such securities for a short period, such as the capital gains period of tax statutes, for a deferred sale, for a market rise (assuming that a market develops), or for any other fixed period.
- 3.6 No Public Market. The Subscriber understands that there is no public market for the Series 12 Preferred. The Subscriber understands that although there is presently a public market for the Common Stock, including the Conversion Shares, Rule 144 (the "Rule") promulgated under the Securities Act requires, among other conditions, a one-year holding period following full payment of the consideration therefor prior to the resale (in limited amounts) of securities acquired in a nonpublic offering without having to satisfy the registration requirements under the Securities Act. The Subscriber understands that the Company makes no representation or warranty regarding its fulfillment in the future of any reporting requirements under the Exchange Act, or its dissemination to the public of any current financial or other information concerning the Company, as is required by the Rule as one of the conditions of its availability. The Subscriber understands and hereby acknowledges that the Company is under no obligation to register the Series 12 Preferred or the Conversion Shares under the Securities Act, except as set forth in Section 5 hereof. The Subscriber agrees to hold the Company and its directors, officers and controlling persons and their respective heirs, representatives, successors and assigns harmless and to indemnify them against all liabilities, costs and expenses incurred by them as a result of any misrepresentation made by the Subscriber contained herein or any sale or distribution by the Subscriber in violation of the Securities Act or any applicable state securities or "blue sky" laws (collectively, "Securities Laws").

- 3.7 Sophisticated Investor. That (a) the Subscriber has adequate means of providing for the Subscriber's current financial needs and possible contingencies and has no need for liquidity of the Subscriber's investment in the Series 12 Preferred; (b) the Subscriber is able to bear the economic risks inherent in an investment in the Series 12 Preferred and that an important consideration bearing on its ability to bear the economic risk of the purchase of Series 12 Preferred is whether the Subscriber can afford a complete loss of the Subscriber's investment in the Series 12 Preferred and the Subscriber represents and warrants that the Subscriber can afford such a complete loss; and (c) the Subscriber has such knowledge and experience in business, financial, investment and banking matters (including, but not limited to, investments in restricted, non-listed and non-registered securities) that the Subscriber is capable of evaluating the merits, risks and advisability of an investment in the Series 12 Preferred.
- 3.8 Tax Consequences. The Subscriber acknowledges that the Company has made no representation regarding the potential or actual tax consequences for the Subscriber which will result from entering into the Agreement and from consummation of the Second Exchange. The Subscriber acknowledges that it bears complete responsibility for obtaining adequate tax advice regarding the Agreement and the Second Exchange.
- 3.9 SEC Filing. The Subscriber acknowledges that it has been previously furnished with true and complete copies of the following documents which have been filed with the SEC pursuant to Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act, and that such have been furnished to the Subscriber a reasonable time prior to the date hereof: (i) Annual Report on Form 10-K for the year ended December 31, 1998 (the "Form 10-K"); (ii) Current Report on Form 8-K, date of earliest event reported April 8, 1999; (iii) Quarterly Report on Form 10-Q for the quarter ended March 31, 1999; and (iv) the information contained in any reports or documents required to be filed by the Company under Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act since the distribution of the Form 10-K.
- 3.10 Documents, Information and Access. The Subscriber's decision to purchase the Series 12 Preferred is not based on any promotional, marketing or sales materials, and the Subscriber and its representatives have been afforded, prior to purchase thereof, the opportunity to ask questions of, and to receive answers from, the Company and its management, and has had access to all documents and information which Subscriber deems material to an investment decision with respect to the purchase of Series 12 Preferred hereunder.
- 3.11 No Registration, Review or Approval. The Subscriber acknowledges and understands that the private offering and sale of securities pursuant to this Agreement has not been reviewed or approved by the SEC or by any state

securities commission, authority or agency, and is not registered under the Securities Laws. The Subscriber acknowledges, understands and agrees that the shares of Series 12 Preferred are being offered and exchanged hereunder pursuant to (i) an exchange offer exemption under Section 3(a)(9) of the Securities Act and (ii) (x) a private placement exemption to the registration provisions of the Securities Act pursuant to Section 4(2) of such Securities Act and/or Regulation D promulgated under the Securities Act) and (y) a similar exemption to the registration provisions of applicable state securities laws.

- 3.12 Transfer Restrictions. The Subscriber will not transfer any Series 12 Preferred Securities purchased under this Agreement or any Conversion Shares purchased under this Agreement unless such are registered under the Securities Laws, or unless an exemption is available under such Securities Laws, and the Company may, if it chooses, where an exemption from registration is claimed by such Subscriber, condition any transfer of Series 12 Preferred or Conversion Shares out of the Subscriber's name on receipt of an opinion of the Company's counsel, to the effect that the proposed transfer is being effected in accordance with, and does not violate, an applicable exemption from registration under the Securities Laws, or an opinion of counsel to the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.
- 3.13 No Short Sale. The Subscriber expressly agrees that until such time that it has sold all of the Securities that it shall not, directly or indirectly, through an affiliate (as that term is defined under Rule 405 promulgated under the Securities Act) or by, with or through an unrelated third party or entity, whether or not pursuant to a written or oral understanding, agreement, arrangement, scheme, or artifice of nature whatsoever, engage in the short selling of the Company's Common Stock or any other equity securities of the Company, whether now existing or hereafter issued, or engage in any other activity of any nature whatsoever that has the same effect as a short sale, or is a de facto or de jure short sale, of the Company's Common Stock or any other equity security of the Company, whether now existing or hereafter issued, including, but not limited to, the sale of any rights pursuant to any understanding, agreement, arrangement, scheme or artifice of any nature whatsoever, whether oral or in writing, relative to the Company's Common Stock or any other equity securities of the Company whether now existing or hereafter created.
- 3.14 No Commission. The Subscriber agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Third Exchange.
- 3.15 Reliance. The Subscriber understands and acknowledges that the Company is relying upon all of the

representations, warranties, covenants, understandings, acknowledgments and agreements contained in this

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Agreement in determining whether to accept this subscription and to sell and issue the Series 12 Preferred to the Subscriber.

3.16 Accuracy or Representations and Warranties. All of the representations, warranties, understandings and acknowledgments that Subscriber has made herein are true and correct in all material respects as of the date of execution hereof. The Subscriber will perform and comply fully in all material respects with all covenants and agreements set forth herein, and the Subscriber covenants and agrees that until the acceptance of this Agreement by the Company, the Subscriber shall inform the Company immediately in writing of any changes in any of the representations or warranties provided or contained herein.

3.17 Indemnity. The Subscriber hereby agrees to indemnify and hold harmless the Company, and the Company's successors and assigns, from, against and in all respects of any demands, claims, actions or causes of action, assessments, liabilities, losses, costs, damages, penalties, charges, fines or expenses (including, without limitation, interest, penalties, and attorney and accountants' fees, disbursements and expenses), arising out of or relating to any breach by Subscriber of any representations, warranty, covenant or agreement made by Subscriber in this Agreement. Such right to indemnification shall be in addition to any and all other rights of the Company under this Agreement or otherwise, at law or in equity.

3.18 Survival. The Subscriber expressly acknowledges and agrees that all of its representations, warranties, agreements and covenants set forth in this Agreement shall be of the essence hereof and shall survive the execution, delivery and Closing of this Agreement, the sale, purchase, and conversion, if any, of the Series 12 Preferred, the sale of the Conversion Shares, the exercise of the Series 6 Warrants, and the sale of the Warrant Shares.

4. Representations, Warranties and Covenants of the Company. In order to induce Subscriber to enter into this Agreement and to exchange the Series 8 Preferred for the Series 12 Preferred, the Company hereby represents, warrants and covenants to Subscriber as follows:

4.1 Organization, Authority, Qualification. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware. The Company has full corporate power and authority to own and operate its properties and assets and to conduct and carry on its business as it is now being conducted and operated.

4.2 Authorization. The Company has full power and authority to execute and deliver this Agreement and to perform its obligations under and consummate the transactions

contemplated by this Agreement. Upon the execution of this Agreement by the Company and delivery of the Securities, this Agreement shall have been duly and

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validly executed and delivered by the Company and shall constitute the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.

- 4.3 No Commission. The Company agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Third Exchange.
- 4.4 Ownership of, and Title to, Securities. The Series 12 Preferred to be exchanged for the Series 8 Preferred by the Subscriber are, and all Conversion Shares, when issued, will be, duly authorized, validly issued, fully paid and nonassessable shares of the capital stock of the Company, free of personal liability. Upon consummation of the exchange of the Series 12 Preferred (and upon the conversion of the Series 12 Preferred, in whole or in part) pursuant to this Agreement, the Subscriber will own and acquire title to the Series 12 Preferred (and the Conversion Shares, as the case may be) free and clear of any and all proxies, voting trusts, pledges, options, restrictions, or other legal or equitable encumbrance of any nature whatsoever (other than the restrictions on transfer due to Securities Laws or as otherwise provided for in this Agreement or the Series 12 Preferred Certificate of Designations).
- 4.5 Exemption from Registration. The offer and exchange of securities with the Subscriber in accordance with the terms and provisions of this Agreement is being affected in accordance with the Securities Act, pursuant to an exchange offer exemption to the registration provision of the Securities Act pursuant to Section 3(a)(9) thereunder and to a private placement exemption to the registration provisions of the Act pursuant to Section 4(2) of such Act and/or Regulation D promulgated under the Securities Act, based on the representations, warranties and covenants made by the Subscriber contained in this Agreement.

5. Registration Rights. In order to induce the Subscriber to enter into this Agreement and exchange the Series 8 Preferred for the Series 12 Preferred, the Company hereby covenants and agrees to grant to the Subscriber the registration rights with respect to the Conversion Shares and the shares of Common Stock which may issue as dividends on the Series 12 Preferred, as set forth in Section 5 of the First Exchange Agreement regarding the shares of Common Stock issuable upon conversion of the Series 8 Preferred and as dividends thereon. The registration rights as set forth in Section 5 of the First Exchange Agreement regarding the shares of Common Stock issuable upon exercise of the Series 6 Warrants are not changed by this Agreement.

6. Indemnification.

- 6.1 By the Company. Subject to the terms of this Section 6,

the Company will indemnify and hold harmless the Subscriber, its directors and officers, and any underwriter (as defined in the Securities Act) for the

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Subscriber and each person, if any, who controls the Subscriber or such underwriter within the meaning of the Act, from and against, and will reimburse the Subscriber and each such underwriter and controlling person with respect to, any and all loss, damage, liability, cost and expense to which such holder or any such underwriter or controlling person may become subject under the Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement filed with the SEC pursuant to Section 5, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made not misleading; provided, however, that the Company will not be liable in any such case to the extent that any such loss, damage, liability, cost or expense arises out of, or is based upon, an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by the Subscriber, such underwriter or such controlling person in writing specifically for use in the preparation thereof.

6.2 By the Subscriber. Subject to the terms of this Section 6, the Subscriber will indemnify and hold harmless the Company, its directors and officers, any controlling person and any underwriter from and against, and will reimburse the Company, its directors and officers, any controlling person and any underwriter with respect to, any and all loss, damage, liability, cost or expense to which the Company or any controlling person and/or any underwriter may become subject under the Securities Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in such Registration Statement filed with the SEC pursuant to Section 5, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was so made in reliance upon, and in strict conformity with, written information furnished by, or on behalf of, the Subscriber specifically for use in the preparation thereof.

6.3 Procedure. Promptly after receipt by an indemnified party pursuant to the provisions of Section 6.1 or 6.2 of notice of the commencement of any action involving the subject matter of the foregoing indemnity provisions, such indemnified party will, if a claim thereof is to be

made against the indemnifying party pursuant to the provisions of Section 6.1 or 6.2, promptly notify the indemnifying party of the commencement thereof; but the omission to so notify the indemnifying party will not relieve the indemnifying party from any liability which

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it may have to any indemnified party otherwise than hereunder. In case such action is brought against any indemnified party and the indemnified party notifies the indemnifying party of the commencement thereof, the indemnifying party shall have the right to participate in, and, to the extent that it may wish, assume the defense thereof; or, if there is a conflict of interest which would prevent counsel for the indemnifying party from also representing the indemnified party, the indemnified parties have the right to select only one (1) separate counsel to participate in the defense of such action on behalf of all such indemnified parties. After notice from the indemnifying parties to such indemnified party of the indemnifying parties' election so to assume the defense thereof, the indemnifying parties will not be liable to such indemnified parties pursuant to the provisions of said Section 6.1 or 6.2 for any legal or other expense subsequently incurred by such indemnified parties in connection with the defense thereof, other than reasonable costs of investigation, unless (a) the indemnified parties shall have employed counsel in accordance with the provisions of the preceding sentence; (b) the indemnifying parties shall not have employed counsel satisfactory to the indemnified parties to represent the indemnified parties within a reasonable time after the notice of the commencement of the action or (c) the indemnifying party has authorized the employment of counsel for the indemnified party at the expense of the indemnifying parties.

7. Securities Legends and Notices. Subscriber represents and warrants that it has read, considered and understood the following legends, and agrees that such legends, substantially in the form and substance set forth below, shall be placed on all of the certificates representing the Series 12 Preferred:

Series 12 Preferred Legends

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS PREFERRED STOCK AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE

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COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THE SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF FEBRUARY 28, 1998, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

Conversion Shares Legends

THE SHARES OF COMMON STOCK REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS COMMON STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THESE SHARES OF COMMON STOCK ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF FEBRUARY 28, 1998, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

8. Miscellaneous.

8.1 Assignment and Power of Attorney. For purposes of affecting the exchange of the Series 8 Preferred in accordance with the terms of this Agreement, at the Closing the Subscriber does hereby assign all of its right, title and interest in and to the Series 8 Preferred to the Company and irrevocably makes, constitutes and appoints the Company as the true and lawful agents and attorneys-in-fact of the Subscriber ("Attorney-In-Fact") with full power and authority

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(except as provided below) to act hereunder individually, or through duly appointed successor attorneys-in-fact, in its sole discretion, all as hereinafter provided, in the name of, for and on behalf of the Subscriber, as fully as could the Subscriber if present and acting in person, with respect to all matters in connection with the transfer of the Series 8 Preferred Stock.

8.2 Amendment; Waiver. Neither this Agreement nor the Warrants shall be changed, modified or amended in any respect except by the mutual written agreement of the parties hereto. Any provision of this Agreement or the

Warrants may be waived in writing by the party which is entitled to the benefits thereof. No waiver of any provision of this Agreement or the Series 6 Warrants shall be deemed to, or shall constitute a waiver of, any other provision hereof or thereof (whether or not similar), nor shall any such waiver constitute a continuing waiver.

- 8.3 Binding Effect; Assignment. Neither this Agreement nor the Series 6 Warrants, or any rights or obligations hereunder or thereunder, are assignable by the Subscriber.
- 8.4 Governing Law; Litigation Costs. This Agreement and its validity, construction and performance shall be governed in all respects by the internal laws of the State of Delaware without giving effect to such State's conflicts of laws provisions. Each of the Company and the Subscriber expressly and irrevocably consent to the jurisdiction and venue of the federal courts located in Wilmington, Delaware. Each of the parties agrees that in the event either party brings an action to enforce any of the provisions of this Agreement or to recovery for an alleged breach of any of the provisions of this Agreement, each party shall be responsible for its own legal costs and disbursements during the pendency of any such action; provided, however, that after any such action has been reduced to a final, unappealable judgment, the prevailing party shall be entitled to recover from the other party all reasonable, documented attorneys' fees and disbursements and court costs from the other party.
- 8.5 Severability. Any term or provisions of this Agreement or the Series 6 Warrants which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction only, be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or thereof affecting the validity or enforceability of such provision in any other jurisdiction.
- 8.6 Headings. The captions, headings and titles preceding the text of each or any Section, subsection or paragraph hereof are for convenience of reference only and shall not affect the construction, meaning or interpretation of this Agreement or the Warrants or any term or provisions hereof or thereof.
- 8.7 Counterparts. This Agreement may be executed in one or more original or facsimile counterparts, each of which shall be deemed an original and all of which shall be considered one and the same agreement, binding on all of

the parties hereto, notwithstanding that all parties are not signatories to the same counterpart. Upon delivery of an executed counterpart by the undersigned Subscriber to the Company, which in turn is executed and delivered by the Company, this Agreement shall be binding as one original agreement between Subscriber and the Company.

- 8.8 Transfer Taxes. Each party hereto shall pay all such sales, transfer, use, gross receipts, registration and similar taxes arising out of, or in connection with, the transactions contemplated by this Agreement (collectively, the "Transfer Taxes") as are payable by such party under applicable law, and the Company shall pay the cost of any documentary stock transfer stamps, if any, to be affixed to the certificates representing the Shares to be sold.
- 8.9 Entire Agreement. This Agreement, along with the Series 6 Warrants and the Series 12 Preferred Certificate of Designations, merges and supersedes any and all prior agreements, understandings, discussions, assurances, promises, representations or warranties among the parties with respect to the subject matter hereof, and contains the entire agreement among the parties with respect to the subject matter set forth herein and therein.
- 8.10 Authority; Enforceability. The Subscriber is duly authorized to enter into this Agreement and to perform all of its obligations hereunder. Upon the execution and delivery of this Agreement by the Subscriber, this Agreement shall be enforceable against the Subscriber in accordance with its terms.
- 8.11 Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or by fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (i) on the business day actually received if given by hand or by fax, (ii) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (iii) five (5) business days following the mailing thereof, if mailed by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 8.11:

If to the Company: Dr. Louis F. Centofanti
Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32653
Fax No.: (352) 373-0040

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with copies Irwin H. Steinhorn, Esquire
simultaneously Conner & Winters
by like means to: One Leadership Square, Suite 1700
211 North Robinson
Oklahoma City, Oklahoma 73102
Fax No.: (405) 232-2695

If to the Herbert Strauss

Subscriber: RBB Bank Aktiengesellschaft
Burgring 16, 8010 Graz, Austria
Fax No.: 011-43-316-8072 ext. 392

- 8.12 No Third Party Beneficiaries. This Agreement and the rights, benefits, privileges, interests, duties and obligations contained or referred to herein shall be solely for the benefit of the parties hereto and no third party shall have any rights or benefits hereunder as a third party beneficiary or otherwise hereunder.
- 8.13 Public Announcements. Neither Subscriber nor any officer, director, stockholder, employee, affiliate or affiliated person or entity of Subscriber, shall make or issue any press releases or otherwise make any public statements or make any disclosures to any third person or entity with respect to the transactions contemplated herein and will not make or issue any press releases or otherwise make any public statements of any nature whatsoever with respect to the Company without the express prior approval of the Company.
- 8.14 Conflicts with First Exchange Agreement. In the event of a conflict between the terms of the First Exchange Agreement and the terms of this Agreement, this Agreement shall control in all respects.

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IN WITNESS WHEREOF, the Company and the undersigned Subscriber have each duly executed this Agreement on the 15th day of July 1999.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chief Executive Officer

RBB BANK AKTIENGESELLSCHAFT

By /s/ Herbert Strauss

Herbert Strauss
Headtrader

EXCHANGE AGREEMENT

exchanging

2,252 SHARES OF SERIES 10 CLASS J CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

for

2,252 SHARES OF SERIES 13 CLASS M CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

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Exhibit "A" Certificate of Designations

15th day of July 1999, by and between PERMA-FIX ENVIRONMENTAL SERVICES, INC., a Delaware corporation, having offices at 1940 Northwest 67th Place, Gainesville, Florida 32653 (the "Company"), and RBB BANK AKTIENGESELLSCHAFT, organized under the laws of Austria, and having its principal offices at Burgring 16, 8101 Graz, Austria (the "Subscriber").

