

As filed with the Securities and Exchange Commission
on December 23, 1997
Registration No. 333-

=====

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-3
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

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

DELAWARE	58-1954497
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1940 Northwest 67th Place
Gainesville, Florida 32653
(352) 373-4200
(Address, including zip code, and telephone number, including area code, of
registrant's principal executive office)

DR. LOUIS F. CENTOFANTI
Chairman of the Board
Perma-Fix Environmental Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32653
(352) 373-4200
(Address, including zip code, and telephone number, including
area code, of agent for service)

Copy to:
IRWIN H. STEINHORN, ESQUIRE
Conner & Winters, A Professional Corporation
One Leadership Square, Suite 1700
211 North Robinson
Oklahoma City, Oklahoma 73102
(405) 272-5711

Approximate date of commencement of proposed sale to the
public: As soon as practicable after this Registration Statement
becomes effective.

If the only securities being registered on this form are being
offered pursuant to a dividend or interest reinvestment plans,
please check the following box: []

If any of the securities being registered on this Form are to
be offered on a delayed or continuous basis pursuant to Rule 415
under the Securities Act of 1933, other than securities offered
only in connection with dividend or interest reinvestment plans,
check the following box: [X]

If this Form is filed to register additional securities for an
offering pursuant to Rule 462(b) under the Securities Act, check
the following box and list the Securities Act registration
statement number of the earlier effective registration statement
for the same offering: []

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering:

If delivery of the prospectus is expected to be made pursuant to Rule 434, check the following box: []

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

CALCULATION OF REGISTRATION FEE

=====				
=====				
Title of Each Class of Securities to be Registered	Number of Shares to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
-----	-----	-----	-----	-----
Common Stock, \$.001 par value	3,302,074 (1)	\$2.4688 (2)	\$8,152,160	\$2,404.89
Common Stock, \$.001 par value	375,000 (3)	\$2.00-\$3.625 (4)	\$1,165,625	\$ 343.86

=====

=====

(1) Includes (a) 1,379,311 shares to be issued upon conversion of the Company's Series 6 Class F Convertible Preferred Stock, par value \$.001 per share ('Series 6 Preferred'); (b) 250,000 shares which may be issued by the Company in payment of dividends accrued on the Series 6 Preferred; (c) 200,000 shares to be issued upon conversion of the Company's Series 7 Class G Convertible Preferred Stock, par value \$.001 per share ('Series 7 Preferred'); (d) 36,000 shares which may be issued by the Company in payment of dividends accrued on the Series 7 Preferred; (e) 100,000 shares to be issued upon exercise of one warrant at an exercise price of \$1.50 per share; (f) 100,000 shares to be issued upon exercise of one warrant at an exercise price of \$1.70 per share; (g) 375,000 shares to be issued upon exercise of two warrants at an exercise price of \$1.8125; (h) 35,000 shares to be issued upon exercise of two warrants at an exercise price of \$1.8125; (i) 200,000 shares to be issued upon exercise of one warrant at an exercise price of \$2.00 per share; (j) 175,000 shares to be issued upon exercise of one warrant at an exercise price of \$2.00 per share; (k) 75,000 shares to be issued upon exercise of one warrant at an exercise price of \$2.00 per share; (l) 281,250 shares to be issued upon the exercise of one warrant at an exercise price of \$2.125 per share; (m) 75,000 shares to be issued upon the exercise of five warrants at an exercise price of \$2.375 per share; and (n) 20,513 shares to be issued upon exercise of one warrant at an exercise price of \$2.4375 per share.

(2) Estimated solely for the purposes of calculating the registration fee in accordance with Rule 457(c) on the basis of the average of the high and low price as quoted on the NASDAQ Small Cap Market on December 19, 1997.

(3) Includes (a) 75,000 shares to be issued upon exercise of one warrant at an exercise price of \$2.50 per share; (b) 175,000 shares to be issued upon exercise of one warrant at an exercise price of \$3.00 per share; and (c) 125,000 shares to be issued upon exercise of one warrant at an exercise

price of \$3.625 per share.

(4) Estimated in accordance with Rule 457(g) for the purpose of calculating the registration fee.

Subject to Completion: Dated December 23, 1997

PROSPECTUS

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

3,677,074 Shares of Common Stock, par value \$.001

This prospectus ('Prospectus') covers 3,677,074 shares (the 'Shares') of the common stock, par value \$.001 per share ('Common Stock'), of Perma-Fix Environmental Services, Inc., a Delaware corporation (the 'Company') for reoffer or resale from time to time by the Selling Shareholders (as defined on page 32). The Shares are comprised of the following: (a) 1,379,311 shares of Common Stock issuable by the Company upon the conversion of 2,500 shares of Series 6 Class E Convertible Preferred Stock, par value \$.001 per share ('Series 6 Preferred'), issued by the Company in connection with an Exchange Agreement, dated November 6, 1997, but effective as of September 16, 1997 (the 'RBB Exchange Agreement'), entered into between the Company and RBB Bank Aktiengesellschaft ('RBB Bank'), located in Graz, Austria; (b) 250,000 shares of Common Stock which may be issued by the Company to RBB Bank in payment of accrued dividends on the Series 6 Preferred; (c) 656,250 shares of Common Stock issuable upon the exercise of three warrants, each dated as of September 16, 1997, issued by the Company to RBB Bank in connection with the RBB Exchange Agreement, with two warrants each being for 187,500 shares and exercisable for three years at \$1.8125 per share, and the third warrant being for 281,250 shares and exercisable for three years at \$2.125 per share (collectively, the 'Series 6 Warrants'); (d) 300,000 shares of Common Stock issuable by the Company upon the exercise of two warrants, each dated June 9, 1997, issued by the Company to JW Charles Financial Services, Inc. ('JW Charles'), with one warrant being for 100,000 shares and exercisable for three years at \$1.50 per share and the other warrant being for 200,000 shares and exercisable for five years at \$2.00 per share (collectively, the 'Charles Warrants'); (e) 200,000 shares of Common Stock issuable by the Company upon the conversion of 350 shares of Series 7 Class G Convertible Preferred Stock, par value \$.001 per share ('Series 7 Preferred'), issued by the Company in connection with an Exchange Agreement, dated October 31, 1997, but effective as of September 16, 1997 (the 'Infinity Exchange Agreement'), entered into between the Company and The Infinity Fund, L.P. ('Infinity'); (f) 36,000 shares of Common Stock which may be issued by the Company to Infinity in payment of dividends accrued on the Series 7 Preferred; (g) 35,000 shares of Common Stock issuable upon the exercise of two warrants, each dated as of September 16, 1997, issued by the Company to Infinity in connection with the Infinity Exchange Agreement, and exercisable for three years at \$1.8125 (the 'Infinity Warrants'); (h) 125,000 shares of Common Stock issuable by the Company upon the exercise of a warrant, dated June 17, 1994, issued by the Company to Sun Bank, National Association ('Sun Bank') in connection with the extension of certain financial credits by Sun Bank to the Company ('Sun Bank Warrant'), exercisable until June 16, 1999, at an exercise price of \$3.625 per share; (i) 7,000 shares of Common Stock issuable by the Company upon exercise of one warrant ('Blair Remainder Warrant'), exercisable until December 31, 1999, at an

exercise price of \$2.375 per share, issued to D.H. Blair Investment Banking Corporation ('Blair') to reflect the unassigned portion of a warrant for 75,000 shares of Common Stock which was previously issued by the Company to Blair in connection with the extension of a promissory note ('Blair Warrant') and which was partially assigned by Blair to the following officers and directors of Blair: (w) 28,000 shares of Common Stock issuable by the Company upon exercise of one warrant issued to J. Morton Davis ('Davis') as a result of the assignment by Blair of a portion of the Blair Warrant, exercisable until December 31, 1999, at an exercise price of \$2.375 per share ('Davis Warrant'); (x) 28,000 shares of Common Stock issuable by the Company upon exercise of one warrant issued to Esther Stahler ('Stahler') as a result of the assignment by Blair of a portion of the Blair Warrant, exercisable until December 31, 1999, at an exercise price of \$2.375 per share ('Stahler Warrant'); (y) 7,000 shares of Common Stock issuable by the Company upon exercise of one warrant issued to Ruki Renov ('Renov') as a result of the assignment by Blair of a portion of the Blair Warrant, exercisable until December 31, 1999, at an exercise price of \$2.375 per share ('Renov Warrant'); and (z) 5,000 shares of Common Stock issuable by the Company upon exercise of one warrant issued to Martin A. Bell ('Bell') as a result of the assignment by Blair of a portion of the Blair Warrant, exercisable until December 31, 1999, at an exercise price of \$2.375 per share ('Bell Warrant'); (j) 20,513 shares of Common Stock issuable by the Company upon exercise of a warrant issued to Ally

Capital Management ('Ally') in connection with a loan to the Company, which warrant is exercisable until September 11, 2000, at an exercise price of \$2.4375 per share; (k) 100,000 shares of Common Stock issuable by the Company upon exercise of one warrant, dated as of September 16, 1997, issued by the Company to Dionysus Limited ('Dionysus'), an Isle of Man corporation, for services rendered to the Company in connection with the Private Placement (as defined) and exercisable for three years at \$1.70 per share ('Dionysus Warrant'); and (l) 500,000 shares of Common Stock issuable upon the exercise of four warrants, each dated July 25, 1997, issued to the following individuals for services rendered to the Company: (x) Karl H. Ehlert, a five year warrant to purchase up to 175,000 shares at an exercise price of \$2.00 per share and a five year warrant to purchase up to 175,000 shares at an exercise price of \$3.00 per share (collectively, the 'Ehlert Warrants') and (y) R. Keith Fetter, a three year warrant to purchase up to 75,000 shares at an exercise price of \$2.00 per share and a three year warrant to purchase up to 75,000 shares at an exercise price of \$2.50 per share (collectively, the 'Fetter Warrants') (the Ehlert Warrants and Fetter Warrants are collectively referred to as the 'Service Warrants'). See 'Summary of Securities Being Offered' and 'Private Placements and Exchange Agreements.'

The shares of Series 6 Preferred and the shares of Series 7 Preferred may be converted into shares of Common Stock at a conversion price ('Conversion Price') equal to \$1.8125 per share of Common Stock, except that, in the event the average closing bid price of the Common Stock as reported in the over-the-counter market, or the closing sale price if listed on a national securities exchange, for 20 of any 30 consecutive trading days after March 1, 1998, shall be less than \$2.50 per share, the Conversion Price shall be adjusted thereafter ('Conversion Price Adjustment') to be 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 provided to the

Company, multiplied by eighty percent (80%) or (ii) \$1.8125; provided, however, that the Conversion Price Adjustment applies to the Series 7 Preferred only if the holders of such Series 7 Preferred have engaged in no sales of Common Stock during and for 30 trading days prior to the 30 consecutive trading day period used to activate the Conversion Price Adjustment. If the Conversion Price Adjustment becomes effective, then the minimum conversion price shall be \$0.75 per share of Common Stock, which minimum will be eliminated from and after September 6, 1998. If the Conversion Price Adjustment does not become effective, the conversion of all of the Series 6 Preferred could result in the issuance of up to approximately 1,379,311 shares of Common Stock, and the conversion of all of the Series 7 Preferred could result in the issuance of up to approximately 200,000 shares of Common Stock. If the Conversion Price Adjustment is in effect and the conversion occurs prior to September 6, 1998, the number of shares of Common Stock issuable upon the conversion of the Series 6 Preferred could result in the issuance of between approximately 1,379,311 to 3,333,333 shares of Common Stock, and the conversion of the Series 7 Preferred could result in the issuance of between approximately 200,000 to 467,000 shares of Common Stock with the actual number depending upon the closing bid price of the Common Stock over the five trading days immediately preceding the conversion date or dates. The number of shares of Common Stock issuable upon conversion of the Series 6 Preferred and the Series 7 Preferred could exceed the foregoing estimates if converted after the minimum conversion price is eliminated on September 6, 1998, or under certain other limited circumstances. See ''Summary of Securities Being Offered.'' However, the Company is required to use reasonable efforts to register only 1,379,311 shares to be issued upon the conversion of the Series 6 Preferred under the terms of the RBB Exchange Agreement and 200,000 shares to be issued upon the conversion of the Series 7 Preferred under the terms of the Infinity Exchange Agreement. The 1,379,311 shares and 200,000 shares required to be registered under the terms of the RBB Exchange Agreement and the Infinity Exchange Agreement, respectively, approximates the number of shares of Common Stock issuable by the Company upon such conversion at a conversion price of \$1.8125 per share. See ''Private Placements and Exchange Agreements.''