W I T N E S S E T H:

WHEREAS, the Company and the Subscriber previously entered into a certain Private Securities Subscription Agreement dated June 30, 1998 ("Subscription Agreement") under which (i) 3,000 shares of "Series 10 Class Convertible Preferred Stock," par value \$.001 per share (the "Series 10 Preferred"), and (ii) an aggregate of 350,000 common stock purchase warrants were issued to the Subscriber in the form of one common stock purchase warrant dated June 30, 1998, providing for the purchase of 200,000 shares of the Company's common stock, par value \$.001 per share (the "Common Stock"), at an exercise price of \$1.875 per share, and one common stock warrant dated June 30, 1998, providing for the purchase of 150,000 shares of Common Stock at an exercise price of \$2.50 per share (collectively, the "Series 10 Warrants") (the Common Stock issuable upon the exercise of the Series 10 Warrants is referred to hereinafter as the "Warrant Shares");

WHEREAS, pursuant to the terms of the Series 10 Preferred, the Subscriber has previously converted seven hundred forty-eight (748) shares of Series 10 Preferred into Common Stock leaving two thousand two hundred fifty-two (2,252) shares remaining issued and outstanding as of the date of this Agreement;

WHEREAS, the subscriber owns all of the issued and outstanding shares of Series 10 Preferred as of the date of this Agreement;

WHEREAS, the Company and the Subscriber both desire to enter into this Agreement, under which all of the issued and outstanding shares of the Series 10 Preferred will be delivered and tendered to the Company in exchange (the "Exchange") for an aggregate of two thousand two hundred fifty-two (2,252) shares of a new series of convertible preferred stock, par value \$.001 per share, to be designated by the Company's Board of Directors as "Series 13 Class M Convertible Preferred Stock" (the "Series 13 Preferred"), with the Series 13 Preferred containing such terms, conditions, restrictions and provisions as set forth in the Series 13 Preferred Certificate of Designations, attached hereto as Exhibit "A," ("Series 13 Preferred Certificate of Designations");

WHEREAS, the Subscription Agreement is not terminated, except from and after the date of this Agreement (i) the Subscriber shall have no rights under the Subscription Agreement or otherwise arising out of or in connection with or relating to the Series 10 Preferred or to subscribe for Series 10 Preferred or any shares of Common Stock issuable or obtainable upon conversion of the Series 10 Preferred and (ii) if the Subscription Agreement is in conflict with this Agreement, this Agreement shall control in all respects;

WHEREAS, the terms, conditions, restrictions and provisions of the Series 13 Preferred shall be the same as the terms, conditions, restrictions and provisions of the Series 10 Preferred, except that (i) the Series 13 Preferred shall not be convertible for a period of twelve months from the date of this Agreement, (ii) the Minimum

Conversion Price (as defined herein) shall be \$1.50 for a period of twenty-four months from the date of issuance of the Series 13 Preferred, (iii) the Company shall, at any time and from time to time within 120 days from the date of issuance of the Series 13 Preferred have the option to redeem up to 450 shares of Series 13 Preferred of the 2,252 currently outstanding for \$1,000 per share, and upon such redemption the holder of the Series 13 Preferred so redeemed shall not have the right to convert such redeemed shares, (iv) for a period of twelve months from the date of issuance of the Series 13 Preferred, the Company shall at any time and from time to time, have the option of redeeming the Series 13 Preferred for \$1,100 per share, except as otherwise provided in (iii) above, and upon such redemption the holder of the Series 13 Preferred so redeemed shall not have the right to convert such redeemed shares, (v) after a period of twelve months from the date of issuance of the Series 13 Preferred, the Company shall, at any time and from time to time, have the option of redeeming the Series 13 Preferred for \$1,200 per share, and (vi) after a period of twelve months from the date of the issuance of the Series 13 Preferred, upon receipt of notice of redemption, the holder of the Series 13 Preferred being redeemed shall have five business days in which to exercise an option to convert some or all of the shares of Series 13 Preferred being redeemed by the Company;

WHEREAS, the Series 10 Warrants shall not be affected by this Agreement and shall remain issued and outstanding pursuant to the terms, provisions and conditions of the Series 10 Warrants;

WHEREAS, the shares of Common Stock issuable upon conversion of the Series 13 Preferred ("Conversion Shares") and the Series 13 Preferred are collectively referred to hereinafter as the "Securities;"

WHEREAS, the Company and the Subscriber each desire that the Exchange and the execution of the Agreement act to fully and completely terminate the Subscriber's rights under the Series 10 Preferred, terminate the Series 10 Preferred and will act to fully and completely release all obligations of the Company under the Series 10 Preferred;

WHEREAS, the Common Stock is listed for trading on the Boston Stock Exchange and the National Association of Securities Dealers Automated Quotation SmallCap market ("NASDAQ"), and the Company is subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and has been subject to such filing requirements for the past ninety (90) days;

WHEREAS, the Subscriber is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Securities Act") and the Subscriber received all information as required under Rule 502 of Regulation D.;

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WHEREAS, the Subscriber is not a "U. S. Person," as such term is defined in Regulation S promulgated under the Securities Act;

WHEREAS, in reliance upon the representations made by the Subscriber in this Agreement, the transactions contemplated by this Agreement are such that the offer and exchange of securities by the Company hereunder will be exempt from registration under applicable federal (U. S.) securities laws since this is an exchange offer

pursuant to Section 3(a)(9) of the Securities Act, and it is a private placement and intended to be a nonpublic offering pursuant to Section 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act; and,

WHEREAS, the Securities will not be quoted or listed for trading on any securities exchange, organized market or quotation system at the time of acquisition hereunder.

NOW, THEREFORE, for and in consideration of the premises, and the mutual representations, warranties, covenants and agreements set forth herein, and for other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Exchange and Subscription for Purchase of Securities.

1.1 Issuance of Common Stock and Warrants. In full and complete termination of the Series 10 Preferred and the Subscriber's rights, and the interest in and to the Series 10 Preferred, and in full and complete release of any and all obligations of the Company under the Series 10 Preferred and to the Subscriber under the Series 10 Preferred, at the Closing (as defined herein) the Subscriber shall deliver all of the issued and outstanding shares of the Series 10 Preferred to the Company in exchange for 2,252 shares of Series 13 Preferred, containing such terms, conditions and provisions as set forth in the Series 13 Preferred Certificate of Designations, pursuant to the terms and conditions set forth in this Agreement. Dividends on the Series 10 Preferred shall cease to accrue as of the close of business on the day immediately preceding the date of this Agreement, and dividends on the Series 13 Preferred shall begin to accrue on the date of this Agreement.

1.1.1 Delivery. Upon receipt by the Company of the canceled Series 10 Preferred duly assigned to the Company, the Company shall deliver or cause to be delivered: (a) to Conner & Winters, A Professional Corporation ("Conner & Winters"), a certificate or certificates representing the 2,252 shares of Series 13 Preferred issued in the name of the Subscriber, in such denominations as Subscriber requests in writing, to be held in escrow by Conner & Winters, for the Subscriber; and (b) to the Subscriber, written evidence from the Secretary of State of the State of Delaware that the Series 13 Preferred Certificate of Designations has been filed in the Office of the Secretary of State of the State of Delaware on or before the Closing Date.

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1.1.2 Cancellation of Series 10 Preferred. At the Closing the Subscriber does hereby assign and transfer unto the Company all of the Series 10 Preferred, the Series 10 Preferred shall be terminated and rendered null and void in all respects, and Conner & Winters is directed to

deliver to the Company the Series 10 Preferred marked "Canceled."

- 1.1.3 Restrictive Legends. Subscriber agrees that all certificates representing the Securities shall bear the restrictive legend substantially in the form set forth in Section 7 below which shall include, but not be limited to, a legend to the effect that (a) the Securities represented by such certificate have not been registered under the Securities Act, and (b) unless there is an effective registration statement relating to the Securities, the Securities may not be offered, sold, transferred, mortgaged, pledged or hypothecated without an exemption from registration and an opinion of counsel to the Company with respect thereto, or an opinion from counsel for the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.
- 1.2 Discharge. As of the Closing, the Series 10 Preferred shall be fully terminated in all respects. From and after the Closing, the Subscriber releases, acquits and forever discharges the Company, and all of its respective subsidiaries, affiliates, agents, employees, officers, and directors, as well as their respective heirs, successors, legal and personal representatives, and assigns of any and all of them, from and against any and all claims, liabilities, losses, damages, cause or causes of action of any kind or character whatsoever, whether liquidated, unliquidated or disputed, asserted or assertable, known or unknown, in contract or in tort, at law or in equity, which the Subscriber might now or hereafter have arising out of or in connection with or relating to the Series 10 Preferred.
- 1.3 Exchange. On the basis of the representations, warranties, covenants and agreements, and subject to the terms and conditions set forth herein, at the Closing, the Company agrees to exchange and deliver to the Subscriber, and the Subscriber agrees to accept in such exchange the delivery from the Company, of the Series 13 Preferred in exchange for the transfer of the Series 10 Preferred from the Subscriber to the Company.
- 1.4 Reporting Company. The Company is a reporting company under the Exchange Act and has filed with the United States Securities and Exchange Commission (the "SEC") all reports required to be filed by the Company under Section 13 or 15(d) of the Exchange Act. The Subscriber has had the opportunity to review, and has reviewed, all such reports and information which the Subscriber deemed material to an investment decision regarding the purchase of the Series 13 Preferred.
- 1.5 Terms of the Series 13 Preferred. The Series 13 Preferred shall contain and be subject to the terms, conditions, preferences and restrictions set forth in the

Series 13 Preferred Certificate of Designations attached hereto as Exhibit "A."

- 1.6 No Effect on Series 10 Warrants. Nothing contained in this Agreement shall have any effect on the Series 10 Warrants.

2. Closing.

- 2.1 Closing. The consummation of this Agreement (the "Closing") will occur on at the time and on the date that the 2,252 shares of Series 13 Preferred are delivered by the Company to Conner & Winters (the "Closing Date").

3. Representations, Warranties and Covenants of Subscriber. The Subscriber hereby represents, warrants and covenants to the Company as follows:

- 3.1 Investment Intent. The Subscriber represents and warrants that the shares of Series 13 Preferred are being, and any underlying Conversion Shares will be, purchased or acquired solely for the Subscriber's own account, for investment purposes only and not with a view toward the distribution or resale to others. The Subscriber acknowledges, understands and appreciates that the Securities have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in large part, upon the Subscriber's representations as to investment intention, investor status, and related and other matters set forth herein. Subscriber understands that, in the view of the SEC, among other things, a purchase now with an intent to distribute or resell would represent a purchase and acquisition with an intent inconsistent with its representation to the Company, and the SEC might regard such a transfer as a deferred sale for which the registration exemption is not available.
- 3.2 Certain Risk. The Subscriber recognizes that the purchase of the Series 13 Preferred involves a high degree of risk in that (a) the Company has sustained losses through December 31, 1998, from its operations, and may require substantial funds in addition to the proceeds of this private placement; (b) that the Company has a substantial accumulated deficit; (c) an investment in the Company is highly speculative and only investors who can afford the loss of their entire investment should consider investing in the Company and the Series 13 Preferred; (d) an investor may not be able to liquidate his investment; (e) transferability of the Series 13 Preferred is extremely limited; (f) in the event of a disposition an investor could sustain the loss of his entire investment; (g) the Series 13 Preferred represent non-voting equity securities, and the right to convert into and purchase shares of voting equity securities in a corporate entity that has an accumulated deficit; (h) no return on investment, whether through distributions,

appreciation, transferability or otherwise, and no performance by, through or of the Company, has been promised, assured, represented or warranted by the

Company, or by any director, officer, employee, agent or representative thereof; and, (i) while the Common Stock is presently quoted and traded on the Boston Stock Exchange and the NASDAQ and while the Subscriber is a beneficiary of certain registration rights provided herein, the Series 13 Preferred subscribed for and that are purchased under this Agreement and the Conversion Shares (i) are not registered under applicable federal (U. S.) or state securities laws, and thus may not be sold, conveyed, assigned or transferred unless registered under such laws or unless an exemption from registration is available under such laws, as more fully described herein, and (ii) the Series 13 Preferred subscribed for and that are to be purchased under this Agreement are not quoted, traded or listed for trading or quotation on the NASDAQ, or any other organized market or quotation system, and there is therefore no present public or other market for the Series 13 Preferred, nor can there be any assurance that the Common Stock of the Company will continue to be quoted, traded or listed for trading or quotation on the Boston Stock Exchange or the NASDAQ or on any other organized market or quotation system.

- 3.3 Prior Investment Experience. The Subscriber acknowledges that it has prior investment experience, including investment in non-listed and non-registered securities, or has employed the services of an investment advisor, attorney or accountant to read all of the documents furnished or made available by the Company to it and to evaluate the merits and risks of such an investment on its behalf, and that it recognizes the highly speculative nature of this investment.
- 3.4 No Review by the SEC. The Subscriber hereby acknowledges that this offering of the Series 13 Preferred has not been reviewed by the SEC because this private placement is intended to be an exchange offer under Section 3(a)(9) of the Securities Act and a nonpublic offering pursuant to Section 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act.
- 3.5 Not Registered. The Subscriber understands that the Series 13 Preferred and the Conversion Shares have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in part, upon the Subscriber's investment intention. In this connection, the Subscriber understands that it is the position of the SEC that the statutory basis for such exemption would not be present if its representation merely meant that its present intention was to hold such securities for a short period, such as the capital gains period of tax statutes, for a deferred sale, for a market rise (assuming that a market develops), or for any other fixed period.
- 3.6 No Public Market. The Subscriber understands that there is no public market for the Series 13 Preferred. The Subscriber understands that although there is presently

a public market for the Common Stock, including the Conversion Shares, Rule 144 (the "Rule") promulgated under the Securities Act requires, among other

conditions, a one-year holding period following full payment of the consideration therefor prior to the resale (in limited amounts) of securities acquired in a nonpublic offering without having to satisfy the registration requirements under the Securities Act. The Subscriber understands that the Company makes no representation or warranty regarding its fulfillment in the future of any reporting requirements under the Exchange Act, or its dissemination to the public of any current financial or other information concerning the Company, as is required by the Rule as one of the conditions of its availability. The Subscriber understands and hereby acknowledges that the Company is under no obligation to register the Series 13 Preferred or the Conversion Shares under the Securities Act. The Subscriber agrees to hold the Company and its directors, officers and controlling persons and their respective heirs, representatives, successors and assigns harmless and to indemnify them against all liabilities, costs and expenses incurred by them as a result of any misrepresentation made by the Subscriber contained herein or any sale or distribution by the Subscriber in violation of the Securities Act or any applicable state securities or "blue sky" laws (collectively, "Securities Laws").

- 3.7 Sophisticated Investor. That (a) the Subscriber has adequate means of providing for the Subscriber's current financial needs and possible contingencies and has no need for liquidity of the Subscriber's investment in the Series 13 Preferred; (b) the Subscriber is able to bear the economic risks inherent in an investment in the Series 13 Preferred and that an important consideration bearing on its ability to bear the economic risk of the purchase of Series 13 Preferred is whether the Subscriber can afford a complete loss of the Subscriber's investment in the Series 13 Preferred and the Subscriber represents and warrants that the Subscriber can afford such a complete loss; and (c) the Subscriber has such knowledge and experience in business, financial, investment and banking matters (including, but not limited to, investments in restricted, non-listed and non-registered securities) that the Subscriber is capable of evaluating the merits, risks and advisability of an investment in the Series 13 Preferred.
- 3.8 Tax Consequences. The Subscriber acknowledges that the Company has made no representation regarding the potential or actual tax consequences for the Subscriber which will result from entering into the Agreement and from consummation of the Exchange. The Subscriber acknowledges that it bears complete responsibility for obtaining adequate tax advice regarding the Agreement and the Exchange.
- 3.9 SEC Filing. The Subscriber acknowledges that it has been previously furnished with true and complete copies of the following documents which have been filed with the SEC pursuant to Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act, and that such have been furnished to the Subscriber a reasonable time prior to the date hereof:

(i) Annual Report on Form 10-K for the year ended December 31, 1998 (the "Form 10-K"); (ii) Current Report on Form 8-K, date of earliest event reported April 8, 1999; (iii) Quarterly Report on Form 10-Q for the quarter ended March 31, 1999; and (iv) the information contained in any reports or documents required to be filed by the Company under Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act since the distribution of the Form 10-K.

- 3.10 Documents, Information and Access. The Subscriber's decision to purchase the Series 13 Preferred is not based on any promotional, marketing or sales materials, and the Subscriber and its representatives have been afforded, prior to purchase thereof, the opportunity to ask questions of, and to receive answers from, the Company and its management, and has had access to all documents and information which Subscriber deems material to an investment decision with respect to the purchase of Series 13 Preferred hereunder.
- 3.11 No Registration, Review or Approval. The Subscriber acknowledges and understands that the private offering and sale of securities pursuant to this Agreement has not been reviewed or approved by the SEC or by any state securities commission, authority or agency, and is not registered under the Securities Laws. The Subscriber acknowledges, understands and agrees that the shares of Series 13 Preferred are being offered and exchanged hereunder pursuant to (i) an exchange offer exemption under Section 3(a)(9) of the Securities Act and (ii) (x) a private placement exemption to the registration provisions of the Securities Act pursuant to Section 4(2) of such Securities Act and/or Regulation D promulgated under the Securities Act) and (y) a similar exemption to the registration provisions of applicable state securities laws.
- 3.12 Transfer Restrictions. The Subscriber will not transfer any Series 13 Preferred Securities purchased under this Agreement or any Conversion Shares purchased under this Agreement unless such are registered under the Securities Laws, or unless an exemption is available under such Securities Laws, and the Company may, if it chooses, where an exemption from registration is claimed by such Subscriber, condition any transfer of Series 13 Preferred or Conversion Shares out of the Subscriber's name on receipt of an opinion of the Company's counsel, to the effect that the proposed transfer is being effected in accordance with, and does not violate, an applicable exemption from registration under the Securities Laws, or an opinion of counsel to the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.
- 3.13 No Short Sale. The Subscriber expressly agrees that until such time that it has sold all of the Securities that it shall not, directly or indirectly, through an affiliate (as that term is defined under Rule 405 promulgated under the Securities Act) or by, with or through an unrelated third party or entity, whether or not pursuant to a written or oral understanding,

agreement, arrangement, scheme, or artifice of nature whatsoever, engage in the short selling of the Company's Common Stock or any other equity securities of the Company, whether now existing or hereafter issued, or engage in any other activity of any nature whatsoever that has the same effect as a short sale, or is a de facto or de jure short sale, of the Company's Common Stock or any other equity security of the Company, whether now existing or hereafter issued, including, but not limited to, the sale of any rights pursuant to any understanding, agreement, arrangement, scheme or artifice of any nature whatsoever, whether oral or in writing, relative to the Company's Common Stock or any other equity securities of the Company whether now existing or hereafter created.

3.14 No Commission. The Subscriber agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Exchange.

3.15 Reliance. The Subscriber understands and acknowledges that the Company is relying upon all of the representations, warranties, covenants, understandings, acknowledgments and agreements contained in this Agreement in determining whether to accept this subscription and to sell and issue the Series 13 Preferred to the Subscriber.

3.16 Accuracy or Representations and Warranties. All of the representations, warranties, understandings and acknowledgments that Subscriber has made herein are true and correct in all material respects as of the date of execution hereof. The Subscriber will perform and comply fully in all material respects with all covenants and agreements set forth herein, and the Subscriber covenants and agrees that until the acceptance of this Agreement by the Company, the Subscriber shall inform the Company immediately in writing of any changes in any of the representations or warranties provided or contained herein.

3.17 Indemnity. The Subscriber hereby agrees to indemnify and hold harmless the Company, and the Company's successors and assigns, from, against and in all respects of any demands, claims, actions or causes of action, assessments, liabilities, losses, costs, damages, penalties, charges, fines or expenses (including, without limitation, interest, penalties, and attorney and accountants' fees, disbursements and expenses), arising out of or relating to any breach by Subscriber of any representations, warranty, covenant or agreement made by Subscriber in this Agreement. Such right to indemnification shall be in addition to any and all other rights of the Company under this Agreement or otherwise, at law or in equity.

3.18 Survival. The Subscriber expressly acknowledges and agrees that all of its representations, warranties, agreements and covenants set forth in this Agreement shall be of the essence hereof and shall survive the

execution, delivery and Closing of this Agreement, the sale, purchase, and conversion, if any, of the Series 13 Preferred, the sale of the Conversion Shares, the exercise of the Series 10 Warrants, and the sale of the Warrant Shares.

4. Representations, Warranties and Covenants of the Company. In order to induce Subscriber to enter into this Agreement and to exchange the Series 10 Preferred for the Series 13 Preferred, the Company hereby represents, warrants and covenants to Subscriber as follows:

- 4.1 Organization, Authority, Qualification. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware. The Company has full corporate power and authority to own and operate its properties and assets and to conduct and carry on its business as it is now being conducted and operated.
- 4.2 Authorization. The Company has full power and authority to execute and deliver this Agreement and to perform its obligations under and consummate the transactions contemplated by this Agreement. Upon the execution of this Agreement by the Company and delivery of the Securities, this Agreement shall have been duly and validly executed and delivered by the Company and shall constitute the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.
- 4.3 No Commission. The Company agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Exchange.
- 4.4 Ownership of, and Title to, Securities. The Series 13 Preferred to be exchanged for the Series 10 Preferred by the Subscriber are, and all Conversion Shares, when issued, will be, duly authorized, validly issued, fully paid and nonassessable shares of the capital stock of the Company, free of personal liability. Upon consummation of the exchange of the Series 13 Preferred (and upon the conversion of the Series 13 Preferred, in whole or in part) pursuant to this Agreement, the Subscriber will own and acquire title to the Series 13 Preferred (and the Conversion Shares, as the case may be) free and clear of any and all proxies, voting trusts, pledges, options, restrictions, or other legal or equitable encumbrance of any nature whatsoever (other than the restrictions on transfer due to Securities Laws or as otherwise provided for in this Agreement or the Series 13 Preferred Certificate of Designations).
- 4.5 Exemption from Registration. The offer and exchange of securities with the Subscriber in accordance with the terms and provisions of this Agreement is being affected in accordance with the Securities Act, pursuant to an exchange offer exemption to the registration provision of the Securities Act pursuant to Section 3(a)(9) thereunder and to a private placement exemption to the registration

provisions of the Act pursuant to Section 4(2) of such Act and/or Regulation D promulgated under the Securities Act, based on the representations, warranties and covenants made by the Subscriber contained in this Agreement.

5. Registration Rights. In order to induce the Subscriber to enter into this Agreement and exchange the Series 10 Preferred for the Series 13 Preferred, the Company hereby covenants and agrees to grant to the Subscriber the registration rights with respect to the Conversion Shares and the shares of Common Stock which may issue as dividends on the Series 13 Preferred, as set forth in Section 10 of the Subscription Agreement regarding the shares of Common Stock issuable upon conversion of the Series 13 Preferred and as dividends thereon. The registration rights as set forth in Section 10 of the Subscription Agreement regarding the shares of Common Stock issuable upon exercise of the Series 10 Warrants are not changed by this Agreement.

6. Indemnification.

6.1 By the Company. Subject to the terms of this Section 6, the Company will indemnify and hold harmless the Subscriber, its directors and officers, and any underwriter (as defined in the Securities Act) for the Subscriber and each person, if any, who controls the Subscriber or such underwriter within the meaning of the Act, from and against, and will reimburse the Subscriber and each such underwriter and controlling person with respect to, any and all loss, damage, liability, cost and expense to which such holder or any such underwriter or controlling person may become subject under the Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement filed with the SEC in connection with the Conversion Shares, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made not misleading; provided, however, that the Company will not be liable in any such case to the extent that any such loss, damage, liability, cost or expense arises out of, or is based upon, an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by the Subscriber, such underwriter or such controlling person in writing specifically for use in the preparation thereof.

6.2 By the Subscriber. Subject to the terms of this Section 6, the Subscriber will indemnify and hold harmless the Company, its directors and officers, any controlling person and any underwriter from and against, and will reimburse the Company, its directors and officers, any controlling person and any underwriter with respect to, any and all loss, damage, liability, cost or expense to which the Company or any controlling person and/or any underwriter may become subject under the Securities Act

or otherwise, insofar as such losses, damages,

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liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in a Registration Statement filed with the SEC in connection to the Conversion Shares, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was so made in reliance upon, and in strict conformity with, written information furnished by, or on behalf of, the Subscriber specifically for use in the preparation thereof.

- 6.3 Procedure. Promptly after receipt by an indemnified party pursuant to the provisions of Section 6.1 or 6.2 of notice of the commencement of any action involving the subject matter of the foregoing indemnity provisions, such indemnified party will, if a claim thereof is to be made against the indemnifying party pursuant to the provisions of Section 6.1 or 6.2, promptly notify the indemnifying party of the commencement thereof; but the omission to so notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to any indemnified party otherwise than hereunder. In case such action is brought against any indemnified party and the indemnified party notifies the indemnifying party of the commencement thereof, the indemnifying party shall have the right to participate in, and, to the extent that it may wish, assume the defense thereof; or, if there is a conflict of interest which would prevent counsel for the indemnifying party from also representing the indemnified party, the indemnified parties have the right to select only one (1) separate counsel to participate in the defense of such action on behalf of all such indemnified parties. After notice from the indemnifying parties to such indemnified party of the indemnifying parties' election so to assume the defense thereof, the indemnifying parties will not be liable to such indemnified parties pursuant to the provisions of said Section 6.1 or 6.2 for any legal or other expense subsequently incurred by such indemnified parties in connection with the defense thereof, other than reasonable costs of investigation, unless (a) the indemnified parties shall have employed counsel in accordance with the provisions of the preceding sentence; (b) the indemnifying parties shall not have employed counsel satisfactory to the indemnified parties to represent the indemnified parties within a reasonable time after the notice of the commencement of the action or (c) the indemnifying party has authorized the employment of counsel for the indemnified party at the expense of the indemnifying parties.

7. Securities Legends and Notices. Subscriber represents and warrants that it has read, considered and understood the following legends, and agrees that such legends, substantially in the form

and substance set forth below, shall be placed on all of the certificates representing the Series 13 Preferred:

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Series 13 Preferred Legends

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS PREFERRED STOCK AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THE SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN SUBSCRIPTION AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF JUNE 30, 1998, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

Conversion Shares Legends

THE SHARES OF COMMON STOCK REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS COMMON STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE

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COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THESE SHARES OF COMMON STOCK ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN SUBSCRIPTION AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF JUNE 30, 1998, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

8. Miscellaneous.

- 8.1 Assignment and Power of Attorney. For purposes of affecting the exchange of the Series 10 Preferred in accordance with the terms of this Agreement at the Closing, the Subscriber does hereby assign all of its right, title and interest in and to the Series 10 Preferred to the Company and irrevocably makes, constitutes and appoints the Company as the true and lawful agents and attorneys-in-fact of the Subscriber ("Attorney-In-Fact") with full power and authority (except as provided below) to act hereunder individually, or through duly appointed successor attorneys-in-fact, in its sole discretion, all as hereinafter provided, in the name of, for and on behalf of the Subscriber, as fully as could the Subscriber if present and acting in person, with respect to all matters in connection with the transfer of the Series 10 Preferred.
- 8.2 Amendment; Waiver. Neither this Agreement nor the Warrants shall be changed, modified or amended in any respect except by the mutual written agreement of the parties hereto. Any provision of this Agreement or the Warrants may be waived in writing by the party which is entitled to the benefits thereof. No waiver of any provision of this Agreement or the Series 10 Warrants shall be deemed to, or shall constitute a waiver of, any other provision hereof or thereof (whether or not similar), nor shall any such waiver constitute a continuing waiver.
- 8.3 Binding Effect; Assignment. Neither this Agreement nor the Series 10 Warrants, or any rights or obligations hereunder or thereunder, are assignable by the Subscriber.
- 8.4 Governing Law; Litigation Costs. This Agreement and its validity, construction and performance shall be governed in all respects by the internal laws of the State of Delaware without giving effect to such State's conflicts of laws provisions. Each of the Company and the Subscriber expressly and irrevocably consent to the jurisdiction and venue of the federal courts located in Wilmington, Delaware. Each of the parties agrees that in the event either party brings an action to enforce any of the provisions of this Agreement or to recovery for an alleged breach of any of the provisions of this Agreement, each party shall be responsible for its own legal costs and disbursements during the pendency of any such action; provided, however, that after any such

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action has been reduced to a final, unappealable judgment, the prevailing party shall be entitled to recover from the other party all reasonable, documented attorneys' fees and disbursements and court costs from the other party.

- 8.5 Severability. Any term or provisions of this Agreement or the Series 10 Warrants which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction only, be ineffective only to the extent of such prohibition or unenforceability without invalidating

the remaining provisions hereof or thereof affecting the validity or enforceability of such provision in any other jurisdiction.

- 8.6 Headings. The captions, headings and titles preceding the text of each or any Section, subsection or paragraph hereof are for convenience of reference only and shall not affect the construction, meaning or interpretation of this Agreement or the Warrants or any term or provisions hereof or thereof.
- 8.7 Counterparts. This Agreement may be executed in one or more original or facsimile counterparts, each of which shall be deemed an original and all of which shall be considered one and the same agreement, binding on all of the parties hereto, notwithstanding that all parties are not signatories to the same counterpart. Upon delivery of an executed counterpart by the undersigned Subscriber to the Company, which in turn is executed and delivered by the Company, this Agreement shall be binding as one original agreement between Subscriber and the Company.
- 8.8 Transfer Taxes. Each party hereto shall pay all such sales, transfer, use, gross receipts, registration and similar taxes arising out of, or in connection with, the transactions contemplated by this Agreement (collectively, the "Transfer Taxes") as are payable by such party under applicable law, and the Company shall pay the cost of any documentary stock transfer stamps, if any, to be affixed to the certificates representing the Shares to be sold.
- 8.9 Entire Agreement. This Agreement, along with the Series 10 Warrants and the Series 13 Preferred Certificate of Designations, merges and supersedes any and all prior agreements, understandings, discussions, assurances, promises, representations or warranties among the parties with respect to the subject matter hereof, and contains the entire agreement among the parties with respect to the subject matter set forth herein and therein.
- 8.10 Authority; Enforceability. The Subscriber is duly authorized to enter into this Agreement and to perform all of its obligations hereunder. Upon the execution and delivery of this Agreement by the Subscriber, this Agreement shall be enforceable against the Subscriber in accordance with its terms.

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- 8.11 Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or by fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (i) on the business day actually received if given by hand or by fax, (ii) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (iii) five (5) business days following the mailing

thereof, if mailed by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 8.11:

If to the Company: Dr. Louis F. Centofanti
Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32653
Fax No.: (352) 373-0040

with copies Irwin H. Steinhorn, Esquire
simultaneously Conner & Winters
by like means to: One Leadership Square, Suite 1700
211 North Robinson
Oklahoma City, Oklahoma 73102
Fax No.: (405) 232-2695

If to the Herbert Strauss
Subscriber: RBB Bank Aktiengesellschaft
Burgring 16, 8010 Graz, Austria
Fax No.: 011-43-316-8072 ext. 392

8.12 No Third Party Beneficiaries. This Agreement and the rights, benefits, privileges, interests, duties and obligations contained or referred to herein shall be solely for the benefit of the parties hereto and no third party shall have any rights or benefits hereunder as a third party beneficiary or otherwise hereunder.

8.13 Public Announcements. Neither Subscriber nor any officer, director, stockholder, employee, affiliate or affiliated person or entity of Subscriber, shall make or issue any press releases or otherwise make any public

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statements or make any disclosures to any third person or entity with respect to the transactions contemplated herein and will not make or issue any press releases or otherwise make any public statements of any nature whatsoever with respect to the Company without the express prior approval of the Company.

8.14 Conflicts with Subscription Agreement. In the event of a conflict between the terms of the Subscription Agreement and the terms of this Agreement, this Agreement shall control in all respects.

IN WITNESS WHEREOF, the Company and the undersigned Subscriber have each duly executed this Agreement on the 15th day of July, 1999.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti

Chief Executive Officer

RBB BANK AKTIENGESELLSCHAFT

By /s/ Herbert Strauss

Herbert Strauss
Headtrader

SEE RESTRICTIVE LEGEND ON REVERSE SIDE

INCORPORATED UNDER THE LAWS OF
DELAWARE

No. ****

Shares ****

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

SERIES 11 CLASS K CONVERTIBLE PREFERRED STOCK
Par Value \$.001 Per Share

THIS CERTIFIES THAT - - S P E C I M E N - - is the owner of ****
***** (*****) shares of Series 11 Class K Convertible
Preferred Stock of

Perma-Fix Environmental Services, Inc.
transferable only on the books of the Corporation by the holder
hereof in person or by attorney upon surrender of this
Certificate properly endorsed.

In Witness Whereof, the said Corporation has caused this
Certificate to be signed by its duly authorized officers and to
be sealed with the Seal of the Corporation this ____ day of
_____, 1999.

Secretary

President

SHARES \$.001 EACH

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK
ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN
REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE
"SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES
LAWS. THIS PREFERRED STOCK AND THE COMMON STOCK ISSUABLE UPON
CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD,
PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF
AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT
WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY
APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN
CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION
OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN
OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS
SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND
QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE
SECURITIES LAWS OR AN EXEMPTION THEREFROM.

CERTIFICATE

FOR

SHARES

of the

CAPITAL STOCK

of

Perma-Fix Environmental Services, Inc.

Series 11 Class K Convertible Preferred Stock
Par Value \$.001 Per Share

ISSUED TO

**** S P E C I M E N ****

DATED

_____, 1999

For Value Received, _____ hereby sell, assign and
transfer unto _____
_____ Shares of the Capital Stock represented by
the within Certificate, and do hereby irrevocably constitute and
appoint _____ to transfer the
said Stock on the books of the within named Corporation with full
power of substitution in the premises.

Dated _____, 19____.

In presence of _____

SEE RESTRICTIVE LEGEND ON REVERSE SIDE

INCORPORATED UNDER THE LAWS OF
DELAWARE

No. ****

Shares ****

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

SERIES 12 CLASS L CONVERTIBLE PREFERRED STOCK
Par Value \$.001 Per Share

THIS CERTIFIES THAT - - S P E C I M E N - - is the owner of ****
***** (*****) shares of Series 12 Class L Convertible
Preferred Stock of

Perma-Fix Environmental Services, Inc.
transferable only on the books of the Corporation by the holder
hereof in person or by attorney upon surrender of this
Certificate properly endorsed.

In Witness Whereof, the said Corporation has caused this
Certificate to be signed by its duly authorized officers and to
be sealed with the Seal of the Corporation this ____ day of
_____, 1999.

Secretary

President

SHARES \$.001 EACH

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK
ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN
REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE
"SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES
LAWS. THIS PREFERRED STOCK AND THE COMMON STOCK ISSUABLE UPON
CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD,
PLEGDED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF
AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT
WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY
APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN
CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION
OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN
OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS
SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND
QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE
SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THE SHARES OF COMMON STOCK
ISSUABLE UPON CONVERSION ARE ALSO SUBJECT TO THE REGISTRATION
RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND
BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF FEBRUARY
28, 1998, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL
EXECUTIVE OFFICE.

CERTIFICATE
FOR

SHARES
of the
CAPITAL STOCK
of

Perma-Fix Environmental Services, Inc.

Series 12 Class L Convertible Preferred Stock
Par Value \$.001 Per Share

ISSUED TO
**** S P E C I M E N ****

DATED
_____, 1999

For Value Received, _____ hereby sell, assign and
transfer unto _____
_____ Shares of the Capital Stock represented by
the within Certificate, and do hereby irrevocably constitute and
appoint _____ to transfer the
said Stock on the books of the within named Corporation with full
power of substitution in the premises.

Dated _____, 19____.

In presence of _____

SEE RESTRICTIVE LEGEND ON REVERSE SIDE

INCORPORATED UNDER THE LAWS OF
DELAWARE

No. ****

Shares ****

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

SERIES 13 CLASS M CONVERTIBLE PREFERRED STOCK
Par Value \$.001 Per Share

THIS CERTIFIES THAT - - S P E C I M E N - - is the owner of ****
***** (*****) shares of Series 13 Class M Convertible
Preferred Stock of

Perma-Fix Environmental Services, Inc.
transferable only on the books of the Corporation by the holder
hereof in person or by attorney upon surrender of this
Certificate properly endorsed.

In Witness Whereof, the said Corporation has caused this
Certificate to be signed by its duly authorized officers and to
be sealed with the Seal of the Corporation this ____ day of
_____, 1999.

Secretary

President

SHARES \$.001 EACH

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK
ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN
REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE
"SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES
LAWS. THIS PREFERRED STOCK AND THE COMMON STOCK ISSUABLE UPON
CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD,
PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF
AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT
WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY
APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN
CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION
OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN
OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS
SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND
QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE
SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THE SHARES OF COMMON STOCK
ISSUABLE UPON CONVERSION ARE ALSO SUBJECT TO THE REGISTRATION
RIGHTS SET FORTH IN THAT CERTAIN SUBSCRIPTION AGREEMENT BY AND
BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF JUNE 30,
1998, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL
EXECUTIVE OFFICE.

CERTIFICATE

FOR

SHARES

of the

CAPITAL STOCK

of

Perma-Fix Environmental Services, Inc.

Series 13 Class M Convertible Preferred Stock
Par Value \$.001 Per Share

ISSUED TO
**** S P E C I M E N ****

DATED
_____, 1999

For Value Received, _____ hereby sell, assign and
transfer unto _____
_____ Shares of the Capital Stock represented by
the within Certificate, and do hereby irrevocably constitute and
appoint _____ to transfer the
said Stock on the books of the within named Corporation with full
power of substitution in the premises.

Dated _____, 19____.

In presence of _____

EXCHANGE AGREEMENT

exchanging

1,769 SHARES OF SERIES 11 CLASS K CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

for

1,769 SHARES OF SERIES 14 CLASS N CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

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Exhibit "A" Certificate of Designations

THIS EXCHANGE AGREEMENT (the "Agreement") is entered on the 3rd day of August 1999, by and between PERMA-FIX ENVIRONMENTAL SERVICES, INC., a Delaware corporation, having offices at 1940 Northwest 67th Place, Gainesville, Florida 32653 (the "Company"),

and RBB BANK AKTIENGESELLSCHAFT, organized under the laws of Austria, and having its principal offices at Burgring 16, 8101 Graz, Austria (the "Subscriber").

W I T N E S S E T H:

WHEREAS, the Company and the Subscriber previously entered into a certain Subscription and Purchase Agreement dated July 17, 1996 ("Subscription Agreement") under which (i) 5,500 shares of "Series 3 Class C Convertible Preferred Stock," par value \$.001 per share (the "Series 3 Preferred"), and (ii) an aggregate of 2,000,000 common stock purchase warrants were issued to the Subscriber in the form of one common stock purchase warrant dated July 19, 1996, providing for the purchase of 1,000,000 shares of the Company's common stock, par value \$.001 per share (the "Common Stock"), at an exercise price of \$2.00 per share, and one common stock warrant dated July 19, 1996, providing for the purchase of 1,000,000 shares of Common Stock at an exercise price of \$3.50 per share (collectively, the "Series 3 Warrants") (the Common Stock issuable upon the exercise of the Series 6 Warrants is referred to hereinafter as the "Warrant Shares");

WHEREAS, pursuant to the terms of the Series 3 Preferred, the Subscriber has previously converted three thousand seven hundred thirty-one (3,731) shares of Series 3 Preferred into Common Stock, leaving 1,769 shares of Series 3 Preferred remaining issued and outstanding as of the date of this Agreement;

WHEREAS, the Company and the Subscriber previously entered into a certain Exchange Agreement dated as of the 15th day of July, 1999, ("First Exchange Agreement"), under which all of the Series 3 Preferred were delivered and tendered to the Company in exchange (the "First Exchange") for an aggregate of 1,769 shares of "Series 11 Class K Convertible Preferred Stock" (the "Series 11 Preferred").

WHEREAS, Subscriber owns all of the issued and outstanding shares of Series 11 Preferred as of the date of this Agreement;

WHEREAS, the Company and the Subscriber both desire to enter into this Agreement, under which all of the issued and outstanding shares of the Series 11 Preferred will be delivered and tendered to the Company in exchange (the "Second Exchange") for an aggregate of 1,769 shares of a new series of convertible preferred stock, par value \$.001 per share, to be designated by the Company's Board of Directors as "Series 14 Class N Convertible Preferred Stock" (the "Series 14 Preferred"), with the Series 14 Preferred containing such terms, conditions, restrictions and provisions as set forth in the Series 14 Preferred Certificate of Designations, attached hereto as Exhibit "A," ("Series 14 Preferred Certificate of Designations");

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WHEREAS, the Subscription Agreement and First Exchange Agreement is are be terminated in all respects;

WHEREAS, the terms, conditions, restrictions and provisions of the Series 14 Preferred shall be the same as the terms, conditions, restrictions and provisions of the Series 11 Preferred, except that (i) the Series 11 Preferred shall not be convertible for a period of twelve months from April 20, 1999, (ii) the Minimum Conversion Price (as defined herein) shall be \$1.50 for a period of twenty-

four months from April 20, 1999, (iii) for a period of twelve months from April 20, 1999, the Company shall have the option of redeeming the Series 11 Preferred for \$1,100 per share, at any time and from time to time, and if the Company does redeem the Series 11 Preferred during the first twelve months from April 20, 1999, the holder of the Series 11 Preferred shall not have the right to convert such redeemed shares, (iv) after twelve months from April 20, 1999, the Company shall have the option of redeeming the Series 11 Preferred for \$1,200 per share, at any time and from time to time, and (v) after twelve months from April 20, 1999, upon receipt of notice of redemption, the holder of the Series 11 Preferred being redeemed shall have five business days in which to exercise an option to convert some or all of the shares of Series 11 Preferred being redeemed by the Company,

WHEREAS, the Series 3 Warrants shall not be affected by this Agreement and shall remain issued and outstanding pursuant to the terms, provisions and conditions of the Series 3 Warrants;

WHEREAS, the shares of Common Stock issuable upon conversion of the Series 14 Preferred ("Conversion Shares") and the Series 14 Preferred are collectively referred to hereinafter as the "Securities;"

WHEREAS, the Common Stock is listed for trading on the Boston Stock Exchange and the National Association of Securities Dealers Automated Quotation SmallCap market ("NASDAQ"), and the Company is subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and has been subject to such filing requirements for the past ninety (90) days;

WHEREAS, the Subscriber is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Securities Act") and the Subscriber received all information as required under Rule 502 of Regulation D;

WHEREAS, the Subscriber is not a "U. S. Person," as such term is defined in Regulation S promulgated under the Securities Act;

WHEREAS, in reliance upon the representations made by the Subscriber in this Agreement, the transactions contemplated by this Agreement are such that the offer and exchange of securities by the Company hereunder will be exempt from registration under applicable federal (U. S.) securities laws since this is an exchange offer pursuant to Section 3(a)(9) of the Securities Act, and it is a

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private placement and intended to be a nonpublic offering pursuant to Sections 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act; and,

WHEREAS, the Securities will not be quoted or listed for trading on any securities exchange, organized market or quotation system at the time of acquisition hereunder.

NOW, THEREFORE, for and in consideration of the premises, and the mutual representations, warranties, covenants and agreements set forth herein, and for other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Exchange and Subscription for Purchase of Securities.

1.1 Issuance of Common Stock and Warrants. In full and complete termination of the Series 11 Preferred and the Subscriber's rights, and the interest in and to the Series 11 Preferred, and in full and complete release of any and all obligations of the Company under the Series 11 Preferred and to the Subscriber under the Series 11 Preferred, at the Closing (as defined herein) the Subscriber shall deliver all of the issued and outstanding shares of the Series 11 Preferred to the Company in exchange for 1,769 shares of Series 14 Preferred, containing such terms, conditions and provisions as set forth in the Series 14 Preferred Certificate of Designations, pursuant to the terms and conditions set forth in this Agreement. Dividends on the Series 11 Preferred shall cease to accrue as of the close of business on the day immediately preceding the date of this Agreement, and dividends on the Series 14 Preferred shall begin to accrue on the date of this Agreement.

1.1.1 Delivery. Upon receipt by the Company of the canceled Series 11 Preferred duly assigned to the Company, the Company shall deliver or cause to be delivered: (a) to Conner & Winters, A Professional Corporation ("Conner & Winters"), a certificate or certificates representing the 1,769 shares of Series 14 Preferred issued in the name of the Subscriber, in such denominations as Subscriber requests in writing, to be held in escrow by Conner & Winters, for the Subscriber; and (b) to the Subscriber, written evidence from the Secretary of State of the State of Delaware that the Series 14 Preferred Certificate of Designations has been filed in the Office of the Secretary of State of the State of Delaware on or before the Closing Date.

1.1.2 Cancellation of Series 11 Preferred. At the Closing, RBB Bank does hereby assign and transfer unto the Company all of the Series 11 Preferred and the Series 11 Preferred shall be terminated and rendered null and void in all respects, and Conner & Winters is directed to deliver to the Company the Series 11 Preferred marked "Canceled."

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1.1.3 Termination of Previous Agreements. The Subscription Agreement and the First Exchange Agreement are hereby terminated in their entirety.

1.1.4 Restrictive Legends. Subscriber agrees that all certificates representing the Securities shall bear the restrictive legend substantially in the form set forth in Section 6 below which shall include, but not be limited to, a legend to the effect that (a) the Securities represented by such certificate

have not been registered under the Securities Act, and (b) unless there is an effective registration statement relating to the Securities, the Securities may not be offered, sold, transferred, mortgaged, pledged or hypothecated without an exemption from registration and an opinion of counsel to the Company with respect thereto, or an opinion from counsel for the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.

1.2 Discharge. As of the Closing, the Series 11 Preferred shall be fully terminated in all respects. From and after the Closing, the Subscriber releases, acquits and forever discharges the Company, and all of its respective subsidiaries, affiliates, agents, employees, officers, and directors, as well as their respective heirs, successors, legal and personal representatives, and assigns of any and all of them, from and against any and all claims, liabilities, losses, damages, cause or causes of action of any kind or character whatsoever, whether liquidated, unliquidated or disputed, asserted or assertable, known or unknown, in contract or in tort, at law or in equity, which the Subscriber might now or hereafter have arising out of or in connection with or relating to the Series 11 Preferred.

1.3 Exchange. On the basis of the representations, warranties, covenants and agreements, and subject to the terms and conditions set forth herein, at the Closing, the Company agrees to exchange and deliver to the Subscriber, and the Subscriber agrees to accept in such exchange the delivery from the Company, of the Series 14 Preferred in exchange for the transfer of the Series 11 Preferred from the Subscriber to the Company.