The Company's Common Stock is traded under the symbol ''PES'' on the Boston Stock Exchange (''BSE'') and under the symbol ''PESI'' on the National Association of Securities Dealers Automated Quotation System SmallCap Market (''NASDAQ''). The

-2-

Shares may be offered for sale from time to time in one or more transactions, including block trades, in the over the counter market, on the BSE and the NASDAQ, in privately negotiated transactions, or in a combination of any such methods of sale. On December 19, 1997, the closing bid price of the Company's Common Stock as quoted by the NASDAQ was \$2.4375 per share.

The Company will not receive any of the proceeds from the sale of Shares by the Selling Shareholders. However, the Company will receive the exercise price upon the exercise of the various warrants described herein. See ''Use of Proceeds.''

The Company has agreed to pay all the costs and fees relating to the registration of the Shares covered by this Prospectus. However, the Company will not pay any discounts, concessions or commissions payable to underwriters, dealers or agents incident to the offering of the Shares or fees and expenses incurred by counsel

for the Selling Shareholders.

The mailing address, including zip code, and the telephone number of the principal executive office of the Company is: 1940 Northwest 67th Place, Gainesville, Florida 32653, and the telephone number is (352) 373-4200.

INVESTMENT IN THESE SECURITIES INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" OF THIS PROSPECTUS FOR A DISCUSSION OF CERTAIN FACTORS THAT PROSPECTIVE INVESTORS SHOULD CONSIDER PRIOR TO AN INVESTMENT IN THESE SECURITIES.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is December ____, 1997.

-3-

SPECIAL NOTE REGARDING
FORWARD-LOOKING STATEMENTS

Certain statements contained within this Prospectus 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 Prospectus 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 or inability to improve operations and become profitable on an annualized basis and continue its operations, (ii) completion of the Congress Loan (as defined below), (iii) resolution of the defaults under the Heller Agreement (as defined below) and the Ally Agreement (as defined below), (iv) the Company's ability to develop or adopt new and existing technologies in the conduct of its operations, (v) anticipated financial performance, (vi) ability to comply with the Company's general working capital requirements, (vii) ability to recover under certain insurance policies, (viii) ability to retain or receive certain permits, (ix) the successful resolution of certain actions instituted by the Tennessee Department of Environment and Conservation ("TDEC") against the Memphis, Tennessee facility of the Company, (x) ability to be able to continue to borrow under the Company's revolving line of credit, (xi) 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 facility in Memphis, Tennessee, (xii) ability to remediate certain contaminated sites for projected amounts, (xiii) determination whether the Company is a potentially responsible party at the Drum site (as defined below), and, if determined to be a potentially responsible party, the potential cost to the Company in connection with

remediating the Drum site, (xiv) determination that the Company is a potentially responsible party at the Drum site (as defined below) and, as a result, potential cost to the Company in connection with remediating the Drum site, and 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 Prospectus, 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) ability to receive or retain certain required permits, (ix) ability to satisfactorily resolve certain pending orders or issues or to reopen a certain facility, (x) discovery of additional contamination or expanded contamination at a certain Dayton, Ohio property formerly leased by the Company or the Company's facility at Memphis, Tennessee which would result in a material increase in remediation expenditures, (xi) determination that PFM is the source of chlorinated compounds at the Allen Well Field, (xii) changes in federal, state and local laws and regulations, especially environmental regulations, or in interpretation of such, (xiii) potential increases in equipment, maintenance, operating or labor costs, (xiv) management retention and development, (xv) the requirement to use internally generated funds for purposes not presently anticipated, (xvi) Congress' (as defined below) decision regarding the completion of the Congress Loan, (xvii) Congress' providing terms in the Congress Loan which are unacceptable to the Company, (xviii) the ability to obtain waivers regarding existing defaults under certain covenants contained in loan agreements that the Company is a party to or the ability of the Company to successfully negotiate a payoff under such loan agreements should alternative financing become available, (xix) a determination by the insurance carrier that coverage is not available or is available in limited amounts regarding pending or

-4-

future claims, a determination that PFM or the Company is a potentially responsible party regarding the Drum site, and, as a result is determined to be liable for a substantial portion of the remediation cost at the Drum site, or (xx) the ability of the Company to become profitable or, if unable to become profitable, the ability to secure additional liquidity in the form of additional equity or debt. The Company undertakes no obligation to update publicly any forward-looking statement, whether as a result of new information, future events or otherwise.

AVAILABLE INFORMATION

The Company is subject to the informational requirements of the Securities Exchange Act of 1934, as amended ('Exchange Act'), and, in accordance therewith, files reports, proxy statements and other information with the Securities and Exchange Commission (the 'Commission'). Such reports, proxy statements and other information can be inspected and copied at the public reference facilities maintained by the Commission at Room 1024, Judiciary

Plaza, 450 Fifth Street, N.W., Washington, D. C. 20549, as well as at its Regional Offices located at 7 World Trade Center, Suite 1300, New York, New York 10048, and 500 West Madison Street, Suite 1400, Chicago, Illinois 60661-2511. Copies of such material can be obtained from the Public Reference Section of the Commission, 450 Fifth Street, N.W., Washington, D. C. 20549, at prescribed rates. Such materials can also be accessed through the World Wide Web site of the Commission, which contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission (<http://www.sec.gov>). The Company's Common Stock is listed on the BSE and with NASDAQ, and reports, proxy statements and other information concerning the Company may also be inspected at (a) the offices of the BSE at One Boston Place, Boston, Massachusetts 02108, and (b) the offices of NASDAQ at 1735 K Street, N.W., Washington, D. C. 20006-1506.

The Company has filed a registration statement on Form S-3 (together with any amendments thereto, the "'Registration Statement'") under the Securities Act of 1933, as amended (the "'Securities Act'"), with respect to the Shares offered by this Prospectus. This Prospectus constitutes a part of the Registration Statement and omits certain information contained in the Registration Statement in accordance with the rules and regulations of the Commission. Reference is made to the Registration Statement and exhibits thereto for further information with respect to the Company and the Shares of Common Stock offered hereby. Copies of the Registration Statement and the exhibits thereto may be obtained at prescribed rates upon request to the Commission in Washington, D. C. Any statements contained herein concerning the provisions of any documents are not necessarily complete, and, in each instance, such statements are qualified in their entirety by reference to such document filed as an exhibit to the Registration Statement or otherwise filed with the Commission.

INCORPORATION BY REFERENCE

The following documents filed by the Company with the Commission under the Exchange Act are incorporated by reference in this Prospectus and will be deemed part of this Prospectus:

(1) Annual Report on Form 10-K for the year ended December 31, 1996, as amended by Amendment No. 1 on Form 10-K/A filed October 16, 1997;

(2) Quarterly Report on Form 10-Q for the quarter ended March 31, 1997;

-5-

(3) Quarterly Report on Form 10-Q for the quarter ended June 30, 1997;

(4) Quarterly Report on Form 10-Q for the quarter ended September 30, 1997;

(5) Current Report on Form 8-K dated June 11, 1997, as amended by Current Report on Form 8-K/A dated June 25, 1997;

(6) Current Report on Form 8-K dated July 7, 1997.

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this

Prospectus and prior to the termination of the offering under this Prospectus will be deemed to be incorporated by reference into this Prospectus from the respective dates those documents are filed. If any statement in this Prospectus, in a subsequent supplement to this Prospectus or any document incorporated by reference in this Prospectus is modified or superseded by a statement in this Prospectus, in subsequent supplement to this Prospectus, or in any document incorporated by reference in this Prospectus, the earlier statement will be deemed, for the purposes of this Prospectus to have been modified or superseded by the subsequent statement and the earlier statement is incorporated by reference only as modified or to the extent it is not superseded

The Company will provide to each person to whom this Prospectus is delivered a copy of any or all of the documents which have been or may be incorporated by reference in this Prospectus (other than certain exhibits to those documents). Such copies will be provided upon written or oral request and without charge. Requests should be directed to Richard T. Kelecy, Perma-Fix Environmental Services, Inc., 1940 Northwest 67th Place, Gainesville, Florida 32653, telephone (352) 373-4200.

RISK FACTORS

In evaluating an investment in the Shares, prospective purchasers of the Shares pursuant to this Prospectus should consider carefully the factors set forth below, as well as the other information contained in this Prospectus and incorporated herein by reference.

Accumulated Deficits; Net Losses; Future Losses

The Company has reported consolidated net losses in all annual periods since it began operations in 1991. The Company's historical consolidated balance sheet at December 31, 1996, reflected an accumulated deficit of approximately \$14,290,000, and the Company's consolidated statement of operations for the year ended December 31, 1996, reflected a net loss applicable to Common Stock of approximately \$405,000, or a net loss of approximately \$.05 per share, as compared to a net loss applicable to Common Stock of approximately \$9,052,000, or a net loss of approximately \$1.15 per share, for the year ended December 31, 1995. For the three months ended September 30, 1997, the Company had an unaudited consolidated net income of approximately \$157,000 on unaudited consolidated net revenues of approximately \$7,246,000, as compared to an unaudited consolidated net income of approximately \$155,000 on unaudited consolidated net revenues of approximately \$7,734,000 for the three months ended September 30, 1996. However, for the nine month period ended September 30, 1997, the Company had an unaudited consolidated net loss of approximately \$1,202,000 on unaudited consolidated net revenues of approximately \$20,882,000, as compared to an unaudited consolidated net loss of approximately \$244,000 on unaudited consolidated net revenues of approximately \$23,484,000 for the nine months ended September 30, 1996. If the Company is unable to improve its operations and become profitable on an annualized basis in the foreseeable future, such inability would have a material adverse effect on the Company and the Company's ability to operate.

The Company and its subsidiaries are parties to a Loan and Security Agreement ('Heller Agreement'), with Heller Financial, Inc. ('Heller'), which provides a term loan and a revolving credit facility to the Company. In addition, the Company has an equipment financing agreement ('Ally Agreement') with Ally Capital Corporation ('Ally'). As of September 30, 1997, the Company owed Heller under the term loan approximately \$993,000 and under the revolving credit facility approximately \$2,173,000, and owed Ally under the Ally Agreement approximately \$796,000. As of September 30, 1997, the Company was, and as of the date of this Prospectus the Company is, in default of certain financial and other covenants under the Heller Agreement and the Ally Agreement, including certain covenants in the Heller Agreement prohibiting the issuance by the Company of shares of stock other than shares which Heller has specifically authorized. The Company has not received consent from Heller to issue various shares of stock, including, but not limited to (i) the Series 4 Preferred, Series 5 Preferred, Series 6 Preferred and Series 7 Preferred; (ii) the Series 4 Warrants, Series 6 Warrants, Infinity Warrants, Dionysus Warrant, and Service Warrants; (iii) Common Stock to be issued in payment of dividends accrued on, or upon conversion of, the Series 4 Preferred, Series 5 Preferred, Series 6 Preferred and Series 7 Preferred and (iv) Common Stock to be issued upon exercise of the Series 4 Warrants, Series 6 Warrants, Infinity Warrants, Sun Bank Warrant, Dionysus Warrant, and Service Warrants. See 'Private Placements and Exchange Agreements.'

Although Heller and Ally may, under the terms of their respective agreements with the Company, declare a default and demand immediate repayment of all amounts due under their respective agreements, neither has done so and neither has indicated that it intends to take such action despite being in default of certain covenants. In addition, Heller has continued to provide loans to the Company under the revolving credit facility of the Heller Agreement. If, however, Heller or Ally, or both of them, were to declare a default and demand immediate repayment under one or both of their respective agreements, the Company does not have sufficient liquidity to enable it to make such repayment. If the Company were unable to negotiate a settlement with Heller and/or Ally, or obtain alternative financing from Congress or other external sources, such could have a material adverse effect on the Company and its ability to continue as a viable entity.

During November, 1997, the Company signed a letter of intent with Congress Financial Corporation ('Congress') regarding a proposed \$7,000,000 credit facility ('Congress Loan') which, as proposed, would consist of a revolving line of credit of approximately \$4,500,000 and a term loan of approximately \$2,500,000. The Congress Loan, if completed, would be used to replace the Company's current term loan and revolving loan facility with Heller, as well as the Company's current equipment financing arrangements with Ally. Completion of the Congress Loan, however, is subject to completion by Congress of its due diligence, completion of loan documentation, and credit approval by Congress. No assurance can be made that the Congress Loan will close in the near future or at all.

Potential Environmental Liability

The Company's business involves rendering services in connection with management of waste, including certain types of hazardous waste and low level radioactive waste. The nature of this business is such that the Company cannot avoid exposure to significant risk of liability for damages. Such liability could

involve, without limitation, (a) claims for clean-up costs, personal injury or damage to the environment in cases in which the Company is held responsible for the release of hazardous or radioactive materials; (b) claims of employees, customers or third parties for personal injury or property damage occurring in the course of the Company's operations; and (c) claims alleging negligence or professional errors or omissions in the planning or performance of its services or in the providing of its products. In addition, the Company could be deemed a responsible party for the cost of clean-up of any property which may be contaminated by hazardous substances generated by the Company and disposed of at

-7-

such property or transported by the Company to a site selected by the Company, including properties owned or leased by the Company. The Company could also be subject to fines and civil penalties in connection with violations of regulatory requirements. See "'The Company -- Facility Disruption,'" '--Potential Environmental Liability and Certain Environmental Expenditures,'" and "'--Governmental Regulation.'"

Loss Carryovers

Certain of the Company's losses have resulted in net operating loss carryovers which the Company anticipates may be used to reduce the federal income tax payments which the Company would otherwise be required to make with respect to income generated in future years. The Company had available net operating loss carryovers of approximately \$9,200,000 based on its federal income tax returns as filed with the Internal Revenue Service (''IRS'') for taxable years through 1996. The use of the net operating loss carryovers is, however, subject to certain limitations and will expire to the extent not utilized by the years 2006 through 2011. See "'The Company--Availability of Company's Loss Carryovers.'" In addition, the amount of these carryovers has not been audited or approved by the IRS, and, accordingly, no assurance can be given that such carryovers will not be reduced as a result of audits in the future.

Governmental Regulation

The Company's business is subject to extensive, evolving and increasingly stringent federal, state and local environmental laws and regulations. Such federal, state and local environmental laws and regulations govern the Company's activities regarding the treatment, storage, recycling, disposal and transportation of hazardous and non-hazardous waste and low level radioactive waste. The Company must obtain and maintain permits, licenses and/or approvals in order to conduct such activities in compliance with such laws and regulations. Failure to obtain and maintain such permits, licenses and/or approvals would have a material adverse effect on the Company, its operations and financial condition. There can be no assurance that the Company will be able to maintain its currently held permits, licenses and/or approvals or obtain any additional permits, licenses and/or approvals which may be required as the Company expands its operations. See "'The Company -- Facility Disruption,'" '--Governmental Regulation,'" and "'--Permits and Licenses.'"

Because the environmental industry continues to develop rapidly, the Company cannot predict the extent to which its operations may be affected by future enforcement policies as applied to existing laws, by changes to current environmental laws and regulations or by the enactment of new environmental laws and

regulations. Any predictions regarding possible liability under such laws are complicated further by current environmental laws which provide that the Company could be liable jointly and severally for certain activities of third parties over whom the Company has limited or no control. See '--Potential Environmental Liability.' The nature of the standards imposed by federal, state, and local permitting laws require the Company to incur certain levels of capital expenditures to maintain compliance with such standards. See 'The Company -- Facility Disruption,' 'Potential Environmental Liability and Certain Environmental Expenditures,' and '--Governmental Regulation.'

A lack of liquidity on the part of the Company could have a negative impact on the Company's ability to remain in compliance with various federal, state and local environmental regulations. Violation of such federal, state and local regulations could result in the loss of one or more of the Company's permits or subject the Company to substantial fines, penalties or other liabilities that could have a material adverse impact on the Company's business.

-8-

Facility Disruption

On January 27, 1997, an explosion and resulting fire at the Memphis, Tennessee facility of PFM resulted in damage to certain hazardous storage tanks located on the facility and caused certain limited contamination at the facility. The fire and resulting explosion were caused by the welding activity of employees of an independent contractor at or near a hazardous waste tank farm located on the facility contrary to instructions of PFM. The fire and explosion at PFM have resulted in the Company incurring additional losses as a result of being able to carry on only limited operations at this facility since the fire and explosion and further resulting in the Tennessee Department of Environment and Conservation ('TDEC') taking certain actions against PFM which could have a material adverse effect on the Company. See 'The Company--Facility Disruption.'

Potential Increase in Litigation

The Company's operations are regulated by numerous laws regarding procedures for waste treatment, storage, recycling, transportation and disposal activities. See 'The Company--Governmental Regulation.' In recent years, the waste treatment industry has experienced a significant increase in so-called 'toxic-tort' litigation as those injured by contamination seek to recover for personal injuries or property damage. The Company believes that as the Company's operations and activities expand, there will be a similar increase in the potential for litigation alleging that the Company is responsible for contamination or pollution caused by its normal operations, negligence or other misconduct or for accidents which occur in the course of the Company's business activities. Such litigation, if significant and not adequately insured against, could have a material adverse effect upon the Company's operations and financial condition. In addition, involvement in protracted litigation would likely result in expenditure of significant amounts of the Company's time, effort and money, and could prevent the management of the Company from focusing on the operation and expansion of the Company and thereby result in a material adverse effect upon the Company. See '--Potential Environmental Liability.'

Insurance

The business of the Company exposes it to various risks, including claims for causing damage to property and injuries to persons which may involve allegations of negligence or professional errors or omissions in the performance of its services. Such claims could be substantial. See '--Potential Environmental Liability' and '--Potential Increase in Litigation.' The Company believes that its insurance coverage is presently adequate and similar to or greater than the coverage maintained by other companies of its size in the industry. There can be no assurance that the Company will be able to obtain adequate or required insurance coverage in the future or, if obtainable, that such insurance be available at affordable rates. If the Company cannot obtain or maintain such coverage, it would be a violation of its permit conditions and other requirements of the environmental laws, rules and regulations under which the Company operates and the Company would be unable to continue certain of its operations. Such events would have a material adverse effect on the Company's operations and financial condition. See 'The Company--Insurance' and '--Facility Disruption.'

Reliance on Key Employees; Attraction and Retention of Qualified Professionals

The Company is substantially dependent upon the services of Dr. Louis F. Centofanti, its Chairman, President and Chief Executive Officer. The loss of Dr. Centofanti could have a material adverse effect on the Company. The Company's future success depends on its ability to retain and expand its staff of qualified personnel, including environmental specialists and technicians, sales personnel and engineers. There can be no assurance that the Company will be successful in its efforts to attract and retain such personnel as their availability is limited

-9-

due to the rapid increase in the demand for hazardous waste management services and the highly competitive nature of the hazardous waste management industry.

Dependence on Environmental Regulation and Future Legislation

Demand for the Company's services is substantially dependent upon the public's concern with, and the continuation and proliferation of the laws and regulations governing, the treatment, storage, recycling and disposal of hazardous, non-hazardous and low level radioactive waste. A decrease in the level of public concern, the repeal or modification of such laws, or any significant relaxation of regulations relating to the treatment, storage, recycling and disposal of hazardous waste and low level radioactive waste, would significantly reduce the demand for the services offered by the Company and could have a material adverse effect on the Company, its operations and financial condition.

Competition

The Company competes with numerous companies which are able to provide one or more of the environmental services offered by the Company. Many of the Company's competitors have greater financial, human and other resources than the Company. The increased competition in the waste management industry has resulted in reduced gross margin levels, which are likely to become further reduced due to several factors: (a) more companies entering the market as the industry continues to mature; (b) the likely

expansion of the range of services offered by current and future competitors of the Company; (c) the current efforts of companies and governmental authorities to encourage waste minimization; and (d) the existence of fewer unserved markets available for Company expansion as the Company and its competitors move into new geographic markets. The increased competition and reduced gross margin levels could have a material adverse effect on the business and financial condition of the Company. See ''The Company--Competitive Conditions.''

Voting Control; Ability to Direct Management

Prior to the conversion of the outstanding shares of the Company's Series 3 Class C Convertible Preferred Stock, par value \$.001 per share (the ''Series 3 Preferred''), Series 6 Preferred and Series 7 Preferred or the exercise of any outstanding warrants and options, approximately 11.8% of the outstanding shares of Common Stock is held by the Company's executive officers and directors as of the date of this Prospectus. In addition, such persons have options or similar other rights to acquire approximately 2.7% of additional shares of the Company's Common Stock. Assuming the options and warrants held by the Company's executive officers and directors which are exercisable within 60 days of the date hereof have been exercised and the Company's outstanding shares of preferred stock are not converted and no other outstanding options or warrants are exercised, the Company's executive officers and directors would beneficially own, as a group, approximately 14.4% of the outstanding shares of Common Stock.

As of the date of this Prospectus, RBB Bank holds 931,567 shares of Common Stock, or approximately 8.0% of the outstanding shares of Common Stock. RBB is also the owner of (i) 4,000 shares of the Company's Series 3 Preferred, which are convertible into approximately 2,672,024 shares of Common Stock, assuming the average closing bid quotation for the Common Stock for the five trading days immediately preceding each conversion date equals or exceeds \$2.00 per share, and (ii) 2,500 shares of Series 6 Preferred, which are convertible into approximately 1,379,311 shares of Common Stock, assuming the Conversion Price Adjustment is not in effect, or if in effect, assuming the average closing bid quotation for the Common Stock for the five trading days immediately preceding each conversion date equals or exceeds \$2.27 per share.