1.4 Reporting Company. The Company is a reporting company under the Exchange Act and has filed with the United States Securities and Exchange Commission (the "SEC") all reports required to be filed by the Company under Section 13 or 15(d) of the Exchange Act. The Subscriber has had the opportunity to review, and has reviewed, all such reports and information which the Subscriber deemed material to an investment decision regarding the purchase of the Series 14 Preferred.

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1.5 Terms of the Series 14 Preferred. The Series 14 Preferred shall contain and be subject to the terms, conditions, preferences and restrictions set forth in the Series 14 Preferred Certificate of Designations attached hereto as Exhibit "A."

1.6 No Effect on Series 3 Warrants. Nothing contained in this Agreement shall have any effect on the Series 3 Warrants.

2. Closing.

2.1 Closing. The consummation of this Agreement (the

"Closing") will occur on at the time and on the date that the 1,769 shares of Series 14 Preferred are delivered by the Company to Conner & Winters (the "Closing Date").

3. Representations, Warranties and Covenants of Subscriber. The Subscriber hereby represents, warrants and covenants to the Company as follows:

- 3.1 Investment Intent. The Subscriber represents and warrants that the shares of Series 14 Preferred are being, and any underlying Conversion Shares will be, purchased or acquired solely for the Subscriber's own account, for investment purposes only and not with a view toward the distribution or resale to others. The Subscriber acknowledges, understands and appreciates that the Securities have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in large part, upon the Subscriber's representations as to investment intention, investor status, and related and other matters set forth herein. Subscriber understands that, in the view of the SEC, among other things, a purchase now with an intent to distribute or resell would represent a purchase and acquisition with an intent inconsistent with its representation to the Company, and the SEC might regard such a transfer as a deferred sale for which the registration exemption is not available.
- 3.2 Certain Risk. The Subscriber recognizes that the purchase of the Series 14 Preferred involves a high degree of risk in that (a) the Company has sustained losses through March 31, 1999, from its operations, and may require substantial funds in addition to the proceeds of this private placement; (b) that the Company has a substantial accumulated deficit; (c) an investment in the Company is highly speculative and only investors who can afford the loss of their entire investment should consider investing in the Company and the Series 14 Preferred; (d) an investor may not be able to liquidate his investment; (e) transferability of the Series 14 Preferred is extremely limited; (f) in the event of a disposition an investor could sustain the loss of his entire investment; (g) the Series 14 Preferred represent non-voting equity securities, and the right to convert into and purchase shares of voting equity securities in a corporate entity that has an accumulated deficit; (h) no return on investment, whether through distributions, appreciation, transferability or otherwise, and no

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performance by, through or of the Company, has been promised, assured, represented or warranted by the Company, or by any director, officer, employee, agent or representative thereof; and, (i) while the Common Stock is presently quoted and traded on the Boston Stock Exchange and the NASDAQ and while the Subscriber is a beneficiary of certain registration rights provided herein, the Series 14 Preferred subscribed for and that are purchased under this Agreement and the Conversion Shares (i) are not registered under applicable federal (U. S.) or state securities laws, and thus may not be sold, conveyed, assigned or transferred unless registered

under such laws or unless an exemption from registration is available under such laws, as more fully described herein, and (ii) the Series 14 Preferred subscribed for and that are to be purchased under this Agreement are not quoted, traded or listed for trading or quotation on the NASDAQ, or any other organized market or quotation system, and there is therefore no present public or other market for the Series 14 Preferred, nor can there be any assurance that the Common Stock of the Company will continue to be quoted, traded or listed for trading or quotation on the Boston Stock Exchange or the Nasdaq SmallCap Market or on any other organized market or quotation system.

- 3.3 Prior Investment Experience. The Subscriber acknowledges that it has prior investment experience, including investment in non-listed and non-registered securities, or has employed the services of an investment advisor, attorney or accountant to read all of the documents furnished or made available by the Company to it and to evaluate the merits and risks of such an investment on its behalf, and that it recognizes the highly speculative nature of this investment.
- 3.4 No Review by the SEC. The Subscriber hereby acknowledges that this offering of the Series 14 Preferred has not been reviewed by the SEC because this private placement is intended to be an exchange offer under Section 3(a)(9) of the Securities Act and a nonpublic offering pursuant to Section 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act.
- 3.5 Not Registered. The Subscriber understands that the Series 14 Preferred and the Conversion Shares have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in part, upon the Subscriber's investment intention. In this connection, the Subscriber understands that it is the position of the SEC that the statutory basis for such exemption would not be present if its representation merely meant that its present intention was to hold such securities for a short period, such as the capital gains period of tax statutes, for a deferred sale, for a market rise (assuming that a market develops), or for any other fixed period.
- 3.6 No Public Market. The Subscriber understands that there is no public market for the Series 14 Preferred. The Subscriber understands that although there is presently a public market for the Common Stock, including the Conversion Shares, Rule 144 (the "Rule") promulgated

under the Securities Act requires, among other conditions, a one-year holding period following full payment of the consideration therefor prior to the resale (in limited amounts) of securities acquired in a nonpublic offering without having to satisfy the registration requirements under the Securities Act. The Subscriber understands that the Company makes no representation or warranty regarding its fulfillment in the future of any reporting requirements under the Exchange Act, or its dissemination to the public of any

current financial or other information concerning the Company, as is required by the Rule as one of the conditions of its availability. The Subscriber understands and hereby acknowledges that the Company is under no obligation to register the Series 14 Preferred or the Conversion Shares under the Securities Act. The Subscriber agrees to hold the Company and its directors, officers and controlling persons and their respective heirs, representatives, successors and assigns harmless and to indemnify them against all liabilities, costs and expenses incurred by them as a result of any misrepresentation made by the Subscriber contained herein or any sale or distribution by the Subscriber in violation of the Securities Act or any applicable state securities or "blue sky" laws (collectively, "Securities Laws").

- 3.7 Sophisticated Investor. That (a) the Subscriber has adequate means of providing for the Subscriber's current financial needs and possible contingencies and has no need for liquidity of the Subscriber's investment in the Series 14 Preferred; (b) the Subscriber is able to bear the economic risks inherent in an investment in the Series 14 Preferred and that an important consideration bearing on its ability to bear the economic risk of the purchase of Series 14 Preferred is whether the Subscriber can afford a complete loss of the Subscriber's investment in the Series 14 Preferred and the Subscriber represents and warrants that the Subscriber can afford such a complete loss; and (c) the Subscriber has such knowledge and experience in business, financial, investment and banking matters (including, but not limited to, investments in restricted, non-listed and non-registered securities) that the Subscriber is capable of evaluating the merits, risks and advisability of an investment in the Series 14 Preferred.
- 3.8 Tax Consequences. The Subscriber acknowledges that the Company has made no representation regarding the potential or actual tax consequences for the Subscriber which will result from entering into the Agreement and from consummation of the Exchange. The Subscriber acknowledges that it bears complete responsibility for obtaining adequate tax advice regarding the Agreement and the Exchange.
- 3.9 SEC Filing. The Subscriber acknowledges that it has been previously furnished with true and complete copies of the following documents which have been filed with the SEC pursuant to Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act, and that such have been furnished to the Subscriber a reasonable time prior to the date hereof:
- (i) Annual Report on Form 10-K for the year ended

December 31, 1998 (the "Form 10-K"); (ii) Current Report on Form 8-K, date of earliest event reported April 8, 1999; (iii) Quarterly Report on Form 10-Q for the quarter ended March 31, 1999; (iv) Current Report on Form 8-K, date of earliest event reported June 1, 1999; and (v) the information contained in any reports or documents required to be filed by the Company under Sections 13(a),

14(a), 14(c) or 15(d) of the Exchange Act since the distribution of the Form 10-K.

- 3.10 Documents, Information and Access. The Subscriber's decision to purchase the Series 14 Preferred is not based on any promotional, marketing or sales materials, and the Subscriber and its representatives have been afforded, prior to purchase thereof, the opportunity to ask questions of, and to receive answers from, the Company and its management, and has had access to all documents and information which Subscriber deems material to an investment decision with respect to the purchase of Series 14 Preferred hereunder.
- 3.11 No Registration, Review or Approval. The Subscriber acknowledges and understands that the private offering and sale of securities pursuant to this Agreement has not been reviewed or approved by the SEC or by any state securities commission, authority or agency, and is not registered under the Securities Laws. The Subscriber acknowledges, understands and agrees that the shares of Series 14 Preferred are being offered and exchanged hereunder pursuant to (i) an exchange offer exemption under Section 3(a)(9) of the Securities Act and (ii) (x) a private placement exemption to the registration provisions of the Securities Act pursuant to Section 4(2) of such Securities Act and/or Regulation D promulgated under the Securities Act) and (y) a similar exemption to the registration provisions of applicable state securities laws.
- 3.12 Transfer Restrictions. The Subscriber will not transfer any Series 14 Preferred Securities purchased under this Agreement or any Conversion Shares purchased under this Agreement unless such are registered under the Securities Laws, or unless an exemption is available under such Securities Laws, and the Company may, if it chooses, where an exemption from registration is claimed by such Subscriber, condition any transfer of Series 14 Preferred or Conversion Shares out of the Subscriber's name on receipt of an opinion of the Company's counsel, to the effect that the proposed transfer is being effected in accordance with, and does not violate, an applicable exemption from registration under the Securities Laws, or an opinion of counsel to the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.
- 3.13 No Short Sale. The Subscriber expressly agrees that until such time that it has sold all of the Securities that it shall not, directly or indirectly, through an affiliate (as that term is defined under Rule 405 promulgated under the Securities Act) or by, with or through an unrelated third party or entity, whether or

not pursuant to a written or oral understanding, agreement, arrangement, scheme, or artifice of nature whatsoever, engage in the short selling of the Company's Common Stock or any other equity securities of the Company, whether now existing or hereafter issued, or

engage in any other activity of any nature whatsoever that has the same effect as a short sale, or is a de facto or de jure short sale, of the Company's Common Stock or any other equity security of the Company, whether now existing or hereafter issued, including, but not limited to, the sale of any rights pursuant to any understanding, agreement, arrangement, scheme or artifice of any nature whatsoever, whether oral or in writing, relative to the Company's Common Stock or any other equity securities of the Company whether now existing or hereafter created.

3.14 No Commission. The Subscriber agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Exchange.

3.15 Reliance. The Subscriber understands and acknowledges that the Company is relying upon all of the representations, warranties, covenants, understandings, acknowledgments and agreements contained in this Agreement in determining whether to accept this subscription and to sell and issue the Series 14 Preferred to the Subscriber.

3.16 Accuracy or Representations and Warranties. All of the representations, warranties, understandings and acknowledgments that Subscriber has made herein are true and correct in all material respects as of the date of execution hereof. The Subscriber will perform and comply fully in all material respects with all covenants and agreements set forth herein, and the Subscriber covenants and agrees that until the acceptance of this Agreement by the Company, the Subscriber shall inform the Company immediately in writing of any changes in any of the representations or warranties provided or contained herein.

3.17 Indemnity. The Subscriber hereby agrees to indemnify and hold harmless the Company, and the Company's successors and assigns, from, against and in all respects of any demands, claims, actions or causes of action, assessments, liabilities, losses, costs, damages, penalties, charges, fines or expenses (including, without limitation, interest, penalties, and attorney and accountants' fees, disbursements and expenses), arising out of or relating to any breach by Subscriber of any representations, warranty, covenant or agreement made by Subscriber in this Agreement. Such right to indemnification shall be in addition to any and all other rights of the Company under this Agreement or otherwise, at law or in equity.

3.18 Survival. The Subscriber expressly acknowledges and agrees that all of its representations, warranties, agreements and covenants set forth in this Agreement shall be of the essence hereof and shall survive the

execution, delivery and Closing of this Agreement, the sale, purchase, and conversion, if any, of the Series 14 Preferred, the sale of the Conversion Shares, the exercise of the Series 3 Warrants, and the sale of the

4. Representations, Warranties and Covenants of the Company. In order to induce Subscriber to enter into this Agreement and to exchange the Series 11 Preferred for the Series 14 Preferred, the Company hereby represents, warrants and covenants to Subscriber as follows:

- 4.1 Organization, Authority, Qualification. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware. The Company has full corporate power and authority to own and operate its properties and assets and to conduct and carry on its business as it is now being conducted and operated.
- 4.2 Authorization. The Company has full power and authority to execute and deliver this Agreement and to perform its obligations under and consummate the transactions contemplated by this Agreement. Upon the execution of this Agreement by the Company and delivery of the Securities, this Agreement shall have been duly and validly executed and delivered by the Company and shall constitute the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.
- 4.3 No Commission. The Company agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Exchange.
- 4.4 Ownership of, and Title to, Securities. The Series 14 Preferred to be exchanged for the Series 11 Preferred by the Subscriber are, and all Conversion Shares, when issued, will be, duly authorized, validly issued, fully paid and nonassessable shares of the capital stock of the Company, free of personal liability. Upon consummation of the exchange of the Series 14 Preferred (and upon the conversion of the Series 14 Preferred, in whole or in part) pursuant to this Agreement, the Subscriber will own and acquire title to the Series 14 Preferred (and the Conversion Shares, as the case may be) free and clear of any and all proxies, voting trusts, pledges, options, restrictions, or other legal or equitable encumbrance of any nature whatsoever (other than the restrictions on transfer due to Securities Laws or as otherwise provided for in this Agreement or the Series 14 Preferred Certificate of Designations).
- 4.5 Exemption from Registration. The offer and exchange of securities with the Subscriber in accordance with the terms and provisions of this Agreement is being affected in accordance with the Securities Act, pursuant to an exchange offer exemption to the registration provision of the Securities Act pursuant to Section 3(a)(9) thereunder and to a private placement exemption to the registration

provisions of the Act pursuant to Section 4(2) of such Act and/or Regulation D promulgated under the Securities Act, based on the representations, warranties and covenants made by the Subscriber contained in this Agreement.

5. Registration Rights. In order to induce the Subscriber to enter into this Agreement and purchase the Securities, the Company hereby covenants and agrees to grant to the Subscriber the rights set forth in this Section 5 with respect to the registration of the Warrant Shares and the Conversion Shares.

5.1 Registration. The Company has previously prepared and filed with the SEC, a registration statement on Form S-3 (the "Registration Statement") and such other documents, including a prospectus, as may be necessary in the opinion of counsel for the Company in order to comply with the provisions of the Securities Act, so as to permit a public offering and sale by the Subscriber of up to 3,700,000 shares of Common Stock issuable upon conversion of the Series 3 Preferred, plus up to 330,000 shares of Common Stock, if any, issuable as payment of dividends on the Series 3 Preferred, pursuant to the terms of the Series 3 Preferred, and 2,000,000 shares of Common Stock issuable upon exercise of the Series 3 Warrants. The Company shall use its reasonable efforts to maintain the effectiveness of such Registration Statement for a three year period or until the Conversion Shares have been sold by the Subscriber, whichever is sooner. In connection with the offering of such Common Stock registered pursuant to this Section 5, the Company shall take such actions as shall be reasonably necessary to qualify the Common Stock covered by such Registration Statement under such "blue sky" or other state securities laws for offer and sale as shall be reasonably necessary to permit the public offering and sale of shares of Common Stock covered by such Registration Statement; provided, however, that the Company shall not be required (a) to qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this subparagraph, (b) to subject itself to taxation in any such jurisdiction, or (c) to consent to general service of process in any such jurisdiction. It is expressly agreed that in no event are any registration rights being granted to any of the Series 3 Preferred, Series 11 Preferred or Series 14 Preferred itself, but only with respect to the underlying Conversion Shares issuable upon exercise of the Series 3 Preferred, Series 11 Preferred or Series 14 Preferred, as applicable, and the Warrant Shares issuable upon the exercise of the Series 3 Warrants.

5.2 Current Registration Statement. Once effective, the Company shall use its reasonable efforts to cause such Registration Statement filed hereunder to remain current and effective for a period of three (3) years or until the shares of Common Stock covered by such Registration Statement are sold by the Subscriber, whichever is sooner. The Subscriber shall promptly provide all such

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information and materials and take all such action as may be required in order to permit the Company to comply with all applicable requirements of the SEC and to obtain any desired acceleration of the effective date of such registration statement.

- 5.3 2.0% Penalty. In the event the Registration Statement referred to in Section 5.1 above is not effective on January 31, 2000 (or the next business day thereafter if such day is a Saturday, Sunday or legal holiday), the Company agrees to pay to the Subscriber a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of Series 14 Preferred then outstanding times (b) \$1,000, payable in cash. The Company agrees that for each month thereafter which terminates without the Registration Statement being declared effective by the SEC before 5:00 p.m. Eastern Daylight Savings Time on the last day thereof (or the next business day thereafter if such day is a Saturday, Sunday or legal holiday), the Company shall pay to the Subscriber a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of Series 14 Preferred then outstanding times (b) \$1,000, payable in cash.
- 5.4 Other Provisions. In connection with the offering of any Conversion Shares and/or Warrant Shares registered pursuant to this Section 5, the Company shall furnish to the Subscriber such number of copies of any final prospectus as it may reasonably request in order to effect the offering and sale of the Conversion Shares and/or Warrant Shares to be offered and sold. In connection with any offering of Conversion Shares and/or Warrant Shares registered pursuant to this Section 5.3, the Company shall (a) furnish to the underwriters (if any), at the Company's expense, unlegended certificates representing ownership of the Conversion Shares and/or Warrant Shares sold under such Registration Statement in such denominations as requested and (b) instruct any transfer agent and registrar of the Conversion Shares and/or Warrant Shares to release immediately any stop transfer order, and to remove any restrictive legend, with respect to Conversion Shares and/or Warrant Shares included in any registration becoming effective pursuant to this Agreement upon the sale of such shares by the Subscriber.

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- 5.5 Costs. Subject to the immediately following sentence, the Company shall in all events pay and be responsible for all fees, expenses, costs and disbursements associated with the Registration Statement relating to the Conversion Shares and the Warrant Shares under this Section 5, including filing fees, fees, costs and disbursements of any counsel, accountants and other consultants representing the Company in connection therewith. Notwithstanding anything set forth herein to the contrary, Subscriber shall be responsible for and pay any and all underwriting discounts and commissions in connection with the sale of the Conversion Shares and/or Warrant Shares pursuant hereto and all fees of its legal counsel and other advisors retained in connection with reviewing any registration statement.

5.6 Successors. The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business, properties, stock or assets of the Company, to expressly assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place.

6. Indemnification.

6.1 By the Company. Subject to the terms of this Section 6 the Company will indemnify and hold harmless the Subscriber, its directors and officers, and any underwriter (as defined in the Securities Act) for the Subscriber and each person, if any, who controls the Subscriber or such underwriter within the meaning of the Act, from and against, and will reimburse the Subscriber and each such underwriter and controlling person with respect to, any and all loss, damage, liability, cost and expense to which such holder or any such underwriter or controlling person may become subject under the Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement filed with the SEC in connection with the Conversion Shares, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made not misleading; provided, however, that the Company will not be liable in any such case to the extent that any such loss, damage, liability, cost or expense arises out of, or is based upon, an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by the Subscriber, such underwriter or such controlling person in writing specifically for use in the preparation thereof.

6.2 By the Subscriber. Subject to the terms of this Section 6 the Subscriber will indemnify and hold harmless the Company, its directors and officers, any controlling person and any underwriter from and against, and will

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reimburse the Company, its directors and officers, any controlling person and any underwriter with respect to, any and all loss, damage, liability, cost or expense to which the Company or any controlling person and/or any underwriter may become subject under the Securities Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in a Registration Statement filed with the SEC in connection to the Conversion Shares, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary

to make the statements therein, in light of the circumstances in which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was so made in reliance upon, and in strict conformity with, written information furnished by, or on behalf of, the Subscriber specifically for use in the preparation thereof.

6.3 Procedure. Promptly after receipt by an indemnified party pursuant to the provisions of Section 6.1 or 6.2 of notice of the commencement of any action involving the subject matter of the foregoing indemnity provisions, such indemnified party will, if a claim thereof is to be made against the indemnifying party pursuant to the provisions of Section 6.1 or 6.2, promptly notify the indemnifying party of the commencement thereof; but the omission to so notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to any indemnified party otherwise than hereunder. In case such action is brought against any indemnified party and the indemnified party notifies the indemnifying party of the commencement thereof, the indemnifying party shall have the right to participate in, and, to the extent that it may wish, assume the defense thereof; or, if there is a conflict of interest which would prevent counsel for the indemnifying party from also representing the indemnified party, the indemnified parties have the right to select only one (1) separate counsel to participate in the defense of such action on behalf of all such indemnified parties. After notice from the indemnifying parties to such indemnified party of the indemnifying parties' election so to assume the defense thereof, the indemnifying parties will not be liable to such indemnified parties pursuant to the provisions of said Section 6.1 or 6.2 for any legal or other expense subsequently incurred by such indemnified parties in connection with the defense thereof, other than reasonable costs of investigation, unless (a) the indemnified parties shall have employed counsel in accordance with the provisions of the preceding sentence; (b) the indemnifying parties shall not have employed counsel satisfactory to the indemnified parties to represent the indemnified parties within a reasonable time after the notice of the commencement of the action or (c) the indemnifying party has authorized the employment of counsel for the indemnified party at the expense of the indemnifying parties.

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7. Securities Legends and Notices. Subscriber represents and warrants that it has read, considered and understood the following legends, and agrees that such legends, substantially in the form and substance set forth below, shall be placed on all of the certificates representing the Series 14 Preferred:

Series 14 Preferred Legends

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS PREFERRED

STOCK AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THESE SHARES OF COMMON STOCK ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF AUGUST 3, 1999, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

Conversion Shares Legends

THE SHARES OF COMMON STOCK REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS COMMON STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE

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PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THESE SHARES OF COMMON STOCK ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF AUGUST 3, 1999, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

8. Miscellaneous.

8.1 Assignment and Power of Attorney. For purposes of affecting the exchange of the Series 11 Preferred in accordance with the terms of this Agreement, at the Closing the Subscriber does hereby assign all of its right, title and interest in and to the Series 11 Preferred to the Company and irrevocably makes, constitutes and appoints the Company as the true and lawful agents and attorneys-in-fact of the Subscriber ("Attorney-In-Fact") with full power and authority (except as provided below) to act hereunder individually, or through duly appointed successor attorneys-in-fact, in

its sole discretion, all as hereinafter provided, in the name of, for and on behalf of the Subscriber, as fully as could the Subscriber if present and acting in person, with respect to all matters in connection with the transfer of the Series 11 Preferred.