-10-

RBB Bank holds the 1996 RBB Warrants (as defined under ''Private Placements and Exchange Agreements'') and the Series 6 Warrants, which together may be exercised for the purchase of up to 2,656,250 shares of Common Stock. If RBB Bank acquires (i) an aggregate of an additional 4,051,335 shares of Common Stock on conversion of the Series 3 Preferred and Series 6 Preferred, (ii) 2,656,250 shares of Common Stock upon the exercise of the 1996 RBB Warrants and Series 6 Warrants, and (iii) 401,221 shares of Common Stock which have previously been or herein are being registered to be issuable for payment of dividends on the Series 3 Preferred and Series 6 Preferred, RBB Bank will own approximately 8,040,373 shares of Common Stock (which includes the 931,567 shares of Common Stock directly held by RBB Bank as of the date of this Prospectus), representing approximately 42.9% of the Company's then outstanding Common Stock, assuming no other options or warrants are exercised, the Series 7 Preferred is not converted, and the Company does not issue any additional shares of Common Stock after the date

of this Prospectus other than in connection with the conversion of the outstanding shares of Series 3 Preferred and Series 6 Preferred and exercise of the 1996 RBB Warrants and Series 6 Warrants. In such event, RBB Bank would be the largest shareholder of the Company, and the Company may not have sufficient remedies to be able to avoid an actual change in control of the Company if RBB Bank seeks such a change in control. See ''The Company --Private Placements and Exchange Agreements'' and ''Selling Shareholders.''

Potential Adverse Effect to Company and Possible Adverse Impact on Earnings Per Share Upon Exercise of Outstanding Warrants and Options and Conversion of Outstanding Preferred Stock

The Company has outstanding warrants to purchase up to approximately 9,640,238 shares of Common Stock, including, without limitation, the 1996 RBB Warrants and Series 6 Warrants, and outstanding options to purchase up to approximately 1,273,409 shares of Common Stock. The Company is also obligated to issue to (a) RBB Bank up to approximately 2,672,024 shares of Common Stock upon conversion of the Series 3 Preferred assuming that the average closing bid quotation for the Common Stock for five trading days immediately preceding each of the conversion date or dates of the Series 3 Preferred equals or exceeds \$2.00, and up to approximately 1,379,311 shares upon the conversion of the Series 6 Preferred, assuming the Conversion Price Adjustment is not in effect, or, if in effect assuming the average closing bid quotation for the Common Stock for the five trading days immediately preceding each conversion date or dates of the Series 6 Preferred equals or exceeds \$2.27, and (b) Infinity up to approximately 200,000 shares of Common Stock upon conversion of the Series 7 Preferred assuming the Conversion Price Adjustment is not in effect, or, if in effect, assuming the average closing bid quotation for Common Stock for the five trading days immediately preceding each conversion date or dates of the Series 7 Preferred equals or exceeds \$2.27 per share. Depending on the price of the Common Stock as of the date of conversion and under certain conditions, the number of shares issuable upon conversion of the Series 3 Preferred, Series 6 Preferred and Series 7 Preferred may exceed the amounts indicated above. In addition, the Company intends to pay dividends accruing on the outstanding shares of Series 3 Preferred, Series 6 Preferred Stock and Series 7 Preferred in shares of Common Stock rather than cash if and when declared by the Board of Directors. The terms of the Heller Agreement provide that all dividends paid on the Series 3 Preferred must be paid in shares of Common Stock rather than cash. The Company has not, however, received Heller's consent to issue the Series 6 Preferred Stock, Series 7 Preferred Stock or shares of Common Stock to be issued upon conversion thereof or as dividends thereon. The Company is currently seeking to replace the loan with Heller and has signed a letter of intent with Congress regarding such potential replacement financing. See '' -- Defaults on Senior Debt.''

The issuance of Common Stock pursuant to such warrants, options, convertible preferred stock, or in payment of dividends on the Series 3 Preferred, Series 6 Preferred and Series 7 Preferred could adversely affect the ability of the Company to, and the terms on which it can, raise additional equity capital. If all or a substantial portion of such warrants and options are exercised and all or a substantial portion of the Series 3 Preferred, Series 6 Preferred and Series 7 Preferred are converted into Common Stock, the issuance of the additional shares of Common Stock will have a substantial and material adverse impact on an existing stockholder's ownership percentage of the outstanding shares of

Common Stock and may result in a ''change of control'' of the Company. Moreover, in the event the Company generates net income, there could be a substantial material adverse impact on earnings per share if such additional shares are issued and to the extent the options and warrants are required to be included in the weighted average shares outstanding calculation. See ''--Voting Control; Ability to Direct Management,'' ''--Barriers to Takeover'' and ''Private Placements and Exchange Agreements.''

No Dividends Paid

Since its inception, the Company has not paid cash dividends on its Common Stock. The Company intends to retain future earnings, if any, to provide funds for the operation and/or expansion of its business. Accordingly, the Company does not anticipate paying cash dividends on its Common Stock in the reasonably foreseeable future. Moreover, the terms of the Heller Agreement provide that no dividends may be paid on the Common Stock without Heller's approval.

The terms of the Series 3 Preferred Stock, Series 6 Preferred Stock, and the Series 7 Preferred Stock allow the Company to pay dividends on the shares of such preferred stock in cash or Common Stock. The terms of the Heller Agreement require the Company to pay the dividends accruing on the shares of Series 3 Preferred Stock in shares of Common Stock if and when declared and paid by the Board of Directors of the Company. The Company currently intends to pay the dividends accruing on the shares of Series 3 Preferred, Series 6 Preferred Stock and the Series 7 Preferred Stock in shares of Common Stock if and when declared and paid by the Board of Directors of the Company. The Company has not, however, received Heller's consent to issue the Series 6 Preferred Stock, Series 7 Preferred Stock or shares of Common Stock to be issued upon conversion thereof or as dividends thereon. The Company is currently seeking to replace the loan with Heller and has signed a letter of intent with Congress regarding such potential replacement financing. See ''--Defaults on Senior Debt,'' ''--Potential Adverse Effect to the Company and Possible Adverse Impact on Earnings Per Share Upon Exercise of Outstanding Warrants and Options'' and ''Private Placements and Exchange Agreements.''

Barriers to Takeover

The Company is a Delaware corporation and is governed, in part, by the provisions of Section 203 of the General Corporation Law of Delaware, an anti-takeover law enacted in 1988. In general, Section 203 prohibits a Delaware public corporation from engaging in a ''business combination'' with an ''interested stockholder'' for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business contribution is approved in a prescribed manner. As a result of Section 203, potential acquirers of the Company may be discouraged from attempting to effect acquisition transactions with the Company, thereby possibly depriving holders of the Company's securities of certain opportunities to sell or otherwise dispose of such securities at above-market prices pursuant to such transactions. Further, the Company's 1991 Performance Equity Plan, 1992 Outside Directors Stock Option Plan and 1993 Nonqualified Stock Option Plan provide for the immediate acceleration of, and removal of restrictions from, options and other awards under such plans upon a ''change of control'' (as defined in the respective

plans). Such provisions may also have the result of discouraging acquisitions of the Company. See '--Voting Control' and '--Ability to Direct Management.'

RBB Bank has the right to acquire an aggregate of approximately 6,707,585 shares of Common Stock, consisting of (i) 2,672,024 shares upon conversion of the issued and outstanding Series 3 Preferred assuming the average closing bid quotation for the Common Stock for five trading days immediately preceding each of the conversion date or dates equals or exceeds \$2.00 per share and (ii) 1,379,311 shares upon conversion of the issued and outstanding Series 6 Preferred assuming the Conversion Price Adjustment is not in effect, or, if in effect, assuming the average closing bid quotation for the Common Stock for five trading days

-12-

immediately preceding each of the conversion date or dates equals or exceeds \$2.27 per share and (iii) 2,656,250 shares upon the exercise of the 1996 RBB Warrants and Series 6 Warrants. Upon such conversion and exercise, RBB Bank will own approximately 41.7% of the outstanding shares of Common Stock of the Company, which includes the 931,567 shares of Common Stock directly held by RBB Bank as of the date of this Prospectus but does not include the 401,221 shares of Common Stock which have previously been or herein are being registered to be issuable for payment of dividends on the Series 3 Preferred and Series 6 Preferred. This estimate assumes that the Series 7 Preferred is not converted and that no shares of Common Stock are issued by the Company after the date of this Prospectus, other than in connection with the conversion of the outstanding shares of Series 3 Preferred and Series 6 Preferred and exercise of the 1996 RBB Warrants and Series 6 Warrants. In such event, RBB Bank will be the largest single stockholder of the Company and will have such a significant number of shares of Common Stock within its control that the Company may have insufficient remedies to avoid an actual change in control of the Company in favor of RBB Bank. If RBB Bank obtains ownership of an additional substantial percentage of Common Stock of the Company, it could prevent or discourage other persons from attempting to acquire the Company even if RBB Bank does not obtain control of the Company. See '--Voting Control; Ability to Direct Management' and 'Private Placements and Exchange Agreements.'

THE COMPANY

Company Overview

The Company is a Delaware corporation organized in 1990. The Company is engaged, through its subsidiaries, in the (a) waste management services, consisting of treatment, storage, recycling, and disposal of hazardous and non-hazardous industrial and commercial wastes, and the storage, treatment and disposal of certain low-level radioactive waste; and (b) consulting and engineering services to industry and government for broad-scope environmental problems. In recent years, the Company has grown through acquisitions and internal development. The Company's primary subsidiaries in the waste management services are:

- * Perma-Fix Treatment Services, Inc. ('PFTS') located in Tulsa, Oklahoma;

- * Perma-Fix of Florida, Inc. ('PFF') located in Gainesville, Florida;

- * Perma-Fix of Dayton, Inc. ('PFD') located in Dayton, Ohio;

- * Perma-Fix, Inc. ('PFI') located in Tulsa, Oklahoma;
- * Perma-Fix of Ft. Lauderdale, Inc. ('PFFL') located in Davie, Florida;
- * Perma-Fix of Memphis, Inc. ('PFM') located in Memphis, Tennessee.

The Company's primary subsidiaries in the consulting and engineering services are:

- * Mintech, Inc., located in Tulsa, Oklahoma, and
- * Schreiber, Grana & Yonley, Inc., located in St. Louis, Missouri.

The Company's executive offices are located at 1940 N.W. 67th Place, Gainesville, Florida 32653.

Principal Products and Services

The Company is engaged in two lines of business: (a) waste management, including off-site and on-site services for the treatment, storage, recycling, and disposal of hazardous, non-hazardous and mixed low-level radioactive and hazardous wastes; and (b) environmental engineering and consulting services specializing in environmental management programs, agency communications, regulatory permitting, compliance and auditing, landfill design, field testing and characterization. The Company presently services

-13-

institutions, commercial companies, and governmental agencies nationwide. Distribution channels for services are through direct sales to customers by the Company's sales force or via intermediaries.

New Process

The Company has developed a new process ('New Process') designed to remove certain types of organic hazardous constituents from soils or other substrates ('Soils'). This New Process will be used at PFF's facility and is designed to remove the organic hazardous constituents from the Soils through a water based system. The Company has filed a patent application with the U. S. Patent and Trademark Office covering the New Process. As of the date of this Prospectus, the Company has not received a patent for the New Process, and there are no assurances that such a patent will be issued to the Company.

Until development by the Company of this New Process, the Company was not aware of a relatively simple and inexpensive process that would remove the organic hazardous constituents from Soils without elaborate and expensive equipment or expensive treating agents. Due to the organic hazardous constituents involved, the disposal options for such materials are extremely limited, resulting in high disposal cost when there is a disposal option available. By removing the organic hazardous waste constituents from the Soils to a level where the Soils may be returned to the ground, the generator's disposal options for such waste are substantially increased, allowing the generator to dispose of such waste at substantially less cost.

As of the date of this Prospectus, the Company has only performed limited testing on the New Process and has not developed the New Process for commercial use. As a result, there are no assurances that the New Process will perform as presently expected, once such is developed for commercial use. It is anticipated that

the Company will have developed the New Process and such will be ready for commercial use on or before the end of 1998. Further, changes to current environmental laws and regulations could limit the use of the New Process or the disposal options available to the generator. See '-- Permits and Licenses.'

Facility Disruption

On January 27, 1997, a fire and explosion occurred at the PFM facility 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. The facility was not operational from the date of the fire until limited operations resumed during May, 1997. Since May 1997, PFM has operated this facility on a limited basis and has (a) accepted waste for processing and disposal, but has arranged for other facilities owned by the Company or subsidiaries of the Company or others not affiliated with the Company to process such waste, and (b) ceased all fuel blending at the facility. The Company is currently evaluating the extent of PFM's activities at this facility and various options available to the Company in connection therewith, including the move of all or a portion of PFM's Memphis, Tennessee operations to a new facility on a short or long-term basis is, subject to, among other things, PFM being able to receive necessary permits for such a move and PFM having sufficient liquidity to make such a move.

During the period of limited operations of PFM's Memphis, Tennessee facility, the utilization of other facilities to process waste has resulted in higher costs to PFM than if PFM were able to process waste at its Memphis, Tennessee facility, along with the additional handling and transportation costs associated with these activities. The net revenues for PFM were approximately \$1,514,000 for the nine months ended September 30, 1997, reflecting a decrease of approximately \$1,386,000 or approximately 48% from PFM net

-14-

revenues from the nine months ended September 30, 1996, of approximately \$2,900,000. The Company and PFM have property and business interruption insurance. The Company has settled its property and contents claim for \$522,000, less a retention of \$25,000. The Company is in the process of negotiating with its insurance carrier regarding the amount of business interruption insurance that may be recoverable by PFM as a result thereof, if any. The inability to recover PFM's losses under such insurance may have a material adverse effect on the Company. See '-- Potential Environmental Liability.'

As a result of the explosion and resulting tank fire at the PFM facility, the TDEC issued an order dated April 23, 1997 (the 'TDEC Order'), which alleges that the facility violated certain hazardous waste rules and regulations promulgated by the TDEC. The TDEC Order assessed a penalty of approximately \$144,000 and ordered, among other things, that (a) the facility cease blending operations, (b) the facility's permit to construct a new hazardous waste tank storage area, which has not yet been constructed, be revoked, and (c) PFM implement certain other actions. PFM has responded to the TDEC Order and asserted that the TDEC Order was issued against the wrong party, that PFM did not violate any rules and regulations promulgated by the TDEC, that the actions taken by the TDEC were contrary to applicable rules and regulations and that the TDEC is not entitled to such penalties. The Company intends

for PFM to vigorously defend itself in connection with this matter. As a result of the TDEC Order, the EPA has made a determination ('EPA Determination') that PFM's Memphis, Tennessee facility is unacceptable for the receipt of waste generated under the Comprehensive Environmental Response Compensation and Liability Act of 1980 ('CERCLA'). PFM's Memphis, Tennessee facility, however, has not accepted a material amount of CERCLA waste in the past and, therefore, the Company believes the EPA Determination will not have a material adverse effect on the Company. If the Company is not successful in its defense of the TDEC Order, and the current terms of the TDEC Order are enforced, such could have a material adverse effect on the Company. See 'Risk Factors--Facility Disruption.'

Potential Environmental Liability and Certain Environmental Expenditures

In May 1995, PFM, a subsidiary of the Company which was purchased in December 1993 and was formerly known as American Resource Recovery Corporation ('ARR'), became aware that the U.S. District Attorney for the Western District of Tennessee and the Department of Justice (the 'DOJ') were investigating certain prior activities of W. R. Drum Company ('Drum'), its successor, First Southern Container Company, and any other facility owned or operated, in whole or in part, by Johnnie Williams. In May and September 1995, PFM received a Grand Jury Subpoena which demanded the production of any documents in the possession of PFM pertaining to Drum, First Southern Container Company, or any other facility owned or operated, and held in part, by Johnnie Williams. PFM complied with each Grand Jury Subpoena. In December 1995, representatives of the DOJ advised PFM that it was also currently a subject of the investigation involving Drum, First Southern Container Company, and/or Johnnie Williams. Since December 1995, PFM has not heard from, or been in contact with, the DOJ regarding this investigation. In accordance with certain provisions of the Agreement and the Plan of Merger relating to the prior acquisition of PFM, on or about January 2, 1996, PFM notified Ms. Billie K. Dowdy, the sole shareholder of PFM prior to its acquisition by the Company, of the foregoing, and advised her that the Company and PFM would look to Ms. Dowdy to indemnify, defend and hold the Company and PFM harmless from any liability, loss, damage or expense incurred or suffered as a result of, or in connection with, this matter.

Recently, PFM was notified by the United States Environmental Protection Agency ('EPA') that the EPA had conducted remediation operations at a site owned and operated by Drum in Memphis, Tennessee (the 'Drum site') at the approximate cost of \$1,500,000, and that the EPA was now seeking information regarding, among other things, details regarding transportation of materials by others (such as ARR and PFM) to the Drum site and parties that may be a 'potentially responsible party' ('PRP') as defined under CERCLA, regarding the Drum site as a result of delivering hazardous waste containers to Drum during the time of its operation. The EPA has orally informed PFM that PFM may be a PRP regarding the remediation of the Drum site. If the EPA believes

PFM, as a result of acts by ARR prior to the time ARR was acquired by the Company, is a PRP regarding the Drum site, the EPA may seek to require PFM to pay the cost of part or all of the remediation which has been performed at the Drum site. Although the Company does not believe that it is a PRP regarding the Drum site, no assurance can be made that the Company will not be deemed a PRP for the Drum site and will not have to pay for part or all of the cost

of remediation of such site. If PFM is determined to be a PRP regarding the Drum site and were determined to be liable for all or a substantial portion of the remediation cost of the Drum site, such could have a material adverse effect on the Company. See '--Governmental Regulations.'

For 1997, the Company budgeted capital expenditures of \$1,250,000 for improving operations and maintaining permit compliance at its various TSD facilities (excluding capital expenditures due to the January, 1997, fire and explosion at the PFM facility) and \$350,000 to comply with federal, state, and local regulations in connection with remediation activities by PFD at the Leased Property (as defined below), and the PFM facility, of which \$165,000 has been spent as of September 30, 1997. The Company believes that these expenditures are necessary to remain competitive or to maintain compliance with federal, state or local environmental requirements. As of September 30, 1997, the Company's net purchases of new capital equipment totaled approximately \$1,185,167. The Company anticipates financing the remainder of these expenditures by, without limitation, a combination of lease financing and/or utilization of the equity raised in the RBB Private Placement and the Infinity Private Placement.

PFD is required to remediate a parcel of formerly leased property ('Leased Property') which was formerly operated as a RCRA storage and solvent recycling facility by a company that was merged with PFD prior to the Company's acquisition of PFD. The Leased Property contains certain contaminated waste in the soils and groundwater. The Company was indemnified by the seller of PFD for costs associated with remediating the Leased Property, which entails remediation of soil and/or groundwater restoration. However, the seller filed for bankruptcy in 1995. Prior to the acquisition of PFD by the Company, the seller had established a trust fund ('Trust Fund') to support the remedial activity on the Leased Property pursuant to an agreement with the Ohio Environmental Protection Agency ('Ohio EPA'). The Trust Fund was funded with the seller's stock. The value of the seller's stock subsequently declined and the stock was sold by the Trustee of Trust Fund after the Company's acquisition of PFD and prior to the seller's bankruptcy filing. The decline in the value of the seller's stock resulted in a shortfall in the value of the Trust Fund, and the Company was required to deposit \$250,000 into the Trust Fund. The current balance in the Trust Fund is approximately \$342,000. The Company has accrued approximately \$925,000 for the estimated costs of remediating the Leased Property, which is in excess of the current estimate for completion and is estimated to extend over a period of three to five years. While the Company believes that its expenditures towards remediation of the Leased Property will not have a material adverse effect upon the Company, no assurance can be made that the remediation process will not prove to be more difficult or costly than anticipated or that the Company's remediation expenditures will not have a material adverse effect on the Company's operations and financial condition.

Prior to the Company's acquisition of PFM, gasoline had been detected in the groundwater at the PFM facility. In the acquisition process, the Company assumed certain liabilities to remediate gasoline contaminated groundwater and to investigate potential areas of soil contamination at the PFM facility. The previous owners of PFM installed monitoring and treatment equipment to restore the groundwater to acceptable standards in accordance with federal, state and local authorities. The Company is

continuing this restoration process and anticipates expenditures of approximately \$1,050,000 over the next five to ten years to remediate the prior contamination.

The PFM facility is situated in the vicinity of the Memphis Defense Depot (the ''Defense Facility''). The Defense Facility is listed as a Superfund site. The Defense Facility is adjacent to the Allen Well Field utilized by Memphis Light, Gas & Water to provide public water to Memphis, Tennessee. Chlorinated compounds have been detected in the groundwater beneath the Defense Facility, as well as in a limited number of certain production wells in the Allen Well Field. Very low concentrations of certain chlorinated

-16-

compounds also have been detected in the groundwater beneath the PFM facility. The Company is currently investigating the possible presence of these compounds. Based upon a study performed by the Company's environmental engineering group, the Company does not believe the PFM facility is the source of the chlorinated compounds in the Allen Well Field. Accordingly, the Company does not believe that the presence of the low concentrations of chlorinated compounds at the PFM facility will have a material adverse effect upon the Company. If the Company is determined to be the source of such contamination, any liabilities, obligations to remediate, or penalties associated with such contamination, could have a material adverse effect upon the Company.

The explosion and fire at the PFM facility in January, 1997, caused limited contamination at the facility. The Company is in the process of repairing and/or replacing the damaged storage tanks and any contamination resulting from the occurrence. The Company and PFM have provided notice to their property and business interruption insurance carriers of such loss and have settled the property and contents claim for \$522,000, less a retention of \$25,000, which the Company anticipates, but there is no assurance, will cover substantially all of the costs to repair or remove tanks damaged at PFM's facility. See ''Risk Factors--Facility Disruption''; ''--Potential Environmental Liability, '' The Company is in the process of negotiating with its insurance carrier regarding the amount of business interruption insurance that may be recoverable by PFM, if any.

Insurance

The Company currently maintains general liability insurance coverage of \$1 million per occurrence, with \$2 million in the aggregate plus an additional \$6 million excess umbrella coverage. In addition, the Company carries contractors' operations and professional liability coverage of \$1 million per occurrence and \$2 million in the aggregate subject to a \$50,000 deductible. The Company is required by EPA regulations to carry environmental impairment liability insurance providing coverage for off-site 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, the Company has doubled these coverage amounts to \$2 million per occurrence and \$4 million per year in the aggregate. In addition, the deep well operated by PFTS located in Tulsa, Oklahoma, carries environmental impairment liability insurance of \$4 million per occurrence and \$8 million per year in the aggregate. The cost of the Company's insurance is substantial and is expected to increase. See ''Risk Factors--Insurance.''

Governmental Regulation

Various federal, state and local laws and regulations have been enacted regarding the handling and management of waste. These laws create liability for environmental contamination caused by such handling and management. The Company will likely be subject to extensive compliance review by federal, state and local environmental regulatory authorities. The Company has implemented or intends to implement procedures at each of its facilities designed to help assure compliance with applicable environmental laws and regulations. Noncompliance with environmental laws and regulations, including failure to implement required procedures regarding such laws and regulations, could result in civil or criminal enforcement actions or private actions, mandatory cleanup requirements, revocation of required permits or licenses, denial of applications for future permits, or significant fines, penalties or damages, any of which could have a material adverse effect on the Company, its operations and financial condition.