- 8.2 Amendment; Waiver. Neither this Agreement nor the Warrants shall be changed, modified or amended in any respect except by the mutual written agreement of the parties hereto. Any provision of this Agreement or the Warrants may be waived in writing by the party which is entitled to the benefits thereof. No waiver of any provision of this Agreement or the Series 3 Warrants shall be deemed to, or shall constitute a waiver of, any other provision hereof or thereof (whether or not similar), nor shall any such waiver constitute a continuing waiver.
- 8.3 Binding Effect; Assignment. Neither this Agreement nor the Series 3 Warrants, or any rights or obligations hereunder or thereunder, are assignable by the Subscriber.
- 8.4 Governing Law; Litigation Costs. This Agreement and its validity, construction and performance shall be governed in all respects by the internal laws of the State of Delaware without giving effect to such State's conflicts of laws provisions. Each of the Company and the Subscriber expressly and irrevocably consent to the jurisdiction and venue of the federal courts located in Wilmington, Delaware. Each of the parties agrees that in the event either party brings an action to enforce any of the provisions of this Agreement or to recovery for an alleged breach of any of the provisions of this Agreement, each party shall be responsible for its own
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- legal costs and disbursements during the pendency of any such action; provided, however, that after any such action has been reduced to a final, unappealable judgment, the prevailing party shall be entitled to recover from the other party all reasonable, documented attorneys' fees and disbursements and court costs from the other party.
- 8.5 Severability. Any term or provisions of this Agreement or the Series 3 Warrants which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction only, be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or thereof affecting the validity or enforceability of such provision in any other jurisdiction.
- 8.6 Headings. The captions, headings and titles preceding the text of each or any Section, subsection or paragraph hereof are for convenience of reference only and shall not affect the construction, meaning or interpretation of this Agreement or the Warrants or any term or provisions hereof or thereof.
- 8.7 Counterparts. This Agreement may be executed in one or more original or facsimile counterparts, each of which

shall be deemed an original and all of which shall be considered one and the same agreement, binding on all of the parties hereto, notwithstanding that all parties are not signatories to the same counterpart. Upon delivery of an executed counterpart by the undersigned Subscriber to the Company, which in turn is executed and delivered by the Company, this Agreement shall be binding as one original agreement between Subscriber and the Company.

- 8.8 Transfer Taxes. Each party hereto shall pay all such sales, transfer, use, gross receipts, registration and similar taxes arising out of, or in connection with, the transactions contemplated by this Agreement (collectively, the "Transfer Taxes") as are payable by such party under applicable law, and the Company shall pay the cost of any documentary stock transfer stamps, if any, to be affixed to the certificates representing the Shares to be sold.
- 8.9 Entire Agreement. This Agreement, along with the Series 3 Warrants and the Series 14 Preferred Certificate of Designations, merges and supersedes any and all prior agreements, understandings, discussions, assurances, promises, representations or warranties among the parties with respect to the subject matter hereof, and contains the entire agreement among the parties with respect to the subject matter set forth herein and therein.
- 8.10 Authority; Enforceability. The Subscriber is duly authorized to enter into this Agreement and to perform all of its obligations hereunder. Upon the execution and delivery of this Agreement by the Subscriber, this Agreement shall be enforceable against the Subscriber in accordance with its terms.
- 8.11 Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or by fax, by certified or registered mail, return receipt

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requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (i) on the business day actually received if given by hand or by fax, (ii) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (iii) five (5) business days following the mailing thereof, if mailed by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 7.11:

If to the Company: Dr. Louis F. Centofanti
Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place

Gainesville, Florida 32653
Fax No.: (352) 373-0040

with copies Irwin H. Steinhorn, Esquire
simultaneously Conner & Winters
by like means to: One Leadership Square, Suite 1700
 211 North Robinson
 Oklahoma City, Oklahoma 73102
 Fax No.: (405) 232-2695

If to the Herbert Strauss
Subscriber: RBB Bank Aktiengesellschaft
 Burgring 16, 8010 Graz, Austria
 Fax No.: 011-43-316-8072 ext. 392

8.12 No Third Party Beneficiaries. This Agreement and the rights, benefits, privileges, interests, duties and obligations contained or referred to herein shall be solely for the benefit of the parties hereto and no third party shall have any rights or benefits hereunder as a third party beneficiary or otherwise hereunder.

8.13 Public Announcements. Neither Subscriber nor any officer, director, stockholder, employee, affiliate or affiliated person or entity of Subscriber, shall make or issue any press releases or otherwise make any public statements or make any disclosures to any third person or entity with respect to the transactions contemplated herein and will not make or issue any press releases or otherwise make any public statements of any nature whatsoever with respect to the Company without the express prior approval of the Company.

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8.14 Conflicts with Subscription Agreement. In the event of a conflict between the terms of the Subscription Agreement and the terms of this Agreement, this Agreement shall control in all respects.

IN WITNESS WHEREOF, the Company and the undersigned Subscriber have each duly executed this Agreement on the 3rd day of August 1999.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chief Executive Officer

RBB BANK AKTIENGESELLSCHAFT

By /s/ Herbert Strauss

Herbert Strauss
Headtrader

EXCHANGE AGREEMENT

exchanging

616 SHARES OF SERIES 12 CLASS L CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

for

616 SHARES OF SERIES 15 CLASS O CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

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Exhibit "A" Certificate of Designations

SERVICES, INC., a Delaware corporation, having offices at 1940 Northwest 67th Place, Gainesville, Florida 32653 (the "Company"), and RBB BANK AKTIENGESELLSCHAFT, organized under the laws of Austria, and having its principal offices at Burgring 16, 8101 Graz, Austria (the "Subscriber").

W I T N E S S E T H:

WHEREAS, the Company and the Subscriber previously entered into a certain Subscription and Purchase Agreement dated as of the 9th day of June, 1997 ("Subscription Agreement") under which (i) 2,500 shares of "Series 4 Class D Convertible Preferred Stock," par value \$.001 per share (the "Series 4 Preferred"), and (ii) an aggregate of 375,000 common stock purchase warrants were issued to the Subscriber in the form of one common stock purchase warrant dated June 9, 1997, providing for the purchase of 187,500 shares of the Company's common stock, par value \$.001 per share (the "Common Stock"), at an exercise price of \$2.10 per share, and one common stock warrant dated June 9, 1997, providing for the purchase of 187,500 shares of Common Stock at an exercise price of \$2.50 per share (collectively, the "June 1997 Warrants");

WHEREAS, the Company and the Subscriber previously entered into a certain Exchange Agreement dated as of the 6th day of November, 1997, but effective as of the 16th day of September, 1997 ("First Exchange Agreement"), under which the Subscription Agreement was terminated in all respects and all of the Series 4 Preferred and the June 1997 Warrants were delivered and tendered to the Company in exchange (the "First Exchange") for (i) an aggregate of 2,500 shares of "Series 6 Class F Convertible Preferred Stock," par value \$.001 per share (the "Series 6 Preferred") and (ii) an aggregate of 656,250 common stock purchase warrants (the "Series 6 Warrants"), each providing for the purchase of one share of the Company's Common Stock, 375,000 of which are exercisable at \$1.8125 per share and 281,250 of which are exercisable at \$2.125 per share (the Common Stock issuable upon the exercise of the Series 6 Warrants is referred to hereinafter as the "Warrant Shares");

WHEREAS, the Company and the Subscriber previously entered into a certain Exchange Agreement dated as of the 30th day of April, 1998, but effective as of the 28th day of February, 1998 ("Second Exchange Agreement"), under which all of the Series 6 Preferred were delivered and tendered to the Company in exchange (the "Second Exchange") for an aggregate of 2,500 shares of "Series 8 Class H Convertible Preferred Stock," par value \$.001 per share (the "Series 8 Preferred");

WHEREAS, pursuant to the terms of the Series 8 Preferred, the Subscriber has previously converted one thousand five hundred eighty-four (1,584) shares of Series 8 Preferred into Common Stock, leaving nine hundred sixteen (916) shares of Series 8 Preferred issued and outstanding;

WHEREAS, the Company and the Subscriber previously entered into a certain Exchange Agreement dated as of the 15th day of July, 1999 ("Third Exchange Agreement"), under which all of the Series 8 Preferred were delivered and tendered to the Company in exchange

(the "Third Exchange") for an aggregate of nine hundred sixteen (916) shares of "Series 12 Class L Convertible Preferred Stock,"

par value \$.001 per share (the "Series 12 Preferred");

WHEREAS, pursuant to the terms of the Series 12 Preferred, the Company redeemed three hundred (300) shares of the Series 12 Preferred, leaving six hundred sixteen (616) shares of Series 12 Preferred issued and outstanding;

WHEREAS, Subscriber owns all of the issued and outstanding shares of Series 12 Preferred as of the date of this Agreement;

WHEREAS, the Company and the Subscriber both desire to enter into this Agreement, under which all of the issued and outstanding shares of the Series 12 Preferred will be delivered and tendered to the Company in exchange (the "Fourth Exchange") for an aggregate of 616 shares of a new series of convertible preferred stock, par value \$.001 per share, to be designated by the Company's Board of Directors as "Series 15 Class O Convertible Preferred Stock" (the "Series 15 Preferred"), with the Series 15 Preferred containing such terms, conditions, restrictions and provisions as set forth in the Series 15 Preferred Certificate of Designations, attached hereto as Exhibit "A," ("Series 15 Preferred Certificate of Designations");

WHEREAS, upon execution of this Agreement, the Subscription Agreement, First Exchange Agreement, Second Exchange Agreement and Third Exchange Agreement are to be terminated in all respects;

WHEREAS, the terms, conditions, restrictions and provisions of the Series 15 Preferred shall be the same as the terms, conditions, restrictions and provisions of the Series 12 Preferred, except that (i) the Series 15 Preferred shall not be convertible for a period of twelve months from April 20, 1999, (ii) the Minimum Conversion Price (as defined herein) shall be \$1.50 for a period of twenty-four months from April 20, 1999, (iii) for a period of twelve months from April 20, 1999, the Company shall, have the option of redeeming the Series 15 Preferred for \$1,100 per share, at any time and from time to time, and if the Company does redeem the Series 15 Preferred during the first twelve months from April 20, 1999, the holder of the Series 15 Preferred so redeemed shall not have the right to convert such redeemed shares, (iv) after a period of twelve months from April 20, 1999, the Company shall, at any time and from time to time, have the option of redeeming the outstanding shares of Series 15 Preferred for \$1,200 per share, and (v) after a period of twelve months from April 20, 1999, upon receipt of notice of redemption, the holder of the Series 15 Preferred being redeemed shall have five business days in which to exercise an option to convert some or all of the shares of Series 15 Preferred being redeemed by the Company;

WHEREAS, the Company and the Subscriber each desire that the Fourth Exchange and the execution of the Agreement act to fully and completely terminate the Subscriber's rights under the Series 12 Preferred, terminate the Series 12 Preferred, and will act to fully and completely release all obligations of the Company under the Series 12 Preferred;

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WHEREAS, the Series 6 Warrants shall not be affected by this Agreement and shall remain issued and outstanding pursuant to the terms, provisions and conditions of the Series 6 Warrants;

WHEREAS, the shares of Common Stock issuable upon conversion of the Series 15 Preferred ("Conversion Shares") and the Series 15

Preferred are collectively referred to hereinafter as the "Securities;"

WHEREAS, the Common Stock is listed for trading on the Boston Stock Exchange and the National Association of Securities Dealers Automated Quotation SmallCap market ("NASDAQ"), and the Company is subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and has been subject to such filing requirements for the past ninety (90) days;

WHEREAS, the Subscriber is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Securities Act") and the Subscriber received all information as required under Rule 502 of Regulation D;

WHEREAS, the Subscriber is not a "U. S. Person," as such term is defined in Regulation S promulgated under the Securities Act;

WHEREAS, in reliance upon the representations made by the Subscriber in this Agreement, the transactions contemplated by this Agreement are such that the offer and exchange of securities by the Company hereunder will be exempt from registration under applicable federal (U. S.) securities laws since this is an exchange offer pursuant to Section 3(a)(9) of the Securities Act, and it is a private placement and intended to be a nonpublic offering pursuant to Sections 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act; and,

WHEREAS, the Securities will not be quoted or listed for trading on any securities exchange, organized market or quotation system at the time of acquisition hereunder.

NOW, THEREFORE, for and in consideration of the premises, and the mutual representations, warranties, covenants and agreements set forth herein, and for other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Exchange and Subscription for Purchase of Securities.

- 1.1 Issuance of Common Stock and Warrants. In full and complete termination of the Series 12 Preferred and the Subscriber's rights, and the interest in and to the Series 12 Preferred, and in full and complete release of any and all obligations of the Company under the Series 12 Preferred and to the Subscriber under the Series 12 Preferred, at the Closing (as defined herein) the Subscriber shall deliver all of the issued and outstanding shares of the Series 12 Preferred to the

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Company in exchange for 616 shares of Series 15 Preferred, containing such terms, conditions and provisions as set forth in the Series 15 Preferred Certificate of Designations, pursuant to the terms and conditions set forth in this Agreement. Dividends on the Series 12 Preferred shall cease to accrue as of the close of business on the day immediately preceding the date of this Agreement and dividends on the Series 15 Preferred shall begin to accrue on the date of this Agreement.

- 1.1.1 Delivery. Upon receipt by the Company of the canceled Series 12 Preferred duly assigned to the Company, the Company shall deliver or cause to be delivered: (a) to Conner & Winters, A Professional Corporation ("Conner & Winters"), a certificate or certificates representing the 616 shares of Series 15 Preferred issued in the name of the Subscriber, in such denominations as Subscriber requests in writing, to be held in escrow by Conner & Winters, for the Subscriber; and (b) to the Subscriber, written evidence from the Secretary of State of the State of Delaware that the Series 15 Preferred Certificate of Designations has been filed in the Office of the Secretary of State of the State of Delaware on or before the Closing Date.
- 1.1.2 Cancellation of Series 12 Preferred. At the Closing, the Subscriber does hereby assign and transfer unto the Company all of the Series 12 Preferred and the Series 12 Preferred shall be terminated and rendered null and void in all respects, and Conner & Winters is directed to deliver to the Company the Series 12 Preferred marked "Canceled."
- 1.1.3 Termination of Previous Agreements. Each of the Subscription Agreement, First Exchange Agreement, Second Agreement and Third Exchange Agreement is hereby terminated in its entirety.
- 1.1.4 Restrictive Legends. Subscriber agrees that, subject to the provisions of Section 5 below, all certificates representing the Securities shall bear the restrictive legend substantially in the form set forth in Section 7 below which shall include, but not be limited to, a legend to the effect that (a) the Securities represented by such certificate have not been registered under the Securities Act, and (b) unless there is an effective registration statement relating to the Securities, the Securities may not be offered, sold, transferred, mortgaged, pledged or hypothecated without an exemption from registration and an opinion of counsel to the Company with respect thereto, or an opinion from counsel for the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor. The legend on all such certificates shall make reference to the registration rights set forth in Section 5 hereof.

- 1.2 Discharge. As of the Closing, the Series 12 Preferred

shall be fully terminated in all respects. From and after the Closing, the Subscriber releases, acquits and forever discharges the Company, and all of its respective subsidiaries, affiliates, agents, employees, officers, and directors, as well as their respective heirs, successors, legal and personal representatives, and assigns of any and all of them, from and against any and all claims, liabilities, losses, damages, cause or causes of action of any kind or character whatsoever, whether liquidated, unliquidated or disputed, asserted or assertable, known or unknown, in contract or in tort, at law or in equity, which the Subscriber might now or hereafter have arising out of or in connection with or relating to the Series 12 Preferred.

- 1.3 Exchange. On the basis of the representations, warranties, covenants and agreements, and subject to the terms and conditions set forth herein, at the Closing, the Company agrees to exchange and deliver to the Subscriber, and the Subscriber agrees to accept in such exchange the delivery from the Company, of the Series 15 Preferred in exchange for the transfer of the Series 12 Preferred from the Subscriber to the Company.
- 1.4 Reporting Company. The Company is a reporting company under the Exchange Act and has filed with the United States Securities and Exchange Commission (the "SEC") all reports required to be filed by the Company under Section 13 or 15(d) of the Exchange Act. The Subscriber has had the opportunity to review, and has reviewed, all such reports and information which the Subscriber deemed material to an investment decision regarding the purchase of the Series 15 Preferred.
- 1.5 Terms of the Series 15 Preferred. The Series 15 Preferred shall contain and be subject to the terms, conditions, preferences and restrictions set forth in the Series 15 Preferred Certificate of Designations attached hereto as Exhibit "A."
- 1.6 No Effect on Series 6 Warrants. Nothing contained in this Agreement shall have any effect on the Series 6 Warrants.

2. Closing.

- 2.1 Closing. The consummation of this Agreement (the "Closing") will occur on at the time and on the date that the 616 shares of Series 15 Preferred are delivered by the Company to Conner & Winters (the "Closing Date").

3. Representations, Warranties and Covenants of Subscriber. The Subscriber hereby represents, warrants and covenants to the Company as follows:

- 3.1 Investment Intent. The Subscriber represents and warrants that the shares of Series 15 Preferred are being, and any underlying Conversion Shares will be,

purchased or acquired solely for the Subscriber's own account, for investment purposes only and not with a view

toward the distribution or resale to others. The Subscriber acknowledges, understands and appreciates that the Securities have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in large part, upon the Subscriber's representations as to investment intention, investor status, and related and other matters set forth herein. Subscriber understands that, in the view of the SEC, among other things, a purchase now with an intent to distribute or resell would represent a purchase and acquisition with an intent inconsistent with its representation to the Company, and the SEC might regard such a transfer as a deferred sale for which the registration exemption is not available.

- 3.2 Certain Risk. The Subscriber recognizes that the purchase of the Series 15 Preferred involves a high degree of risk in that (a) the Company has sustained losses through March 31, 1999, from its operations, and may require substantial funds in addition to the proceeds of this private placement; (b) that the Company has a substantial accumulated deficit; (c) an investment in the Company is highly speculative and only investors who can afford the loss of their entire investment should consider investing in the Company and the Series 15 Preferred; (d) an investor may not be able to liquidate his investment; (e) transferability of the Series 15 Preferred is extremely limited; (f) in the event of a disposition an investor could sustain the loss of his entire investment; (g) the Series 15 Preferred represent non-voting equity securities, and the right to convert into and purchase shares of voting equity securities in a corporate entity that has an accumulated deficit; (h) no return on investment, whether through distributions, appreciation, transferability or otherwise, and no performance by, through or of the Company, has been promised, assured, represented or warranted by the Company, or by any director, officer, employee, agent or representative thereof; and, (i) while the Common Stock is presently quoted and traded on the Boston Stock Exchange and the NASDAQ and while the Subscriber is a beneficiary of certain registration rights provided herein, the Series 15 Preferred subscribed for and that are purchased under this Agreement and the Conversion Shares (y) are not registered under applicable federal (U. S.) or state securities laws, and thus may not be sold, conveyed, assigned or transferred unless registered under such laws or unless an exemption from registration is available under such laws, as more fully described herein, and (z) the Series 15 Preferred subscribed for and that are to be purchased under this Agreement are not quoted, traded or listed for trading or quotation on the NASDAQ, or any other organized market or quotation system, and there is therefore no present public or other market for the Series 15 Preferred, nor can there be any assurance that the Common Stock of the Company will continue to be quoted, traded or listed for trading or quotation on the Boston Stock Exchange or the NASDAQ or on any other organized market or quotation system.

- 3.3 Prior Investment Experience. The Subscriber acknowledges that it has prior investment experience, including

investment in non-listed and non-registered securities, or has employed the services of an investment advisor, attorney or accountant to read all of the documents furnished or made available by the Company to it and to evaluate the merits and risks of such an investment on its behalf, and that it recognizes the highly speculative nature of this investment.

- 3.4 No Review by the SEC. The Subscriber hereby acknowledges that this offering of the Series 15 Preferred has not been reviewed by the SEC because this private placement is intended to be an exchange offer under Section 3(a)(9) of the Securities Act and a nonpublic offering pursuant to Section 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act.
- 3.5 Not Registered. The Subscriber understands that the Series 15 Preferred and the Conversion Shares have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in part, upon the Subscriber's investment intention. In this connection, the Subscriber understands that it is the position of the SEC that the statutory basis for such exemption would not be present if its representation merely meant that its present intention was to hold such securities for a short period, such as the capital gains period of tax statutes, for a deferred sale, for a market rise (assuming that a market develops), or for any other fixed period.
- 3.6 No Public Market. The Subscriber understands that there is no public market for the Series 15 Preferred. The Subscriber understands that although there is presently a public market for the Common Stock, including the Conversion Shares, Rule 144 (the "Rule") promulgated under the Securities Act requires, among other conditions, a one-year holding period following full payment of the consideration therefor prior to the resale (in limited amounts) of securities acquired in a nonpublic offering without having to satisfy the registration requirements under the Securities Act. The Subscriber understands that the Company makes no representation or warranty regarding its fulfillment in the future of any reporting requirements under the Exchange Act, or its dissemination to the public of any current financial or other information concerning the Company, as is required by the Rule as one of the conditions of its availability. The Subscriber understands and hereby acknowledges that the Company is under no obligation to register the Series 15 Preferred or the Conversion Shares under the Securities Act, except as set forth in Section 5 hereof. The Subscriber agrees to hold the Company and its directors, officers and controlling persons and their respective heirs, representatives, successors and assigns harmless and to indemnify them against all liabilities, costs and expenses incurred by them as a result of any misrepresentation made by the Subscriber contained herein or any sale or distribution by the Subscriber in violation of the Securities Act or any applicable state securities or "blue sky" laws (collectively, "Securities Laws").