In connection with the Company's waste management services, the Company may generate from time to time both hazardous and non-hazardous waste which it transports to other facilities for destruction or disposal. The Company also acts as a broker for customers in connection with the transportation, treatment and/or disposal of hazardous and non-hazardous waste. As a generator or broker of hazardous substances delivered to a disposal facility, the Company could be a PRP notwithstanding any absence of fault on the part of the Company. If the Company were deemed a responsible party, it could be subject to substantial clean-up costs, fines and

-17-

penalties. Specifically, liability is joint and several under CERCLA, which authorizes the EPA or a private party to require companies to remediate contaminated or polluted sites. Accordingly, the Company could be held responsible under CERCLA for clean-up costs at a site as to which it is deemed a responsible party regardless of its proportionate responsibility for the site pollution. While the Company believes that, as a practical matter, the EPA and the courts attempt to allocate clean-up costs for a site among the various potentially responsible parties, no assurance can be made that such allocation would occur if the Company is deemed a responsible party for a clean-up site. If the Company is deemed a responsible party regarding one or more sites, the resulting liability could have a material adverse effect on the Company's operations and financial condition. Further, the Company will be liable to remediate sites on which it operates its hazardous waste treatment, storage and disposal (''TSD'') facilities under the Resource Conservation and Recovery Act of 1976, as amended (''RCRA''), if such sites become contaminated. The Company is, as of the date of this Prospectus, remediating one site on which it operates a RCRA permitted treatment and storage facility that became contaminated prior to being acquired by the Company in 1993, one site that was leased by a company subsequently acquired by the Company in 1994 and has been advised by the EPA that it is investigating whether PFM is a PRP as to the Drum site. See ''Risk Factors Potential Environmental Liability'' and ''Potential Environmental Liability and Certain Environmental Expenditures.''

Permits and Licenses

The Company's business is subject to extensive, evolving and increasingly stringent federal, state and local environmental laws and regulations. Such federal, state and local environmental laws

and regulations govern the Company's activities regarding the treatment, storage, recycling, blending, disposal and transportation of hazardous, non-hazardous and low level radioactive waste. These laws and regulations require the Company to obtain and maintain permits, licenses and/or approvals in order to conduct its hazardous, non-hazardous and low-level radioactive waste activities. Failure to obtain and maintain such permits or approvals would have a material adverse effect on the Company, its operations and financial condition. There can be no assurance that the Company will be able to maintain its currently held permits and approvals, and as the Company continues to expand its operations there can be no assurance that the Company will be able to obtain any additional approvals or permits which may be required. See "'--Governmental Regulations,'" "'--Facility Disruption'" and "'Risk Factors--Governmental Regulation.'"

PFTS provides transportation, treatment, storage and disposal of liquid hazardous and non-hazardous wastes, stabilization of liquid and solid drum residues, and deepwell injection services to manufacturing companies located generally in the southwestern portion of the United States. Prior to disposal of the liquid waste in the deepwell, all hazardous liquids are processed in a manner designed to destroy or eliminate the hazardous characteristics of the liquids. These liquids, along with non-hazardous liquids, can be injected into the deep well that has been specifically designed and constructed for this purpose. PFTS has a final RCRA Part B permit to store and treat hazardous waste at its facility. PFTS operates its non-hazardous waste deepwell under a permit issued by the State of Oklahoma.

PFM is a permitted facility that provides transportation, storage and treatment services to hazardous and non-hazardous waste generators throughout the United States. PFM operates a hazardous waste storage facility that accepts hazardous and non-hazardous waste liquids, solids and sludges. Until the fire and explosion at PFM's facility in January, 1997, PFM blended and processed such hazardous and non-hazardous waste into substitute fuel to be burned in cement kilns that have been specially permitted for the processing of hazardous and non-hazardous wastes as fuels.

As a result of the explosion and resulting tank fire at PFM's facility, the TDEC issued the TDEC Order which alleges that the facility violated certain hazardous waste rules and regulations promulgated by the TDEC. The TDEC Order assessed a penalty of approximately \$144,000 and ordered, among other things, that (a) the facility cease blending operations, (b) the facility's permit to construct a new hazardous waste tank storage area, which has not

-18-

yet been constructed, be revoked, and (c) PFM implement certain other actions. PFM has responded to the TDEC Order and asserted that the TDEC Order was issued against the wrong party, that PFM did not violate any rules and regulations promulgated by the TDEC, that the actions taken by the TDEC were contrary to applicable rules and regulations and the TDEC is not entitled to such penalties. The Company intends for PFM to vigorously defend itself in connection with this matter. If the Company is not successful in its defense and the current terms of the TDEC Order are enforced, the TDEC Order could have a material adverse effect on the Company. See "'Risk Factors--Potential Environmental Liability,'" "'Risk Factors--Facility Disruption,'" and "'--Facility Disruption.'"

PFF handles hazardous waste and treatment of waste liquid

scintillation vials, a mixed low-level radioactive/hazardous (flammable) waste used primarily by the medical research and treatment industry. PFF operates under a final RCRA permit and a low level radioactive license issued by the appropriate authorities of the State of Florida. PFF's low-level radioactive license was issued on August 18, 1995, and amended on March 13, 1996 to allow expanded low-level radioactive waste management activities. It is intended that the New Process will operate under existing permits granted to PFF, and, as a result, the operations of the New Process will be limited. The Company is currently exploring expanded uses of the New Process, which expanded uses may require additional or modified permits. There is no assurance that PFF can obtain the additional or modified permits to expand the uses of the New Process.

PFD operates a permitted hazardous waste treatment and storage facility to collect and treat oily waste waters and used oil from both small and large quantity generators. PFD also provides hazardous waste treatment services for collecting and processing organic solvents, sludges, and solids for use as secondary fuels in cement kilns. PFD operates under a RCRA Part B permit which was granted January 3, 1996.

Subject to the Company and satisfactorily resolving the TDEC Order, the Company believes that its TSD facilities have, as of the date of this Prospectus, obtained all approvals, licenses and permits necessary to enable it to conduct its business as presently conducted. The failure of the Company's TSD facilities to renew any of their present approvals, licenses and permits, or the termination of any such approvals, licenses or permits, could have a material adverse effect on the Company, its operations and financial condition. See "'Risk Factors--Governmental Regulation'" and "'The Company--Facility Disruption.'"

As an alternative to off-site waste treatment and disposal methods, PFI conducts waste treatment services at the site of the waste generator. PFI's services include converting certain types of characteristic hazardous wastes into non-hazardous waste and treating non-hazardous waste. The Company believes that PFI's on-site waste treatment services do not require federal environmental permits provided certain conditions are satisfied. PFI has received written verification from each state in which it is presently operating that no such permit is required provided certain conditions are satisfied. Neither PFI nor the Company has, however, received any such verification from the federal government. There can be no assurance that states in which PFI presently does business or the federal government will not enact policies or regulations requiring PFI to obtain permits to conduct its on-site activities.

The Company believes that the licensing requirements for the New Process may be accomplished through modification of licenses currently held by the Company, however, no assurance can be made that the New Process will be approved for use or that it will not require separate license applications in the future which may involve the expenditure of certain of the Company's resources to accomplish.

Competitive Conditions

The Company competes with numerous companies which are able to provide one or more of the environmental services offered by the

Company. Many of the Company's competitors have greater financial, human and other resources than the Company. The increased competition in the waste management industry has resulted in reduced gross margin levels which are likely to reduce further due to several factors: (a) more companies entering the market as the industry matures; (b) the likely expansion of the range of services offered by current and future competitors of the Company; (c) the current efforts of companies and governmental authorities to encourage waste minimization policies, and (d) fewer underserved markets available for Company expansion as the Company and its competitors move into new geographic markets. The increased competition and reduced gross margin levels could have a material adverse effect on the business and financial condition of the Company. See 'Risk Factors -Competition.'

The Company believes that it is a significant participant in the delivery of off-site waste treatment services in the Southeast, Midwest and Southwest. The Company competes with TSD facilities operated by national, regional and independent environmental services firms located within a several hundred mile radius of the Company's facilities.

The Company's competitors for remediation services include national and regional environmental services firms that may have larger environmental remediation staffs and greater resources than the Company. The Company recognizes its lack of technical and financial resources necessary to compete for larger remediation contracts. Accordingly, the Company presently concentrates on remediation services projects within its existing customer base or projects in its service area which are too small for companies without a physical presence in the market to perform competitively.

Environmental engineering and consulting services provided by the Company through its engineering companies involve competition with larger engineering and consulting firms. The Company believes that it is able to compete with these firms based on its established reputation in its market areas and its expertise in several specific elements of environmental engineering and consulting such as cement kiln waste recycling programs.

The Company believes that the barriers of entry for companies seeking to compete with the Company in the waste management industry are dependent upon the specific service to be offered. Consequently, the Company believes that its operations which provide certain services are more likely to encounter increased competition in the future. The Company believes that there are no formidable barriers to entry into the on-site treatment business within which the Company operates. Similarly, certain of the Company's non-hazardous waste operations engage in businesses which do not present any formidable barriers of entry. However, the Company believes that the permitting requirements and the cost to obtain such permits may be barriers of entry into the business of providing hazardous and low-level radioactive waste TSD facilities as presently operated by the Company. The Company's business of providing low level radioactive and hazardous waste recycling of liquid scintillation vials requires both a radioactive permit and a hazardous waste permit, and the Company believes that this dual permitting requirement is a substantial barrier of entry. The Company believes that only one other facility in the United States currently provides low level radioactive and hazardous waste recycling of liquid scintillation vials. If the permit requirements for hazardous waste TSD activities and/or the handling of low level radioactive materials are eliminated or if such

permits become easier to obtain, the Company believes that more companies will enter these markets and provide greater competition to the Company, which could have a material adverse effect on the Company, its operations and financial condition.

The Company believes that consumers of waste management services currently focus primarily on the quality and timeliness of service. However, the Company anticipates that price will become an increasingly important competitive factor as the industry matures. Accordingly, the revenues generated from, and the profitability of, certain of the Company's services may be reduced as price competition intensifies. This reduction could have a material adverse effect on the business and financial condition of the Company. Many of the Company's competitors are larger and more established, with greater marketing, financial, human and other resources than the Company. These competitors will provide significant long-term competition. The Company also expects

-20-

competition to intensify as technological and other advances are made in the waste treatment fields and as public awareness of the hazardous waste disposal problem increases.

Availability of Company's Loss Carryovers

The Company anticipates that its cash flow in future years will benefit from its ability to utilize net operating loss ('NOL') carryovers from prior periods. The NOL carryovers should reduce the federal income tax payments which the Company will otherwise be required to make with respect to income generated in future years. Based upon its federal income tax returns as filed with the IRS for taxable years through 1996, the Company estimates that it had on a consolidated basis available NOL carryovers of approximately \$9,200,000 for federal income tax purposes. These NOL carryovers will expire to the extent not utilized by the years 2006 through 2011. See 'Risk Factors--Loss Carryovers.'

The amount of NOL carryovers has not been audited or approved by the Internal Revenue Service ('IRS') and no assurance can be given that such carryovers will not be reduced as a result of future audits. In addition, the ability of the Company to utilize these carryovers in the future will be subject to a variety of limitations applicable to corporate taxpayers generally under both the Internal Revenue Code of 1986, as amended (the 'Code'), and the Treasury Regulations. These include, in particular, limitations imposed by Code Section 382 ('382 Limitations').

The 382 Limitations provide certain limitations on the utilization of NOL carryovers following a more than 50% change (by value) in the stock ownership of company. In general, the 382 limitations apply when, within a three year 'testing period', there is a more than 50 percentage point increase in the stock of a company that has an NOL held by one or more persons who own (directly or constructively) at least 5% of such Company's stock (with persons who separately are less than 5% shareholders generally being treated in the aggregate as a single shareholder) over the lowest percentage of stock of such company owned by such person(s) at any time during the testing period. The amount of the percentage point increase in stock ownership is calculated for each 5% shareholder, and the increase of each 5% shareholder is aggregated with the increases of other 5% shareholders to determine the total percentage point increase in stock ownership. For purposes of these tests, stock issuable upon the exercise of

certain options and warrants or upon the conversion of preferred stock may be treated as outstanding.

The use of approximately \$7,800,000 of the approximate \$9,200,000 in NOL carryovers as of the taxable year ending December 31, 1996, is limited to a certain extent in future years by reason of certain acquisitions and the issuance of various series of preferred stock of the Company, including, but not limited to, the Series 3 Preferred and Series 6 Preferred. See ''Private Placements and Exchange Agreements -- RBB Private Placement and -- RBB Exchange Agreement.'' Each taxable year after 1996, approximately \$1,500,000 of the approximate \$7,800,000 in 382 Limitations is no longer limited, and after six years, all of the approximate \$9,200,000 in NOL carryovers will be available for use by the Company for federal income tax purposes, except to the extent such has been previously used to reduce the Company's federal income tax payments or such has been reduced by the IRS in connection with audits conducted by the IRS.

PRIVATE PLACEMENTS AND EXCHANGE AGREEMENTS

RBB Private Placement

On or about June 11, 1997, the Company issued to RBB Bank 2,500 shares of newly-created Series 4 Class D Convertible Preferred Stock, par value \$.001 per share (the ''Series 4 Preferred'') at a price of \$1,000 per share, for an aggregate sales price of \$2,500,000 (''RBB Private Placement''). The sale to RBB Bank was made in a private placement under Rule 506 of Regulation D under the Securities Act, pursuant to the terms of a Subscription

-21-

and Purchase Agreement, dated June 9, 1997, between the Company and RBB Bank (''RBB Subscription''). As part of the sale of the Series 4 Preferred, the Company also issued to RBB Bank certain warrants (''Series 4 Warrants'') entitling RBB Bank to purchase, after December 31, 1997 and until June 9, 2000, an aggregate of up to 375,000 shares of Common Stock, subject to certain antidilution provisions, with 187,500 shares exercisable at a price equal to \$2.10 per share and 187,500 shares exercisable at a price equal to \$2.50 per share. The Company received net proceeds of approximately \$2,287,500 under the RBB Private Placement after the payment of placement fees and legal fees. The Company has used the net proceeds from the RBB Private Placement to reduce the outstanding balance under its revolving credit facility under the Heller Agreement, but has continued to borrow under such revolving credit facility after such reduction.

The Company paid fees (excluding legal and accounting) of \$200,000 in connection with the RBB Private Placement and issued to JW Charles, the investment banking firm that handled the RBB Private Placement, the Charles Warrants, entitling JW Charles to purchase (a) until June 9, 2000, up to 200,000 shares of Common Stock at an exercise price of \$2.00 per share, subject to certain antidilution provisions; and (b) until June 9, 2002, up to 100,000 shares of Common Stock, at an exercise price of \$1.50 per share, subject to certain antidilution provisions. Under the terms of the Charles Warrants, JW Charles is entitled to certain registration rights with respect to the shares of Common Stock issuable on the exercise of each warrant.

In connection with the RBB Private Placement, the Company issued (i) two warrants to Karl H. Ehlert, each to purchase 175,000 shares of Common Stock for five years, with the first having an

exercise price of \$2.00 per share and the second having an exercise price of \$3.00 per share; (ii) two warrants to R. Keith Fetter, each allowing the purchase of up to 75,000 shares of Common Stock for three years, with the first having an exercise price of \$2.00 per share and the second having an exercise price of \$2.50 per share and (iii) one warrant to Dionysus Limited allowing the purchase of up to an aggregate of 100,000 shares of Common Stock for three years at an exercise price of \$1.70 per share. These warrants were issued for various consulting services rendered to the Company. Heller has not consented to issuance of the Series 4 Preferred, the Series 4 Warrants, warrants issued to JW Charles, Karl H. Ehler, R. Keith Fetter, or Dionysus Limited or to the issuance of shares of Common Stock to be issued upon exercise of such warrants. See 'Risk Factors -- Defaults on Senior Debt.'

RBB Exchange Agreement

Pursuant to the RBB Exchange Agreement, the Company and RBB Bank exchanged the 2,500 shares of Series 4 Preferred and the Series 4 Warrants for (i) 2,500 shares of Series 6 Preferred, (ii) two warrants each allowing the purchase of up to 187,500 shares of Common Stock at an exercise price of \$1.8125 per share, and (iii) one warrant to purchase 281,250 shares of Common Stock at an exercise price of \$2.125 per share (collectively, the 'Series 6 Warrants'). The Series 6 Warrants may be exercised at any time after December 31, 1997, and until June 9, 2000. Heller has not consented to issuance of the Series 6 Warrants or shares of Common Stock to be issued upon exercise thereof, or to the issuance of Series 6 Preferred or shares of Common Stock to be issued upon conversion thereof or in payment of dividends thereon. See 'Risk Factors -- Defaults on Senior Debt.'

The rights of the Series 6 Preferred are substantially the same as the rights under the Series 4 Preferred, except for certain conversion rights. The Series 6 Preferred is not entitled to any voting rights, except as required by law. The Series 6 Preferred has a liquidation preference over the Common Stock equal to \$1,000 consideration per outstanding share of Series 6 Preferred (the 'Series 6 Liquidation Value'), plus an amount equal to all unpaid dividends accrued thereon. The Series 6 Preferred accrues dividends on a cumulative basis at a rate of 4% per annum of the Liquidation Value ('Series 6 Dividend Rate'), and is payable semi-annually when and as declared by the Board of Directors. No dividends or other distributions may 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 6 Preferred have been

-22-

paid or set aside for payment. Dividends may be paid, at the option of the Company, in the form of cash or Common Stock of the Company if and when declared by the Board of Directors. If the Company pays dividends in Common Stock, such is payable in the number of shares of Common Stock equal to the product of (a) the quotient of (i) the Series 6 Dividend Rate divided by (ii) the average of the closing bid quotation of the Common Stock as reported on the NASDAQ for the five trading days immediately prior to the date the dividend is declared, multiplied by (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.

The holder of the Series 6 Preferred may convert into Common Stock up to 1,250 shares of the Series 6 Preferred on and after

October 5, 1997, and the remaining 1,250 shares of the Series 6 Preferred on and after November 5, 1997. The conversion price per share is \$1.8125, except that, in the event the average closing bid price of the Common Stock as reported in the over-the-counter market, or the closing sale price if listed on a national securities exchange, for 20 of any 30 consecutive trading days after March 1, 1998, shall be less than \$2.50, the conversion price shall thereafter be 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 provided by the holder to the Company multiplied by 80% or (ii) \$1.8125. Notwithstanding the foregoing, the conversion price shall not be less than a minimum of \$.75 per share, which minimum shall be eliminated from and after September 6, 1998.

The Company will have the option to redeem the shares of Series 6 Preferred (a) between June 11, 1998, and June 11, 2001, at a redemption price of \$1,300 per share if at any time the average closing bid price of the Common Stock for ten consecutive trading days is in excess of \$4.00, and (b) after June 11, 2001, at a redemption price of \$1,000 per share. The holder of the Series 6 Preferred Stock will have the option to convert the Series 6 Preferred prior to redemption by the Company. See 'Summary of Securities Being Offered'; 'Risk Factors--Voting Control; Ability to Direct Management.'

Pursuant to the RBB Exchange Agreement, the Company agreed to prepare and file with the Commission by October 27, 1997, a Registration Statement covering up to 1,379,311 shares of Common Stock issuable upon conversion of the Series 6 Preferred, plus up to 250,000 shares of Common Stock issuable in payment of dividends on the Series 6 Preferred pursuant to the terms of the Series 6 Preferred, and up to 656,250 shares of Common Stock issuable upon exercise of the Series 6 Warrants. Such Registration was filed on December 23, 1997. The Company has agreed to use its reasonable efforts to cause the Registration Statement to become effective at the earliest possible date after filing. If the Registration Statement is not declared effective by December 31, 1997, the Company agreed to pay to RBB Bank a penalty of one-tenth of one percent (0.1%) of \$2,500,000 for each business day thereafter which ends without the Registration Statement becoming effective. If the Registration Statement is not effective by January 31, 1998, the Company agreed to pay RBB Bank an additional one-time penalty of two percent (2.0%) of \$2,500,000 payable in cash or Common Stock.

Once the Registration Statement becomes effective, if it subsequently becomes ineffective before September 16, 2000, the Company shall pay to RBB Bank a penalty of \$1.00 for each outstanding share of Series 6 Preferred for each business day that the Registration Statement is not effective. If such ineffectiveness extends for thirty days, the Company shall pay to RBB Bank a one-time penalty of \$20.00 for each share of Series 6 Preferred outstanding on the thirtieth day.

If the Company at any time or from time to time while shares of Series 6 Preferred are issued and outstanding declares or pays, without consideration, any dividend on the Common Stock payable in Common Stock, or effects 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 are 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 will, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate. If the Company declares or pays, without consideration, any dividend on the Common Stock payable in any right to acquire Common Stock for no consideration, then the Company will 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.

Under the terms of the Series 6 Warrants, if the Company declares or pays, without consideration, any dividend on the Common Stock payable in Common Stock, or effects 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 are combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the number of shares of Common Stock issuable upon the exercise of such warrant or the exercise price of such warrant will be adjusted appropriately. As a result of such adjustment, the proportionate number of shares of Common Stock issuable immediately prior to the happening of such event will be the number of shares of Common Stock issuable subsequent to the happening of such event. If at any time the shares of Common Stock covered by the Series 6 Warrants are covered by an effective registration statement and the average closing bid price of the Common Stock for ten consecutive trading days is in excess of \$3.50 with respect to half of the Series 6 Warrants or in excess of \$4.00 with respect to the other half of the Series 6 Warrants, then the Company will have the option to redeem the respective Series 6 Warrants for \$0.01 per share of Common Stock covered by the Series 6 Warrants. The holder of the Series 6 Warrants will have the option to exercise the Series 6 Warrants prior to redemption by the Company. Under the terms of the Series 6 Warrants, the Common Stock issuable upon conversion of the Series 6 Warrants is subject to certain registration rights.

The Series 6 Warrants are entitled to certain rights upon any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety. Upon any such event, the holder of the Series 6 Warrants will have the right, upon exercise of such warrants, to receive the kind and amount of securities, cash or other property which the holder of the Series 6 Warrants would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had such warrants been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance.

RBB Bank has the right to acquire an aggregate of approximately 6,707,585 shares of Common Stock, consisting of (i) 2,672,024 shares upon conversion of the issued and outstanding Series 3 Preferred assuming the average closing bid quotation for the Common Stock for five trading days immediately preceding each of the conversion date or dates equals or exceeds \$2.00 per share and (ii) 1,379,311 shares upon conversion of the issued and outstanding Series 6 Preferred assuming the Conversion Price

Adjustment is not in effect, or, if in effect, assuming the average closing bid quotation for the Common Stock for five trading days immediately preceding each of the conversion date or dates equals or exceeds \$2.27 per share and (iii) 2,656,250 shares upon the exercise of the 1996 RBB Warrants and Series 6 Warrants. Upon such conversion and exercise, RBB Bank will own approximately 41.7% of the outstanding shares of Common Stock of the Company, which includes the 931,567 shares of Common Stock directly held by RBB Bank as of the date of this Prospectus but does not include the 401,221 shares of Common Stock which have previously been or herein are being registered to be issuable for payment of dividends on the Series 3 Preferred and Series 6 Preferred.