- 3.7 Sophisticated Investor. That (a) the Subscriber has adequate means of providing for the Subscriber's current financial needs and possible contingencies and has no need for liquidity of the Subscriber's investment in the Series 15 Preferred; (b) the Subscriber is able to bear the economic risks inherent in an investment in the Series 15 Preferred and that an important consideration bearing on its ability to bear the economic risk of the purchase of Series 15 Preferred is whether the Subscriber can afford a complete loss of the Subscriber's investment in the Series 15 Preferred and the Subscriber represents and warrants that the Subscriber can afford such a complete loss; and (c) the Subscriber has such knowledge and experience in business, financial, investment and banking matters (including, but not limited to, investments in restricted, non-listed and non-registered securities) that the Subscriber is capable of evaluating the merits, risks and advisability of an investment in the Series 15 Preferred.
- 3.8 Tax Consequences. The Subscriber acknowledges that the Company has made no representation regarding the potential or actual tax consequences for the Subscriber which will result from entering into the Agreement and from consummation of the Second Exchange. The Subscriber acknowledges that it bears complete responsibility for obtaining adequate tax advice regarding the Agreement and the Second Exchange.
- 3.9 SEC Filing. The Subscriber acknowledges that it has been previously furnished with true and complete copies of the following documents which have been filed with the SEC pursuant to Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act, and that such have been furnished to the Subscriber a reasonable time prior to the date hereof: (i) Annual Report on Form 10-K for the year ended December 31, 1998 (the "Form 10-K"); (ii) Current Report on Form 8-K, date of earliest event reported April 8, 1999; (iii) Quarterly Report on Form 10-Q for the quarter ended March 31, 1999; (iv) Current Report on Form 8-K, date of earliest event reported June 1, 1999; and (v) the information contained in any reports or documents required to be filed by the Company under Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act since the distribution of the Form 10-K.
- 3.10 Documents, Information and Access. The Subscriber's decision to purchase the Series 15 Preferred is not based on any promotional, marketing or sales materials, and the Subscriber and its representatives have been afforded, prior to purchase thereof, the opportunity to ask questions of, and to receive answers from, the Company and its management, and has had access to all documents and information which Subscriber deems material to an investment decision with respect to the purchase of Series 15 Preferred hereunder.
- 3.11 No Registration, Review or Approval. The Subscriber acknowledges and understands that the private offering and sale of securities pursuant to this Agreement has not

been reviewed or approved by the SEC or by any state securities commission, authority or agency, and is not registered under the Securities Laws. The Subscriber acknowledges, understands and agrees that the shares of Series 15 Preferred are being offered and exchanged hereunder pursuant to (i) an exchange offer exemption under Section 3(a)(9) of the Securities Act and (ii) (y) a private placement exemption to the registration provisions of the Securities Act pursuant to Section 4(2) of such Securities Act and/or Regulation D promulgated under the Securities Act) and (z) a similar exemption to the registration provisions of applicable state securities laws.

3.12 Transfer Restrictions. The Subscriber will not transfer any Series 15 Preferred Securities purchased under this Agreement or any Conversion Shares purchased under this Agreement unless such are registered under the Securities Laws, or unless an exemption is available under such Securities Laws, and the Company may, if it chooses, where an exemption from registration is claimed by such Subscriber, condition any transfer of Series 15 Preferred or Conversion Shares out of the Subscriber's name on receipt of an opinion of the Company's counsel, to the effect that the proposed transfer is being effected in accordance with, and does not violate, an applicable exemption from registration under the Securities Laws, or an opinion of counsel to the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.

3.13 No Short Sale. The Subscriber expressly agrees that until such time that it has sold all of the Securities that it shall not, directly or indirectly, through an affiliate (as that term is defined under Rule 405 promulgated under the Securities Act) or by, with or through an unrelated third party or entity, whether or not pursuant to a written or oral understanding, agreement, arrangement, scheme, or artifice of nature whatsoever, engage in the short selling of the Company's Common Stock or any other equity securities of the Company, whether now existing or hereafter issued, or engage in any other activity of any nature whatsoever that has the same effect as a short sale, or is a de facto or de jure short sale, of the Company's Common Stock or any other equity security of the Company, whether now existing or hereafter issued, including, but not limited to, the sale of any rights pursuant to any understanding, agreement, arrangement, scheme or artifice of any nature whatsoever, whether oral or in writing, relative to the Company's Common Stock or any other equity securities of the Company whether now existing or hereafter created.

3.14 No Commission. The Subscriber agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Third Exchange.

3.15 Reliance. The Subscriber understands and acknowledges

that the Company is relying upon all of the representations, warranties, covenants, understandings, acknowledgments and agreements contained in this Agreement in determining whether to accept this subscription and to sell and issue the Series 15 Preferred to the Subscriber.

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3.16 Accuracy or Representations and Warranties. All of the representations, warranties, understandings and acknowledgments that Subscriber has made herein are true and correct in all material respects as of the date of execution hereof. The Subscriber will perform and comply fully in all material respects with all covenants and agreements set forth herein, and the Subscriber covenants and agrees that until the acceptance of this Agreement by the Company, the Subscriber shall inform the Company immediately in writing of any changes in any of the representations or warranties provided or contained herein.

3.17 Indemnity. The Subscriber hereby agrees to indemnify and hold harmless the Company, and the Company's successors and assigns, from, against and in all respects of any demands, claims, actions or causes of action, assessments, liabilities, losses, costs, damages, penalties, charges, fines or expenses (including, without limitation, interest, penalties, and attorney and accountants' fees, disbursements and expenses), arising out of or relating to any breach by Subscriber of any representations, warranty, covenant or agreement made by Subscriber in this Agreement. Such right to indemnification shall be in addition to any and all other rights of the Company under this Agreement or otherwise, at law or in equity.

3.18 Survival. The Subscriber expressly acknowledges and agrees that all of its representations, warranties, agreements and covenants set forth in this Agreement shall be of the essence hereof and shall survive the execution, delivery and Closing of this Agreement, the sale, purchase, and conversion, if any, of the Series 15 Preferred, the sale of the Conversion Shares, the exercise of the Series 6 Warrants, and the sale of the Warrant Shares.

4. Representations, Warranties and Covenants of the Company. In order to induce Subscriber to enter into this Agreement and to exchange the Series 12 Preferred for the Series 15 Preferred, the Company hereby represents, warrants and covenants to Subscriber as follows:

4.1 Organization, Authority, Qualification. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware. The Company has full corporate power and authority to own and operate its properties and assets and to conduct and carry on its business as it is now being conducted and operated.

4.2 Authorization. The Company has full power and authority to execute and deliver this Agreement and to perform its obligations under and consummate the transactions

contemplated by this Agreement. Upon the execution of this Agreement by the Company and delivery of the

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Securities, this Agreement shall have been duly and validly executed and delivered by the Company and shall constitute the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.

- 4.3 No Commission. The Company agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Third Exchange.
- 4.4 Ownership of, and Title to, Securities. The Series 15 Preferred to be exchanged for the Series 12 Preferred by the Subscriber are, and all Conversion Shares, when issued, will be, duly authorized, validly issued, fully paid and nonassessable shares of the capital stock of the Company, free of personal liability. Upon consummation of the exchange of the Series 15 Preferred (and upon the conversion of the Series 15 Preferred, in whole or in part) pursuant to this Agreement, the Subscriber will own and acquire title to the Series 15 Preferred (and the Conversion Shares, as the case may be) free and clear of any and all proxies, voting trusts, pledges, options, restrictions, or other legal or equitable encumbrance of any nature whatsoever (other than the restrictions on transfer due to Securities Laws or as otherwise provided for in this Agreement or the Series 15 Preferred Certificate of Designations).
- 4.5 Exemption from Registration. The offer and exchange of securities with the Subscriber in accordance with the terms and provisions of this Agreement is being affected in accordance with the Securities Act, pursuant to an exchange offer exemption to the registration provision of the Securities Act pursuant to Section 3(a)(9) thereunder and to a private placement exemption to the registration provisions of the Act pursuant to Section 4(2) of such Act and/or Regulation D promulgated under the Securities Act, based on the representations, warranties and covenants made by the Subscriber contained in this Agreement.

5. Registration Rights. In order to induce the Subscriber to enter into this Agreement and purchase the Securities, the Company hereby covenants and agrees to grant to the Subscriber the rights set forth in this Section 5 with respect to the registration of the Warrant Shares and the Conversion Shares.

- 5.1 Registration. Subject to the terms of Section 5 hereof, the Company agrees that it shall prepare and file with the SEC, a registration statement on Form S-3 or equivalent form (the "Registration Statement") and such other documents, including a prospectus, as may be necessary in the opinion of counsel for the Company in order to comply with the provisions of the Securities Act, so as to permit a public offering and sale by the Subscriber of up to 1,379,311 shares of Common Stock issuable upon conversion of the Series 6 Preferred,

Series 8 Preferred, Series 12 Preferred or Series 15 Preferred, plus up to 250,000 shares of Common Stock, if

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any, issuable as payment of dividends on the Series 6 Preferred, Series 8 Preferred, Series 12 Preferred or Series 15 Preferred pursuant to the terms of the applicable series of preferred stock, and 656,250 shares of Common Stock issuable upon exercise of the Series 6 Warrants. The Company shall use its reasonable efforts to cause such Registration Statement to become effective on or before January 31, 2000. In connection with the offering of such Common Stock registered pursuant to this Section 5, the Company shall take such actions as shall be reasonably necessary to qualify the Common Stock covered by such Registration Statement under such "blue sky" or other state securities laws for offer and sale as shall be reasonably necessary to permit the public offering and sale of shares of Common Stock covered by such Registration Statement; provided, however, that the Company shall not be required (a) to qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this subparagraph, (b) to subject itself to taxation in any such jurisdiction, or (c) to consent to general service of process in any such jurisdiction. It is expressly agreed that in no event are any registration rights being granted to any of the Series 6 Preferred, Series 8 Preferred, Series 12 Preferred or Series 15 Preferred itself, but only with respect to the underlying Conversion Shares issuable upon exercise of the Series 6 Preferred, Series 8 Preferred, Series 12 Preferred or Series 15 Preferred, as applicable, and the Warrant Shares issuable upon the exercise of the Series 6 Warrants.

- 5.2 Current Registration Statement. Once effective, the Company shall use its reasonable efforts to cause such Registration Statement filed hereunder to remain current and effective for a period of three (3) years or until the shares of Common Stock covered by such Registration Statement are sold by the Subscriber, whichever is sooner. The Subscriber shall promptly provide all such information and materials and take all such action as may be required in order to permit the Company to comply with all applicable requirements of the SEC and to obtain any desired acceleration of the effective date of such registration statement.
- 5.3 2.0% Penalty. In the event the Registration Statement referred to in Section 5.1 above is not declared effective by the SEC before 5:00 p.m. Eastern Daylight Savings Time on January 31, 2000 (or the next business day thereafter if such day is a Saturday, Sunday or legal holiday), the Company agrees to pay to the Subscriber a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of Series 15 Preferred then outstanding times (b) \$1,000, payable in cash. The Company agrees that for each month thereafter which terminates without the Registration Statement being declared effective by the SEC before 5:00 p.m. Eastern Daylight Savings Time on the last day thereof (or the next business day thereafter if such day is a Saturday,

Sunday or legal holiday), the Company shall pay to the Subscriber a penalty in an amount equal to two percent

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(2%) of the product of (a) the number of shares of Series 15 Preferred then outstanding times (b) \$1,000, payable in cash.

5.4 Other Provisions. In connection with the offering of any Conversion Shares and/or Warrant Shares registered pursuant to this Section 5, the Company shall furnish to the Subscriber such number of copies of any final prospectus as it may reasonably request in order to effect the offering and sale of the Conversion Shares and/or Warrant Shares to be offered and sold. In connection with any offering of Conversion Shares and/or Warrant Shares registered pursuant to this Section 5.5, the Company shall (a) furnish to the underwriters (if any), at the Company's expense, unlegended certificates representing ownership of the Conversion Shares and/or Warrant Shares sold under such Registration Statement in such denominations as requested and (b) instruct any transfer agent and registrar of the Conversion Shares and/or Warrant Shares to release immediately any stop transfer order, and to remove any restrictive legend, with respect to Conversion Shares and/or Warrant Shares included in any registration becoming effective pursuant to this Agreement upon the sale of such shares by the Subscriber.

5.5 Costs. Subject to the immediately following sentence, the Company shall in all events pay and be responsible for all fees, expenses, costs and disbursements associated with the Registration Statement relating to the Conversion Shares and the Warrant Shares under this Section 5, including filing fees, fees, costs and disbursements of any counsel, accountants and other consultants representing the Company in connection therewith. Notwithstanding anything set forth herein to the contrary, Subscriber shall be responsible for and pay any and all underwriting discounts and commissions in connection with the sale of the Conversion Shares and/or Warrant Shares pursuant hereto and all fees of its legal counsel and other advisors retained in connection with reviewing any registration statement.

5.6 Successors. The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business, properties, stock or assets of the Company, to expressly assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place.

6. Indemnification.

6.0.1 By the Company. Subject to the terms of this

Section 6, the Company will indemnify and hold harmless the Subscriber, its directors and

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officers, and any underwriter (as defined in the Securities Act) for the Subscriber and each person, if any, who controls the Subscriber or such underwriter within the meaning of the Act, from and against, and will reimburse the Subscriber and each such underwriter and controlling person with respect to, any and all loss, damage, liability, cost and expense to which such holder or any such underwriter or controlling person may become subject under the Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement filed with the SEC pursuant to Section 5, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made not misleading; provided, however, that the Company will not be liable in any such case to the extent that any such loss, damage, liability, cost or expense arises out of, or is based upon, an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by the Subscriber, such underwriter or such controlling person in writing specifically for use in the preparation thereof.

- 6.1 By the Subscriber. Subject to the terms of this Section 6, the Subscriber will indemnify and hold harmless the Company, its directors and officers, any controlling person and any underwriter from and against, and will reimburse the Company, its directors and officers, any controlling person and any underwriter with respect to, any and all loss, damage, liability, cost or expense to which the Company or any controlling person and/or any underwriter may become subject under the Securities Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in such Registration Statement filed with the SEC pursuant to Section 5, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was so made in reliance upon, and in strict conformity with,

written information furnished by, or on behalf of, the Subscriber specifically for use in the preparation thereof.

- 6.2 Procedure. Promptly after receipt by an indemnified party pursuant to the provisions of Section 6.1 or 6.2 of notice of the commencement of any action involving the subject matter of the foregoing indemnity provisions, such indemnified party will, if a claim thereof is to be made against the indemnifying party pursuant to the provisions of Section 6.1 or 6.2, promptly notify the

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indemnifying party of the commencement thereof; but the omission to so notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to any indemnified party otherwise than hereunder. In case such action is brought against any indemnified party and the indemnified party notifies the indemnifying party of the commencement thereof, the indemnifying party shall have the right to participate in, and, to the extent that it may wish, assume the defense thereof; or, if there is a conflict of interest which would prevent counsel for the indemnifying party from also representing the indemnified party, the indemnified parties have the right to select only one (1) separate counsel to participate in the defense of such action on behalf of all such indemnified parties. After notice from the indemnifying parties to such indemnified party of the indemnifying parties' election so to assume the defense thereof, the indemnifying parties will not be liable to such indemnified parties pursuant to the provisions of said Section 6.1 or 6.2 for any legal or other expense subsequently incurred by such indemnified parties in connection with the defense thereof, other than reasonable costs of investigation, unless (a) the indemnified parties shall have employed counsel in accordance with the provisions of the preceding sentence; (b) the indemnifying parties shall not have employed counsel satisfactory to the indemnified parties to represent the indemnified parties within a reasonable time after the notice of the commencement of the action or (c) the indemnifying party has authorized the employment of counsel for the indemnified party at the expense of the indemnifying parties.

7. Securities Legends and Notices. Subscriber represents and warrants that it has read, considered and understood the following legends, and agrees that such legends, substantially in the form and substance set forth below, shall be placed on all of the certificates representing the Series 15 Preferred:

Series 15 Preferred Legends

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS PREFERRED STOCK AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF

AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR

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THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THE SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF AUGUST 3, 1999, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

Conversion Shares Legends

THE SHARES OF COMMON STOCK REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS COMMON STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THESE SHARES OF COMMON STOCK ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF AUGUST 3, 1999, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

8. Miscellaneous.

8.1 Assignment and Power of Attorney. For purposes of affecting the exchange of the Series 12 Preferred in accordance with the terms of this Agreement, at the Closing the Subscriber does hereby assign all of its right, title and interest in and to the Series 12 Preferred to the Company and irrevocably makes, constitutes and appoints the Company as the true and lawful agents and attorneys-in-fact of the Subscriber

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("Attorney-In-Fact") with full power and authority (except as provided below) to act hereunder individually, or through duly appointed successor attorneys-in-fact, in its sole discretion, all as hereinafter provided, in the

name of, for and on behalf of the Subscriber, as fully as could the Subscriber if present and acting in person, with respect to all matters in connection with the transfer of the Series 12 Preferred Stock.

- 8.2 Amendment; Waiver. Neither this Agreement nor the Warrants shall be changed, modified or amended in any respect except by the mutual written agreement of the parties hereto. Any provision of this Agreement or the Warrants may be waived in writing by the party which is entitled to the benefits thereof. No waiver of any provision of this Agreement or the Series 6 Warrants shall be deemed to, or shall constitute a waiver of, any other provision hereof or thereof (whether or not similar), nor shall any such waiver constitute a continuing waiver.
- 8.3 Binding Effect; Assignment. Neither this Agreement nor the Series 6 Warrants, or any rights or obligations hereunder or thereunder, are assignable by the Subscriber.
- 8.4 Governing Law; Litigation Costs. This Agreement and its validity, construction and performance shall be governed in all respects by the internal laws of the State of Delaware without giving effect to such State's conflicts of laws provisions. Each of the Company and the Subscriber expressly and irrevocably consent to the jurisdiction and venue of the federal courts located in Wilmington, Delaware. Each of the parties agrees that in the event either party brings an action to enforce any of the provisions of this Agreement or to recovery for an alleged breach of any of the provisions of this Agreement, each party shall be responsible for its own legal costs and disbursements during the pendency of any such action; provided, however, that after any such action has been reduced to a final, unappealable judgment, the prevailing party shall be entitled to recover from the other party all reasonable, documented attorneys' fees and disbursements and court costs from the other party.
- 8.5 Severability. Any term or provisions of this Agreement or the Series 6 Warrants which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction only, be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or thereof affecting the validity or enforceability of such provision in any other jurisdiction.
- 8.6 Headings. The captions, headings and titles preceding the text of each or any Section, subsection or paragraph hereof are for convenience of reference only and shall not affect the construction, meaning or interpretation of this Agreement or the Warrants or any term or provisions hereof or thereof.
- 8.7 Counterparts. This Agreement may be executed in one or more original or facsimile counterparts, each of which

shall be deemed an original and all of which shall be considered one and the same agreement, binding on all of the parties hereto, notwithstanding that all parties are not signatories to the same counterpart. Upon delivery of an executed counterpart by the undersigned Subscriber to the Company, which in turn is executed and delivered by the Company, this Agreement shall be binding as one original agreement between Subscriber and the Company.

- 8.8 Transfer Taxes. Each party hereto shall pay all such sales, transfer, use, gross receipts, registration and similar taxes arising out of, or in connection with, the transactions contemplated by this Agreement (collectively, the "Transfer Taxes") as are payable by such party under applicable law, and the Company shall pay the cost of any documentary stock transfer stamps, if any, to be affixed to the certificates representing the Shares to be sold.
- 8.9 Entire Agreement. This Agreement, along with the Series 6 Warrants and the Series 15 Preferred Certificate of Designations, merges and supersedes any and all prior agreements, understandings, discussions, assurances, promises, representations or warranties among the parties with respect to the subject matter hereof, and contains the entire agreement among the parties with respect to the subject matter set forth herein and therein.
- 8.10 Authority; Enforceability. The Subscriber is duly authorized to enter into this Agreement and to perform all of its obligations hereunder. Upon the execution and delivery of this Agreement by the Subscriber, this Agreement shall be enforceable against the Subscriber in accordance with its terms.
- 8.11 Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or by fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (i) on the business day actually received if given by hand or by fax, (ii) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (iii) five (5) business days following the mailing thereof, if mailed by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 8.11:

If to the Company: Dr. Louis F. Centofanti
Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32653
Fax No.: (352) 373-0040

with copies Irwin H. Steinhorn, Esquire
simultaneously Conner & Winters
by like means to: One Leadership Square, Suite 1700
 211 North Robinson
 Oklahoma City, Oklahoma 73102
 Fax No.: (405) 232-2695

If to the Herbert Strauss
Subscriber: RBB Bank Aktiengesellschaft
 Burgring 16, 8010 Graz, Austria
 Fax No.: 011-43-316-8072 ext. 392

8.12 No Third Party Beneficiaries. This Agreement and the rights, benefits, privileges, interests, duties and obligations contained or referred to herein shall be solely for the benefit of the parties hereto and no third party shall have any rights or benefits hereunder as a third party beneficiary or otherwise hereunder.

8.13 Public Announcements. Neither Subscriber nor any officer, director, stockholder, employee, affiliate or affiliated person or entity of Subscriber, shall make or issue any press releases or otherwise make any public statements or make any disclosures to any third person or entity with respect to the transactions contemplated herein and will not make or issue any press releases or otherwise make any public statements of any nature whatsoever with respect to the Company without the express prior approval of the Company.

8.14 Conflicts with First Exchange Agreement. In the event of a conflict between the terms of the First Exchange Agreement and the terms of this Agreement, this Agreement shall control in all respects.

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IN WITNESS WHEREOF, the Company and the undersigned Subscriber have each duly executed this Agreement on the 3rd day of August 1999.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chief Executive Officer

RBB BANK AKTIENGESELLSCHAFT

By /s/ Herbert Strauss

Herbert Strauss
Headtrader

EXCHANGE AGREEMENT

exchanging

1,802 SHARES OF SERIES 13 CLASS M CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

for

1,802 SHARES OF SERIES 16 CLASS P CONVERTIBLE PREFERRED STOCK,

PAR VALUE \$.001 PER SHARE

of

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
(a Delaware corporation)

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THIS EXCHANGE AGREEMENT (the "Agreement") is entered into on the 3rd day of August 1999, by and between PERMA-FIX ENVIRONMENTAL SERVICES, INC., a Delaware corporation, having offices at 1940 Northwest 67th Place, Gainesville, Florida 32653 (the "Company"), and RBB BANK AKTIENGESSELLSCHAFT, organized under the laws of Austria, and having its principal offices at Burgring 16, 8101 Graz, Austria (the "Subscriber").

W I T N E S S E T H:

WHEREAS, the Company and the Subscriber previously entered into a certain Private Securities Subscription Agreement dated June 30, 1998 ("Subscription Agreement") under which (i) 3,000 shares of "Series 10 Class Convertible Preferred Stock," par value \$.001 per share (the "Series 10 Preferred"), and (ii) an aggregate of 350,000 common stock purchase warrants were issued to the Subscriber in the form of one common stock purchase warrant dated June 30, 1998, providing for the purchase of 200,000 shares of the Company's common stock, par value \$.001 per share (the "Common Stock"), at an exercise price of \$1.875 per share, and one common stock warrant dated June 30, 1998, providing for the purchase of 150,000 shares of Common Stock at an exercise price of \$2.50 per share (collectively, the "Series 10 Warrants") (the Common Stock issuable upon the exercise of the Series 10 Warrants is referred to hereinafter as the "Warrant Shares");

WHEREAS, pursuant to the terms of the Series 10 Preferred, the Subscriber has previously converted seven hundred forty-eight (748) shares of Series 10 Preferred into Common Stock leaving two thousand two hundred fifty-two (2,252) shares remaining issued and outstanding;

WHEREAS, the Company and the Subscriber previously entered into a certain Exchange Agreement dated as of the 15th day of July, 1999 ("First Exchange Agreement"), under which all of the Series 10 Preferred were delivered and tendered to the Company in exchange (the "First Exchange") for an aggregate of two thousand two hundred fifty-two (2,252) shares of "Series 13 Class M Convertible Preferred Stock" (the "Series 13 Preferred");

WHEREAS, pursuant to the terms of the Series 13 Preferred, the Company redeemed four hundred fifty (450) shares of the Series 13 Preferred, leaving one thousand eight hundred two (1,802) shares of Series 13 Preferred issued and outstanding;

WHEREAS, the Subscriber owns all of the issued and outstanding shares of Series 13 Preferred as of the date of this Agreement;

WHEREAS, the Company and the Subscriber both desire to enter into this Agreement, under which all of the issued and outstanding shares of the Series 13 Preferred will be delivered and tendered to the Company in exchange (the "Second Exchange") for an aggregate of one thousand eight hundred two (1,802) shares of a new series of convertible preferred stock, par value \$.001 per share, to be designated by the Company's Board of Directors as "Series 16 Class P Convertible Preferred Stock" (the "Series 16 Preferred"), with

the Series 16 Preferred containing such terms, conditions, restrictions and provisions as set forth in the Series 16 Preferred Certificate of Designations, attached hereto as Exhibit "A," ("Series 16 Preferred Certificate of Designations");

WHEREAS, upon execution of this Agreement, the Subscription Agreement and the First Exchange Agreement are each to be terminated in all respects;

WHEREAS, the terms, conditions, restrictions and provisions of the Series 16 Preferred shall be the same as the terms, conditions, restrictions and provisions of the Series 13 Preferred, except that (i) the Series 16 Preferred shall not be convertible for a period of twelve months from April 20, 1999, (ii) the Minimum Conversion Price (as defined herein) shall be \$1.50 for a period of twenty-four months from April 20, 1999, (iii) for a period of twelve months from April 20, 1999, the Company shall have the option of redeeming the Series 16 Preferred for \$1,100 per share, at any time and from time to time, and if the Company does redeem the Series 16 Preferred during the first twelve months from April 20, 1999, the holder of the Series 16 Preferred so redeemed shall not have the right to convert such redeemed shares, (iv) after a period of twelve months from April 20, 1999, the Company shall, at any time and from time to time, have the option of redeeming the Series 16 Preferred for \$1,200 per share, and (v) after a period of twelve months from April 20, 1999, upon receipt of notice of redemption, the holder of the Series 16 Preferred being redeemed shall have five business days in which to exercise an option to convert some or all of the shares of Series 16 Preferred being redeemed by the Company;

WHEREAS, the Series 10 Warrants shall not be affected by this Agreement and shall remain issued and outstanding pursuant to the terms, provisions and conditions of the Series 10 Warrants;

WHEREAS, the shares of Common Stock issuable upon conversion of the Series 16 Preferred ("Conversion Shares") and the Series 16 Preferred are collectively referred to hereinafter as the "Securities;"

WHEREAS, the Company and the Subscriber each desire that the Exchange and the execution of the Agreement act to fully and completely terminate the Subscriber's rights under the Series 13 Preferred, terminate the Series 13 Preferred and will act to fully and completely release all obligations of the Company under the Series 13 Preferred;

WHEREAS, the Common Stock is listed for trading on the Boston Stock Exchange and the National Association of Securities Dealers Automated Quotation SmallCap market ("NASDAQ"), and the Company is subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and has been subject to such filing requirements for the past ninety (90) days;

WHEREAS, the Subscriber is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Securities Act") and the Subscriber received all information as required under Rule 502 of Regulation D.;

WHEREAS, the Subscriber is not a "U. S. Person," as such term is defined in Regulation S promulgated under the Securities Act;

WHEREAS, in reliance upon the representations made by the Subscriber in this Agreement, the transactions contemplated by this Agreement are such that the offer and exchange of securities by the Company hereunder will be exempt from registration under applicable federal (U. S.) securities laws since this is an exchange offer pursuant to Section 3(a)(9) of the Securities Act, and it is a private placement and intended to be a nonpublic offering pursuant to Section 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act; and,

WHEREAS, the Securities will not be quoted or listed for trading on any securities exchange, organized market or quotation system at the time of acquisition hereunder.

NOW, THEREFORE, for and in consideration of the premises, and the mutual representations, warranties, covenants and agreements set forth herein, and for other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Exchange and Subscription for Purchase of Securities.

1.1 Issuance of Common Stock and Warrants. In full and complete termination of the Series 13 Preferred and the Subscriber's rights, and the interest in and to the Series 13 Preferred, and in full and complete release of any and all obligations of the Company under the Series 13 Preferred and to the Subscriber under the Series 13 Preferred, at the Closing (as defined herein) the Subscriber shall deliver all of the issued and outstanding shares of the Series 13 Preferred to the Company in exchange for 1,802 shares of Series 16 Preferred, containing such terms, conditions and provisions as set forth in the Series 16 Preferred Certificate of Designations, pursuant to the terms and conditions set forth in this Agreement. Dividends on the Series 13 Preferred shall cease to accrue as of the close of business on the day immediately preceding the date of this Agreement, and dividends on the Series 16 Preferred shall begin to accrue on the date of this Agreement.

1.1.1 Delivery. Upon receipt by the Company of the canceled Series 13 Preferred duly assigned to the Company, the Company shall deliver or cause to be delivered: (a) to Conner & Winters, A Professional Corporation ("Conner & Winters"), a certificate or certificates representing the 1,802 shares of Series 16 Preferred issued in the name of the Subscriber, in such denominations as Subscriber requests in writing, to be held in escrow by Conner & Winters, for the Subscriber; and (b) to the Subscriber, written evidence from the Secretary of State of the State of Delaware that the Series 16 Preferred Certificate of Designations has been filed in the Office of the Secretary of State of the State of Delaware on or before the Closing Date.

- 1.1.2 Cancellation of Series 13 Preferred. At the Closing the Subscriber does hereby assign and transfer unto the Company all of the Series 13 Preferred, the Series 13 Preferred shall be terminated and rendered null and void in all respects, and Conner & Winters is directed to deliver to the Company the Series 13 Preferred marked "Canceled."
 - 1.1.3 Termination of Previous Agreements. Each of the Subscription Agreement and the First Exchange Agreement is hereby terminated in its entirety.
 - 1.1.4 Restrictive Legends. Subscriber agrees that all certificates representing the Securities shall bear the restrictive legend substantially in the form set forth in Section 7 below which shall include, but not be limited to, a legend to the effect that (a) the Securities represented by such certificate have not been registered under the Securities Act, and (b) unless there is an effective registration statement relating to the Securities, the Securities may not be offered, sold, transferred, mortgaged, pledged or hypothecated without an exemption from registration and an opinion of counsel to the Company with respect thereto, or an opinion from counsel for the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.
- 1.2 Discharge. As of the Closing, the Series 13 Preferred shall be fully terminated in all respects. From and after the Closing, the Subscriber releases, acquits and forever discharges the Company, and all of its respective subsidiaries, affiliates, agents, employees, officers, and directors, as well as their respective heirs, successors, legal and personal representatives, and assigns of any and all of them, from and against any and all claims, liabilities, losses, damages, cause or causes of action of any kind or character whatsoever, whether liquidated, unliquidated or disputed, asserted or assertable, known or unknown, in contract or in tort, at law or in equity, which the Subscriber might now or hereafter have arising out of or in connection with or relating to the Series 13 Preferred.
- 1.3 Exchange. On the basis of the representations, warranties, covenants and agreements, and subject to the terms and conditions set forth herein, at the Closing, the Company agrees to exchange and deliver to the Subscriber, and the Subscriber agrees to accept in such exchange the delivery from the Company, of the Series 16 Preferred in exchange for the transfer of the Series 13 Preferred from the Subscriber to the Company.
- 1.4 Reporting Company. The Company is a reporting company under the Exchange Act and has filed with the United

States Securities and Exchange Commission (the "SEC") all reports required to be filed by the Company under Section

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13 or 15(d) of the Exchange Act. The Subscriber has had the opportunity to review, and has reviewed, all such reports and information which the Subscriber deemed material to an investment decision regarding the purchase of the Series 16 Preferred.

1.5 Terms of the Series 16 Preferred. The Series 16 Preferred shall contain and be subject to the terms, conditions, preferences and restrictions set forth in the Series 16 Preferred Certificate of Designations attached hereto as Exhibit "A."

1.6 No Effect on Series 10 Warrants. Nothing contained in this Agreement shall have any effect on the Series 10 Warrants.

2. Closing.

2.1 Closing. The consummation of this Agreement (the "Closing") will occur on at the time and on the date that the 1,802 shares of Series 16 Preferred are delivered by the Company to Conner & Winters (the "Closing Date").

3. Representations, Warranties and Covenants of Subscriber. The Subscriber hereby represents, warrants and covenants to the Company as follows:

3.1 Investment Intent. The Subscriber represents and warrants that the shares of Series 16 Preferred are being, and any underlying Conversion Shares will be, purchased or acquired solely for the Subscriber's own account, for investment purposes only and not with a view toward the distribution or resale to others. The Subscriber acknowledges, understands and appreciates that the Securities have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in large part, upon the Subscriber's representations as to investment intention, investor status, and related and other matters set forth herein. Subscriber understands that, in the view of the SEC, among other things, a purchase now with an intent to distribute or resell would represent a purchase and acquisition with an intent inconsistent with its representation to the Company, and the SEC might regard such a transfer as a deferred sale for which the registration exemption is not available.

3.2 Certain Risk. The Subscriber recognizes that the purchase of the Series 16 Preferred involves a high degree of risk in that (a) the Company has sustained losses through December 31, 1998, from its operations, and may require substantial funds in addition to the proceeds of this private placement; (b) that the Company has a substantial accumulated deficit; (c) an investment in the Company is highly speculative and only investors who can afford the loss of their entire investment should consider investing in the Company and the Series 16 Preferred; (d) an investor may not be able to liquidate

his investment; (e) transferability of the Series 16 Preferred is extremely limited; (f) in the event of a

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disposition an investor could sustain the loss of his entire investment; (g) the Series 16 Preferred represent non-voting equity securities, and the right to convert into and purchase shares of voting equity securities in a corporate entity that has an accumulated deficit; (h) no return on investment, whether through distributions, appreciation, transferability or otherwise, and no performance by, through or of the Company, has been promised, assured, represented or warranted by the Company, or by any director, officer, employee, agent or representative thereof; and, (i) while the Common Stock is presently quoted and traded on the Boston Stock Exchange and the NASDAQ and while the Subscriber is a beneficiary of certain registration rights provided herein, the Series 16 Preferred subscribed for and that are purchased under this Agreement and the Conversion Shares (y) are not registered under applicable federal (U. S.) or state securities laws, and thus may not be sold, conveyed, assigned or transferred unless registered under such laws or unless an exemption from registration is available under such laws, as more fully described herein, and (z) the Series 16 Preferred subscribed for and that are to be purchased under this Agreement are not quoted, traded or listed for trading or quotation on the NASDAQ, or any other organized market or quotation system, and there is therefore no present public or other market for the Series 16 Preferred, nor can there be any assurance that the Common Stock of the Company will continue to be quoted, traded or listed for trading or quotation on the Boston Stock Exchange or the NASDAQ or on any other organized market or quotation system.

- 3.3 Prior Investment Experience. The Subscriber acknowledges that it has prior investment experience, including investment in non-listed and non-registered securities, or has employed the services of an investment advisor, attorney or accountant to read all of the documents furnished or made available by the Company to it and to evaluate the merits and risks of such an investment on its behalf, and that it recognizes the highly speculative nature of this investment.
- 3.4 No Review by the SEC. The Subscriber hereby acknowledges that this offering of the Series 16 Preferred has not been reviewed by the SEC because this private placement is intended to be an exchange offer under Section 3(a)(9) of the Securities Act and a nonpublic offering pursuant to Section 4(2) of the Securities Act and/or Regulation D promulgated under the Securities Act.
- 3.5 Not Registered. The Subscriber understands that the Series 16 Preferred and the Conversion Shares have not been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in part, upon the Subscriber's investment intention. In this connection, the Subscriber understands that it is the position of the SEC that the statutory basis for such exemption would not be present if its representation merely meant that its present

intention was to hold such securities for a short period,

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such as the capital gains period of tax statutes, for a deferred sale, for a market rise (assuming that a market develops), or for any other fixed period.

- 3.6 No Public Market. The Subscriber understands that there is no public market for the Series 16 Preferred. The Subscriber understands that although there is presently a public market for the Common Stock, including the Conversion Shares, Rule 144 (the "Rule") promulgated under the Securities Act requires, among other conditions, a one-year holding period following full payment of the consideration therefor prior to the resale (in limited amounts) of securities acquired in a nonpublic offering without having to satisfy the registration requirements under the Securities Act. The Subscriber understands that the Company makes no representation or warranty regarding its fulfillment in the future of any reporting requirements under the Exchange Act, or its dissemination to the public of any current financial or other information concerning the Company, as is required by the Rule as one of the conditions of its availability. The Subscriber understands and hereby acknowledges that the Company is under no obligation to register the Series 16 Preferred or the Conversion Shares under the Securities Act. The Subscriber agrees to hold the Company and its directors, officers and controlling persons and their respective heirs, representatives, successors and assigns harmless and to indemnify them against all liabilities, costs and expenses incurred by them as a result of any misrepresentation made by the Subscriber contained herein or any sale or distribution by the Subscriber in violation of the Securities Act or any applicable state securities or "blue sky" laws (collectively, "Securities Laws").
- 3.7 Sophisticated Investor. That (a) the Subscriber has adequate means of providing for the Subscriber's current financial needs and possible contingencies and has no need for liquidity of the Subscriber's investment in the Series 16 Preferred; (b) the Subscriber is able to bear the economic risks inherent in an investment in the Series 16 Preferred and that an important consideration bearing on its ability to bear the economic risk of the purchase of Series 16 Preferred is whether the Subscriber can afford a complete loss of the Subscriber's investment in the Series 16 Preferred and the Subscriber represents and warrants that the Subscriber can afford such a complete loss; and (c) the Subscriber has such knowledge and experience in business, financial, investment and banking matters (including, but not limited to, investments in restricted, non-listed and non-registered securities) that the Subscriber is capable of evaluating the merits, risks and advisability of an investment in the Series 16 Preferred.
- 3.8 Tax Consequences. The Subscriber acknowledges that the Company has made no representation regarding the potential or actual tax consequences for the Subscriber

which will result from entering into the Agreement and from consummation of the Exchange. The Subscriber acknowledges that it bears complete responsibility for obtaining adequate tax advice regarding the Agreement and the Exchange.

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- 3.9 SEC Filing. The Subscriber acknowledges that it has been previously furnished with true and complete copies of the following documents which have been filed with the SEC pursuant to Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act, and that such have been furnished to the Subscriber a reasonable time prior to the date hereof: (i) Annual Report on Form 10-K for the year ended December 31, 1998 (the "Form 10-K"); (ii) Current Report on Form 8-K, date of earliest event reported April 8, 1999; (iii) Quarterly Report on Form 10-Q for the quarter ended March 31, 1999; (iv) Current Report on Form 8-K, date of earliest event reported June 1, 1999; and (v) the information contained in any reports or documents required to be filed by the Company under Sections 13(a), 14(a), 14(c) or 15(d) of the Exchange Act since the distribution of the Form 10-K.
- 3.10 Documents, Information and Access. The Subscriber's decision to purchase the Series 16 Preferred is not based on any promotional, marketing or sales materials, and the Subscriber and its representatives have been afforded, prior to purchase thereof, the opportunity to ask questions of, and to receive answers from, the Company and its management, and has had access to all documents and information which Subscriber deems material to an investment decision with respect to the purchase of Series 16 Preferred hereunder.
- 3.11 No Registration, Review or Approval. The Subscriber acknowledges and understands that the private offering and sale of securities pursuant to this Agreement has not been reviewed or approved by the SEC or by any state securities commission, authority or agency, and is not registered under the Securities Laws. The Subscriber acknowledges, understands and agrees that the shares of Series 16 Preferred are being offered and exchanged hereunder pursuant to (i) an exchange offer exemption under Section 3(a)(9) of the Securities Act and (ii) (y) a private placement exemption to the registration provisions of the Securities Act pursuant to Section 4(2) of such Securities Act and/or Regulation D promulgated under the Securities Act) and (z) a similar exemption to the registration provisions of applicable state securities laws.
- 3.12 Transfer Restrictions. The Subscriber will not transfer any Series 16 Preferred Securities purchased under this Agreement or any Conversion Shares purchased under this Agreement unless such are registered under the Securities Laws, or unless an exemption is available under such Securities Laws, and the Company may, if it chooses, where an exemption from registration is claimed by such Subscriber, condition any transfer of Series 16 Preferred or Conversion Shares out of the Subscriber's name on receipt of an opinion of the Company's counsel, to the effect that the proposed transfer is being effected in

accordance with, and does not violate, an applicable exemption from registration under the Securities Laws, or an opinion of counsel to the Subscriber, which opinion is satisfactory to the Company, to the effect that registration under the Securities Act is not required in connection with such sale or transfer and the reasons therefor.

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- 3.13 No Short Sale. The Subscriber expressly agrees that until such time that it has sold all of the Securities that it shall not, directly or indirectly, through an affiliate (as that term is defined under Rule 405 promulgated under the Securities Act) or by, with or through an unrelated third party or entity, whether or not pursuant to a written or oral understanding, agreement, arrangement, scheme, or artifice of nature whatsoever, engage in the short selling of the Company's Common Stock or any other equity securities of the Company, whether now existing or hereafter issued, or engage in any other activity of any nature whatsoever that has the same effect as a short sale, or is a de facto or de jure short sale, of the Company's Common Stock or any other equity security of the Company, whether now existing or hereafter issued, including, but not limited to, the sale of any rights pursuant to any understanding, agreement, arrangement, scheme or artifice of any nature whatsoever, whether oral or in writing, relative to the Company's Common Stock or any other equity securities of the Company whether now existing or hereafter created.
- 3.14 No Commission. The Subscriber agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Exchange.
- 3.15 Reliance. The Subscriber understands and acknowledges that the Company is relying upon all of the representations, warranties, covenants, understandings, acknowledgments and agreements contained in this Agreement in determining whether to accept this subscription and to sell and issue the Series 16 Preferred to the Subscriber.
- 3.16 Accuracy or Representations and Warranties. All of the representations, warranties, understandings and acknowledgments that Subscriber has made herein are true and correct in all material respects as of the date of execution hereof. The Subscriber will perform and comply fully in all material respects with all covenants and agreements set forth herein, and the Subscriber covenants and agrees that until the acceptance of this Agreement by the Company, the Subscriber shall inform the Company immediately in writing of any changes in any of the representations or warranties provided or contained herein.
- 3.17 Indemnity. The Subscriber hereby agrees to indemnify and hold harmless the Company, and the Company's successors and assigns, from, against and in all respects of any demands, claims, actions or causes of action, assessments, liabilities, losses, costs, damages,

penalties, charges, fines or expenses (including, without limitation, interest, penalties, and attorney and accountants' fees, disbursements and expenses), arising out of or relating to any breach by Subscriber of any representations, warranty, covenant or agreement made by Subscriber in this Agreement. Such right to indemnification shall be in addition to any and all other rights of the Company under this Agreement or otherwise, at law or in equity.

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3.18 Survival. The Subscriber expressly acknowledges and agrees that all of its representations, warranties, agreements and covenants set forth in this Agreement shall be of the essence hereof and shall survive the execution, delivery and Closing of this Agreement, the sale, purchase, and conversion, if any, of the Series 16 Preferred, the sale of the Conversion Shares, the exercise of the Series 10 Warrants, and the sale of the Warrant Shares.

4. Representations, Warranties and Covenants of the Company. In order to induce Subscriber to enter into this Agreement and to exchange the Series 13 Preferred for the Series 16 Preferred, the Company hereby represents, warrants and covenants to Subscriber as follows:

- 4.1 Organization, Authority, Qualification. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware. The Company has full corporate power and authority to own and operate its properties and assets and to conduct and carry on its business as it is now being conducted and operated.
- 4.2 Authorization. The Company has full power and authority to execute and deliver this Agreement and to perform its obligations under and consummate the transactions contemplated by this Agreement. Upon the execution of this Agreement by the Company and delivery of the Securities, this Agreement shall have been duly and validly executed and delivered by the Company and shall constitute the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.
- 4.3 No Commission. The Company agrees and acknowledges that no commission or other remuneration is being paid or given directly or indirectly for soliciting the Exchange.
- 4.4 Ownership of, and Title to, Securities. The Series 16 Preferred to be exchanged for the Series 13 Preferred by the Subscriber are, and all Conversion Shares, when issued, will be, duly authorized, validly issued, fully paid and nonassessable shares of the capital stock of the Company, free of personal liability. Upon consummation of the exchange of the Series 16 Preferred (and upon the conversion of the Series 16 Preferred, in whole or in part) pursuant to this Agreement, the Subscriber will own and acquire title to the Series 16 Preferred (and the Conversion Shares, as the case may be) free and clear of any and all proxies, voting trusts, pledges, options, restrictions, or other legal or equitable encumbrance of

any nature whatsoever (other than the restrictions on transfer due to Securities Laws or as otherwise provided for in this Agreement or the Series 16 Preferred Certificate of Designations).

- 4.5 Exemption from Registration. The offer and exchange of securities with the Subscriber in accordance with the terms and provisions of this Agreement is being affected

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in accordance with the Securities Act, pursuant to an exchange offer exemption to the registration provision of the Securities Act pursuant to Section 3(a)(9) thereunder and to a private placement exemption to the registration provisions of the Act pursuant to Section 4(2) of such Act and/or Regulation D promulgated under the Securities Act, based on the representations, warranties and covenants made by the Subscriber contained in this Agreement.

- 4.6 Registration Rights. In order to induce the Subscriber to enter into this Agreement and purchase the Securities, the Company hereby covenants and agrees to grant to the Subscriber the rights set forth in this Section 5 with respect to the registration of the Warrant Shares and the Conversion Shares.

5. Registration. Subject to the terms of Section 5 hereof, the Company agrees that it shall prepare and file with the SEC, a registration statement on Form S-3 or equivalent form (the "Registration Statement") and such other documents, including a prospectus, as may be necessary in the opinion of counsel for the Company in order to comply with the provisions of the Securities Act, so as to permit a public offering and sale by the Subscriber of up to 2,200,000 shares of Common Stock issuable upon conversion of the Series 10 Preferred, Series 13 Preferred or Series 16 Preferred, plus up to 350,000 shares of Common Stock, if any, issuable as payment of dividends on the Series 10 Preferred, Series 13 Preferred or Series 16 Preferred pursuant to the terms of the applicable series of preferred stock, and 350,000 shares of Common Stock issuable upon exercise of the Series 10 Warrants. The Company shall use its reasonable efforts to cause such Registration Statement to become effective on or before January 31, 2000. In connection with the offering of such Common Stock registered pursuant to this Section 5, the Company shall take such actions as shall be reasonably necessary to qualify the Common Stock covered by such Registration Statement under such "blue sky" or other state securities laws for offer and sale as shall be reasonably necessary to permit the public offering and sale of shares of Common Stock covered by such Registration Statement; provided, however, that the Company shall not be required (a) to qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this subparagraph, (b) to subject itself to taxation in any such jurisdiction, or (c) to consent to general service of process in any such jurisdiction. It is expressly agreed that in no event are any registration rights being granted to any of the Series 10 Preferred, Series 13 Preferred or Series 16 Preferred itself, but only with respect to the underlying Conversion Shares issuable upon exercise of the Series 10 Preferred, Series 13 Preferred or Series 16 Preferred, as applicable, and the Warrant Shares issuable upon

the exercise of the Series 10 Warrants.

- 5.1 Current Registration Statement. Once effective, the Company shall use its reasonable efforts to cause such Registration Statement filed hereunder to remain current and effective for a period of three (3) years or until the shares of Common Stock covered by such Registration Statement are sold by the Subscriber, whichever is

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sooner. The Subscriber shall promptly provide all such information and materials and take all such action as may be required in order to permit the Company to comply with all applicable requirements of the SEC and to obtain any desired acceleration of the effective date of such registration statement.

- 5.2 2.0% Penalty. In the event the Registration Statement referred to in Section 5.1 above is not declared effective by the SEC before 5:00 p.m. Eastern Daylight Savings Time on January 31, 2000 (or the next business day thereafter if such day is a Saturday, Sunday or legal holiday), the Company agrees to pay to the Subscriber a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of Series 16 Preferred then outstanding times (b) \$1,000, payable in cash. The Company agrees that for each month thereafter which terminates without the Registration Statement being declared effective by the SEC before 5:00 p.m. Eastern Daylight Savings Time on the last day thereof (or the next business day thereafter if such day is a Saturday, Sunday or legal holiday), the Company shall pay to the Subscriber a penalty in an amount equal to two percent (2%) of the product of (a) the number of shares of Series 16 Preferred then outstanding times (b) \$1,000, payable in cash.

- 5.3 Other Provisions. In connection with the offering of any Conversion Shares and/or Warrant Shares registered pursuant to this Section 5, the Company shall furnish to the Subscriber such number of copies of any final prospectus as it may reasonably request in order to effect the offering and sale of the Conversion Shares and/or Warrant Shares to be offered and sold. In connection with any offering of Conversion Shares and/or Warrant Shares registered pursuant to this Section 5.3, the Company shall (a) furnish to the underwriters (if any), at the Company's expense, unlegended certificates representing ownership of the Conversion Shares and/or Warrant Shares sold under such Registration Statement in such denominations as requested and (b) instruct any transfer agent and registrar of the Conversion Shares and/or Warrant Shares to release immediately any stop transfer order, and to remove any restrictive legend, with respect to Conversion Shares and/or Warrant Shares included in any registration becoming effective pursuant to this Agreement upon the sale of such shares by the Subscriber.

- 5.4 Costs. Subject to the immediately following sentence, the Company shall in all events pay and be responsible for all fees, expenses, costs and disbursements

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associated with the Registration Statement relating to the Conversion Shares and the Warrant Shares under this Section 5, including filing fees, fees, costs and disbursements of any counsel, accountants and other consultants representing the Company in connection therewith. Notwithstanding anything set forth herein to the contrary, Subscriber shall be responsible for and pay any and all underwriting discounts and commissions in connection with the sale of the Conversion Shares and/or Warrant Shares pursuant hereto and all fees of its legal counsel and other advisors retained in connection with reviewing any registration statement.

- 5.5 Successors. The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business, properties, stock or assets of the Company, to expressly assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place.

6. Indemnification.

- 6.1 By the Company. Subject to the terms of this Section 6, the Company will indemnify and hold harmless the Subscriber, its directors and officers, and any underwriter (as defined in the Securities Act) for the Subscriber and each person, if any, who controls the Subscriber or such underwriter within the meaning of the Act, from and against, and will reimburse the Subscriber and each such underwriter and controlling person with respect to, any and all loss, damage, liability, cost and expense to which such holder or any such underwriter or controlling person may become subject under the Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement filed with the SEC in connection with the Conversion Shares, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made not misleading; provided, however, that the Company will not be liable in any such case to the extent that any such loss, damage, liability, cost or expense arises out of, or is based upon, an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information

furnished by the Subscriber, such underwriter or such controlling person in writing specifically for use in the preparation thereof.

- 6.2 By the Subscriber. Subject to the terms of this Section 6, the Subscriber will indemnify and hold harmless the Company, its directors and officers, any controlling person and any underwriter from and against, and will reimburse the Company, its directors and officers, any controlling person and any underwriter with respect to, any and all loss, damage, liability, cost or expense to

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which the Company or any controlling person and/or any underwriter may become subject under the Securities Act or otherwise, insofar as such losses, damages, liabilities, costs or expenses are caused by any untrue statement or alleged untrue statement of any material fact contained in a Registration Statement filed with the SEC in connection to the Conversion Shares, any prospectus contained therein or any amendment or supplement thereto, or arise out of, or are based upon, the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was so made in reliance upon, and in strict conformity with, written information furnished by, or on behalf of, the Subscriber specifically for use in the preparation thereof.

- 6.3 Procedure. Promptly after receipt by an indemnified party pursuant to the provisions of Section 6.1 or 6.2 of notice of the commencement of any action involving the subject matter of the foregoing indemnity provisions, such indemnified party will, if a claim thereof is to be made against the indemnifying party pursuant to the provisions of Section 6.1 or 6.2, promptly notify the indemnifying party of the commencement thereof; but the omission to so notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to any indemnified party otherwise than hereunder. In case such action is brought against any indemnified party and the indemnified party notifies the indemnifying party of the commencement thereof, the indemnifying party shall have the right to participate in, and, to the extent that it may wish, assume the defense thereof; or, if there is a conflict of interest which would prevent counsel for the indemnifying party from also representing the indemnified party, the indemnified parties have the right to select only one (1) separate counsel to participate in the defense of such action on behalf of all such indemnified parties. After notice from the indemnifying parties to such indemnified party of the indemnifying parties' election so to assume the defense thereof, the indemnifying parties will not be liable to such indemnified parties pursuant to the provisions of said Section 6.1 or 6.2 for any legal or other expense subsequently incurred by such indemnified parties in connection with the defense thereof, other than reasonable costs of investigation, unless (a) the

indemnified parties shall have employed counsel in accordance with the provisions of the preceding sentence; (b) the indemnifying parties shall not have employed counsel satisfactory to the indemnified parties to represent the indemnified parties within a reasonable time after the notice of the commencement of the action or (c) the indemnifying party has authorized the employment of counsel for the indemnified party at the expense of the indemnifying parties.

7. Securities Legends and Notices. Subscriber represents and warrants that it has read, considered and understood the following legends, and agrees that such legends, substantially in the form

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and substance set forth below, shall be placed on all of the certificates representing the Series 16 Preferred:

Series 16 Preferred Legends

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS PREFERRED STOCK AND THE COMMON STOCK ISSUABLE UPON CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THE SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF AUGUST 3, 1999, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

Conversion Shares Legends

THE SHARES OF COMMON STOCK REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES LAWS. THIS COMMON STOCK MAY NOT BE OFFERED, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION OF PERMA-FIX ENVIRONMENTAL

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SERVICES, INC.'S COUNSEL, OR AN OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THESE SHARES OF COMMON STOCK ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF AUGUST 3, 1999, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

8. Miscellaneous.

8.1 Assignment and Power of Attorney. For purposes of affecting the exchange of the Series 13 Preferred in accordance with the terms of this Agreement at the Closing, the Subscriber does hereby assign all of its right, title and interest in and to the Series 13 Preferred to the Company and irrevocably makes, constitutes and appoints the Company as the true and lawful agents and attorneys-in-fact of the Subscriber ("Attorney-In-Fact") with full power and authority (except as provided below) to act hereunder individually, or through duly appointed successor attorneys-in-fact, in its sole discretion, all as hereinafter provided, in the name of, for and on behalf of the Subscriber, as fully as could the Subscriber if present and acting in person, with respect to all matters in connection with the transfer of the Series 13 Preferred.

8.2 Amendment; Waiver. Neither this Agreement nor the Warrants shall be changed, modified or amended in any respect except by the mutual written agreement of the parties hereto. Any provision of this Agreement or the Warrants may be waived in writing by the party which is entitled to the benefits thereof. No waiver of any provision of this Agreement or the Series 10 Warrants shall be deemed to, or shall constitute a waiver of, any other provision hereof or thereof (whether or not similar), nor shall any such waiver constitute a continuing waiver.

8.3 Binding Effect; Assignment. Neither this Agreement nor the Series 10 Warrants, or any rights or obligations hereunder or thereunder, are assignable by the Subscriber.

8.4 Governing Law; Litigation Costs. This Agreement and its validity, construction and performance shall be governed in all respects by the internal laws of the State of Delaware without giving effect to such State's conflicts of laws provisions. Each of the Company and the Subscriber expressly and irrevocably consent to the jurisdiction and venue of the federal courts located in Wilmington, Delaware. Each of the parties agrees that in the event either party brings an action to enforce any of the provisions of this Agreement or to recovery for an alleged breach of any of the provisions of this

legal costs and disbursements during the pendency of any such action; provided, however, that after any such action has been reduced to a final, unappealable judgment, the prevailing party shall be entitled to recover from the other party all reasonable, documented attorneys' fees and disbursements and court costs from the other party.

- 8.5 Severability. Any term or provisions of this Agreement or the Series 10 Warrants which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction only, be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or thereof affecting the validity or enforceability of such provision in any other jurisdiction.
- 8.6 Headings. The captions, headings and titles preceding the text of each or any Section, subsection or paragraph hereof are for convenience of reference only and shall not affect the construction, meaning or interpretation of this Agreement or the Warrants or any term or provisions hereof or thereof.
- 8.7 Counterparts. This Agreement may be executed in one or more original or facsimile counterparts, each of which shall be deemed an original and all of which shall be considered one and the same agreement, binding on all of the parties hereto, notwithstanding that all parties are not signatories to the same counterpart. Upon delivery of an executed counterpart by the undersigned Subscriber to the Company, which in turn is executed and delivered by the Company, this Agreement shall be binding as one original agreement between Subscriber and the Company.
- 8.8 Transfer Taxes. Each party hereto shall pay all such sales, transfer, use, gross receipts, registration and similar taxes arising out of, or in connection with, the transactions contemplated by this Agreement (collectively, the "Transfer Taxes") as are payable by such party under applicable law, and the Company shall pay the cost of any documentary stock transfer stamps, if any, to be affixed to the certificates representing the Shares to be sold.
- 8.9 Entire Agreement. This Agreement, along with the Series 10 Warrants and the Series 16 Preferred Certificate of Designations, merges and supersedes any and all prior agreements, understandings, discussions, assurances, promises, representations or warranties among the parties with respect to the subject matter hereof, and contains the entire agreement among the parties with respect to the subject matter set forth herein and therein.
- 8.10 Authority; Enforceability. The Subscriber is duly authorized to enter into this Agreement and to perform all of its obligations hereunder. Upon the execution and delivery of this Agreement by the Subscriber, this Agreement shall be enforceable against the Subscriber in accordance with its terms.

8.11 Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or by fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (i) on the business day actually received if given by hand or by fax, (ii) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (iii) five (5) business days following the mailing thereof, if mailed by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 8.11:

If to the Company: Dr. Louis F. Centofanti
Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32653
Fax No.: (352) 373-0040

with copies Irwin H. Steinhorn, Esquire
simultaneously Conner & Winters
by like means to: One Leadership Square, Suite 1700
211 North Robinson
Oklahoma City, Oklahoma 73102
Fax No.: (405) 232-2695

If to the Herbert Strauss
Subscriber: RBB Bank Aktiengesellschaft
Burgring 16, 8010 Graz, Austria
Fax No.: 011-43-316-8072 ext. 392

8.12 No Third Party Beneficiaries. This Agreement and the rights, benefits, privileges, interests, duties and obligations contained or referred to herein shall be solely for the benefit of the parties hereto and no third party shall have any rights or benefits hereunder as a third party beneficiary or otherwise hereunder.

8.13 Public Announcements. Neither Subscriber nor any officer, director, stockholder, employee, affiliate or affiliated person or entity of Subscriber, shall make or issue any press releases or otherwise make any public statements or make any disclosures to any third person or entity with respect to the transactions contemplated herein and will not make or issue any press releases or otherwise make any public statements of any nature

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whatsoever with respect to the Company without the express prior approval of the Company.

8.14 Conflicts with Subscription Agreement. In the event of a conflict between the terms of the Subscription Agreement and the terms of this Agreement, this Agreement

shall control in all respects.

IN WITNESS WHEREOF, the Company and the undersigned Subscriber have each duly executed this Agreement on the 3rd day of August, 1999.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By /s/ Louis Centofanti

Dr. Louis F. Centofanti
Chief Executive Officer

RBB BANK AKTIENGESELLSCHAFT

By /s/ Herbert Strauss

Herbert Strauss
Headtrader

SEE RESTRICTIVE LEGEND ON REVERSE SIDE

INCORPORATED UNDER THE LAWS OF
DELAWARE

No. ****

Shares ****

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

SERIES 14 CLASS N CONVERTIBLE PREFERRED STOCK
Par Value \$.001 Per Share

THIS CERTIFIES THAT - - S P E C I M E N - - is the owner of ****
***** (*****) shares of Series 14 Class N Convertible
Preferred Stock of

Perma-Fix Environmental Services, Inc.
transferable only on the books of the Corporation by the holder
hereof in person or by attorney upon surrender of this
Certificate properly endorsed.

In Witness Whereof, the said Corporation has caused this
Certificate to be signed by its duly authorized officers and to
be sealed with the Seal of the Corporation this ____ day of
_____, 1999.

Secretary

President

SHARES \$.001 EACH

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK
ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN
REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE
"SECURITIES ACT") OR QUALIFIED UNDER APPLICABLE STATE SECURITIES
LAWS. THIS PREFERRED STOCK AND THE COMMON STOCK ISSUABLE UPON
CONVERSION OF THIS PREFERRED STOCK MAY NOT BE OFFERED, SOLD,
PLEGDED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF
AN EFFECTIVE REGISTRATION STATEMENT AND QUALIFICATION IN EFFECT
WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY
APPLICABLE STATE SECURITIES LAW OR WITHOUT THE PRIOR WRITTEN
CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION
OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN
OPINION FROM COUNSEL FOR THE HOLDER HEREOF, WHICH OPINION IS
SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION AND
QUALIFICATION IS NOT REQUIRED UNDER APPLICABLE FEDERAL AND STATE
SECURITIES LAWS OR AN EXEMPTION THEREFROM.

NOTWITHSTANDING THE FOREGOING, THESE SHARES OF COMMON STOCK
ARE ALSO SUBJECT TO THE REGISTRATION RIGHTS SET FORTH IN THAT
CERTAIN EXCHANGE AGREEMENT BY AND BETWEEN THE HOLDER HEREOF AND
THE COMPANY, DATED AS OF AUGUST 3, 1999, A COPY OF WHICH IS ON
FILE AT THE COMPANY'S PRINCIPAL EXECUTIVE OFFICE.

CERTIFICATE

FOR

SHARES

of the

CAPITAL STOCK

of

Perma-Fix Environmental Services, Inc.

Series 14 Class N Convertible Preferred Stock
Par Value \$.001 Per Share

ISSUED TO
**** S P E C I M E N ****

DATED
_____, 1999

For Value Received, _____ hereby sell, assign and
transfer unto _____
_____ Shares of the Capital Stock represented by
the within Certificate, and do hereby irrevocably constitute and
appoint _____ to transfer the
said Stock on the books of the within named Corporation with full
power of substitution in the premises.

Dated _____, 19____.

In presence of _____

SEE RESTRICTIVE LEGEND ON REVERSE SIDE

INCORPORATED UNDER THE LAWS OF
DELAWARE

No. ****

Shares ****

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

SERIES 15 CLASS O CONVERTIBLE PREFERRED STOCK
Par Value \$.001 Per Share

THIS CERTIFIES THAT - - S P E C I M E N - - is the owner of ****
***** (*****) shares of Series 15 Class O Convertible
Preferred Stock of

Perma-Fix Environmental Services, Inc.
transferable only on the books of the Corporation by the holder
hereof in person or by attorney upon surrender of this
Certificate properly endorsed.

In Witness Whereof, the said Corporation has caused this
Certificate to be signed by its duly authorized officers and to
be sealed with the Seal of the Corporation this ____ day of
_____, 1999.

Secretary

President

SHARES \$.001 EACH

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK
ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN
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WITH RESPECT THERETO UNDER THE SECURITIES ACT AND UNDER ANY
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CONSENT OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. AND AN OPINION
OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN
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RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND
BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF AUGUST 3,
1999, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL
EXECUTIVE OFFICE.

CERTIFICATE
FOR

SHARES
of the
CAPITAL STOCK
of

Perma-Fix Environmental Services, Inc.

Series 15 Class O Convertible Preferred Stock
Par Value \$.001 Per Share

ISSUED TO
**** S P E C I M E N ****

DATED
_____, 1999

For Value Received, _____ hereby sell, assign and
transfer unto _____
_____ Shares of the Capital Stock represented by
the within Certificate, and do hereby irrevocably constitute and
appoint _____ to transfer the
said Stock on the books of the within named Corporation with full
power of substitution in the premises.

Dated _____, 19____.

In presence of _____

SEE RESTRICTIVE LEGEND ON REVERSE SIDE

INCORPORATED UNDER THE LAWS OF
DELAWARE

No. ****

Shares ****

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

SERIES 15 CLASS O CONVERTIBLE PREFERRED STOCK
Par Value \$.001 Per Share

THIS CERTIFIES THAT - - S P E C I M E N - - is the owner of ****
***** (*****) shares of Series 15 Class O Convertible
Preferred Stock of

Perma-Fix Environmental Services, Inc.
transferable only on the books of the Corporation by the holder
hereof in person or by attorney upon surrender of this
Certificate properly endorsed.

In Witness Whereof, the said Corporation has caused this
Certificate to be signed by its duly authorized officers and to
be sealed with the Seal of the Corporation this ____ day of
_____, 1999.

Secretary

President

SHARES \$.001 EACH

NEITHER THIS PREFERRED STOCK NOR ANY SHARES OF COMMON STOCK
ISSUABLE UPON THE CONVERSION OF THIS PREFERRED STOCK HAVE BEEN
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OF PERMA-FIX ENVIRONMENTAL SERVICES, INC.'S COUNSEL, OR AN
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RIGHTS SET FORTH IN THAT CERTAIN EXCHANGE AGREEMENT BY AND
BETWEEN THE HOLDER HEREOF AND THE COMPANY, DATED AS OF AUGUST 3,
1999, A COPY OF WHICH IS ON FILE AT THE COMPANY'S PRINCIPAL
EXECUTIVE OFFICE.

CERTIFICATE

FOR

SHARES

of the

CAPITAL STOCK

of

Perma-Fix Environmental Services, Inc.

Series 15 Class O Convertible Preferred Stock
Par Value \$.001 Per Share

ISSUED TO
**** S P E C I M E N ****

DATED
_____, 1999

For Value Received, _____ hereby sell, assign and
transfer unto _____
_____ Shares of the Capital Stock represented by
the within Certificate, and do hereby irrevocably constitute and
appoint _____ to transfer the
said Stock on the books of the within named Corporation with full
power of substitution in the premises.

Dated _____, 19____.

In presence of _____

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