If RBB Bank acquires 8,000,000 shares of Common Stock upon conversion of the Series 3 Preferred and 3,333,333 shares upon conversion of the Series 6 Preferred at their respective minimum

-24-

conversion prices as of the date of this Prospectus, and exercises all of the 1996 RBB Warrants and Series 6 Warrants, RBB Bank will own 15,322,371 shares of Common Stock, representing approximately 58.9% of the then outstanding shares of Common Stock of the Company. In either case, RBB Bank will be the largest single shareholder of the Company, and the Company may not be able to avoid an actual change in control of the Company if RBB Bank seeks such a change in control. Moreover, if such conversion and exercise results in RBB Bank acquiring more than 50% of the then outstanding Common Stock of the Company, the Company would not be able to avoid a change in control. The foregoing estimates assume that the Series 7 Preferred is not converted, no other shares of Common Stock are issued by the Company, no other warrants or options are exercised, the Company does not acquire additional shares of Common Stock as treasury stock, and RBB Bank does not dispose of any shares of Common Stock. See '--Private Placements and Exchange Agreements.' See 'Risk Factors--Voting Potential; Ability to Direct Management.'

As of the date of this Prospectus, RBB Bank holds 931,567 shares of Common Stock, or approximately 8.0% of the outstanding shares of Common Stock. In July, 1996, RBB acquired from the Company 5,500 shares of Series 3 Preferred, and prior to the date of this Prospectus converted 1,500 shares of such Series 3 Preferred into Common Stock pursuant to the terms thereto. As of the date of this Prospectus, RBB Bank owns 4,000 shares of the Company's Series 3 Preferred, which are convertible into approximately 2,672,024 shares of Common Stock assuming an average bid quotation of the Common Stock five trading days immediately preceding each conversion date equals or exceeds \$2.00 per share, which numbers could increase under certain limited circumstances. The conversion price of the Series 3 Preferred is based on the product of the average of the closing bid quotation of the Common Stock for the five trading days immediately preceding the conversion date multiplied by 75%. The initial conversion price had a minimum of \$0.75 per share and a maximum of \$1.50 per share. The minimum conversion price is reduced by \$0.25 per share each time the Company sustains a net loss, on a consolidated basis, in each of two consecutive quarters; provided, however, that for the purposes of determining whether the Company has sustained a net loss in each of two consecutive quarters under the Series 3 Preferred, at no time will a quarter that has already been considered in such determination be considered in any subsequent determination. As a result of the net losses sustained by the Company for the first and second quarters of 1997, the minimum conversion price relating to the Series 3 Preferred has been

reduced to \$0.50 per share. The Common Stock issuable upon conversion of the Series 3 Preferred is covered by an effective registration statement. See ''Selling Shareholders.''

In July, 1996, RBB Bank was granted two warrants to purchase up to an aggregate 2,000,000 shares of Common Stock in connection with the acquisition of the Series 3 Preferred, with 1,000,000 shares of Common Stock exercisable at \$2.00 per share and 1,000,000 shares of Common Stock exercisable at \$3.50 per share (the ''1996 RBB Warrants''). The 1996 RBB Warrants are for a term of five years.

Under the Heller Agreement, the ownership of more than 50% of a class of voting securities of the Company entitled to elect the Board of Directors by any one party or a group acting in concert is a ''change of control'' and is an ''event of default.'' Upon such an ''event of default,'' Heller has the right to exercise certain remedies described in the Heller Agreement, including the right to declare a default and immediately accelerate the debt incurred pursuant to the Heller Agreement. RBB Bank's ownership of more than 50% of the Common Stock as a result of RBB Bank's conversion or exercise of the Series 3 Preferred, Series 6 Preferred, 1996 RBB Warrants and Series 6 Warrants, or any combination thereof, would be an ''event of default'' under the Heller Agreement. See ''Risk Factors Defaults on Senior Debt.'' If the debt which the Company has incurred pursuant to the Heller Agreement is accelerated, the Company may not be able to repay such debt on an accelerated basis or replace such debt with alternative financing.

Additionally, Heller has not specifically consented to the ownership by RBB Bank of more than 50% of the Company's Common Stock. See ''Risk Factors--Potential Adverse Effect to Company and

-25-

Possible Adverse Impact on Earnings Per Share Upon Exercise of Outstanding Warrants and Options'' and ''--Barriers to Takeover.''

Infinity Private Placement

On July 14, 1997, the Company issued to Infinity 350 shares of newly-created Series 5 Class E Convertible Preferred Stock, par value \$.001 per share (the ''Series 5 Preferred'') at a price of \$1,000 per share, for an aggregate sales price of \$350,000. The sale to Infinity was made in a private placement (the ''Infinity Private Placement'') under Rule 506 of Regulation D under the Securities Act, pursuant to the terms of a Subscription and Purchase Agreement, dated July 7, 1997, between the Company and Infinity (''Infinity Subscription''). The Company received proceeds of \$350,000 under the Infinity Private Placement, excluding the payment of legal fees and miscellaneous costs. The Company has used the net proceeds from the Infinity Private Placement to reduce the outstanding balance under its revolving credit facility under the Heller Agreement, but has continued to borrow under such revolving credit facility after such reduction. Heller has not consented to issuance of the Series 5 Preferred or shares of Common Stock to be issued upon conversion thereof or in payment of dividends thereon. See ''Risk Factors Defaults on Senior Debt.''

Infinity Exchange Agreement

Effective September 16, 1997, the Company entered into an Exchange Agreement with Infinity (''Infinity Exchange Agreement'')

pursuant to which the 350 shares of Series 5 Preferred were tendered to the Company in exchange for (i) 350 shares of Series 7 Preferred and (ii) two warrants to purchase up to an aggregate of 35,000 shares of Common Stock at an exercise price of \$1.8125 per share (the ''Infinity Warrants''). The Infinity Warrants may be exercised at any time after December 31, 1997, and until July 7, 2000. Heller has not consented to issuance of the Infinity Warrants or shares of Common Stock to be issued upon exercise thereof, or to the issuance of Series 7 Preferred or shares of Common Stock to be issued upon conversion thereof or in payment of dividends thereon. See ''Risk Factors Defaults on Senior Debt.''

The rights of the Series 7 Preferred are substantially the same as the rights under the Series 5 Preferred, except for certain conversion rights. The Series 7 Preferred is not entitled to any voting rights, except as required by law. The Series 7 Preferred has a liquidation preference over the Common Stock equal to \$1,000 consideration per outstanding share of Series 7 Preferred (the ''Series 7 Liquidation Value''), plus an amount equal to all unpaid dividends accrued thereon. The Series 7 Preferred accrues dividends on a cumulative basis at a rate of 4% per annum of the Liquidation Value (''Series 7 Dividend Rate''), and is payable semi-annually when and as declared by the Board of Directors. No dividends or other distributions may 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 7 Preferred have been paid or set aside for payment. Dividends may be paid, at the option of the Company, in the form of cash or Common Stock of the Company. If the Company pays dividends in Common Stock, such is payable in the number of shares of Common Stock equal to the product of (a) the quotient of (i) the Series 7 Dividend Rate divided by (ii) the average of the closing bid quotation of the Common Stock as reported on the NASDAQ for the five trading days immediate prior to the date the dividend is declared, multiplied by (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.

The holder of the Series 7 Preferred may convert into Common Stock up to 175 shares of the Series 7 Preferred on or after November 3, 1997, and the remaining 175 shares of the Series 7 Preferred on or after December 3, 1997. The conversion price of the Series 7 Preferred is \$1.8125 per share of Common Stock, except that, in the event the average closing bid price 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 Preferred have engaged in no sales of Common Stock of the Company during, and for 30 trading days prior to, the applicable 30 Day

-26-

Period, the conversion price shall thereafter be 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, provided by the holder to the Company multiplied by 80% or (ii) \$1.8125. Notwithstanding the foregoing, the conversion price shall not be less than a minimum of \$.75 per share, which minimum shall be eliminated from and after September 6, 1998. Subject to the closing bid price of the Company's Common Stock at the time of conversion and the other conditions which could increase the number of shares to be issued upon conversion, the Series 7 Preferred, if

all were converted, could be converted into between approximately 200,000 and 467,000 shares of Common Stock, or more after the minimum conversion price is eliminated, or under certain other limited circumstances.

The Company will have the option to redeem the shares of Series 7 Preferred (a) between July 7, 1998, and July 7, 2001, at a redemption price of \$1,300 per share if at any time the average closing bid price of the Common Stock for ten consecutive trading days is in excess of \$4.00, and (b) after July 7, 2001, at a redemption price of \$1,000 per share. The holder of the Series 7 Preferred will have the option to convert the Series 7 Preferred prior to redemption by the Company. The Common Stock issuable on the conversion of the Series 7 Preferred is subject to certain registration rights pursuant to the Infinity Exchange Agreement. See ''Summary of Securities Being Offered.''

If the Company at any time or from time to time while shares of Series 7 Preferred are issued and outstanding declares or pays, without consideration, any dividend on the Common Stock payable in Common Stock, or effects 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 are 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 will, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate. If the Company declares or pays, without consideration, any dividend on the Common Stock payable in any right to acquire Common Stock for no consideration, then the Company will 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.

Under the terms of the Infinity Warrants, if the Company declares or pays, without consideration, any dividend on the Common Stock payable in Common Stock, or effects 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 are combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the number of shares of Common Stock issuable upon the exercise of such warrant or the exercise price of such warrant will be adjusted appropriately. As a result of such adjustment, the proportionate number of shares of Common Stock issuable immediately prior to the happening of such event will be the number of shares of Common Stock issuable subsequent to the happening of such event. If at any time the shares of Common Stock covered by the Infinity Warrants are covered by an effective registration statement and the average closing bid price of the Common Stock for ten consecutive trading days is in excess of \$7.00, then the Company will have the option to redeem the Infinity Warrants for \$0.01 per share of Common Stock covered by the Infinity Warrants. The holder of the Infinity Warrants will have the option to exercise the Infinity Warrants prior to redemption by the Company. Under the terms of the Infinity Warrants, the Common Stock issuable upon exercise of the Infinity Warrants is subject to certain registration rights.

The Infinity Warrants are entitled to certain rights upon any

consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the

-27-

Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety. Upon any such event, the holder of the Infinity Warrants will have the right, upon exercise of such warrant, to receive the kind and amount of securities, cash or other property which the holder of the Infinity Warrants would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had such warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance.

RECENT DEVELOPMENTS

The following are all material changes in the Company's affairs which have occurred since the end of December 31, 1996, and which have not been described in a report on Form 10-Q or Form 8-K filed under the Exchange Act or otherwise discussed in other sections of this Prospectus:

Congress Letter of Intent

In November, 1997, the Company signed a letter of intent with Congress Financial Corporation regarding a proposed \$7,000,000 credit facility ('Congress Loan') which, as proposed, would consist of a revolving line of credit of approximately \$4,500,000 and a term loan of approximately \$2,500,000. The Congress Loan would be used to replace the Company's current term loan and revolving loan facility with Heller, as well as the Company's current equipment financing arrangements with Ally. Completion of the Congress Loan, however, is subject to credit approval by Congress which will entail, among other things, completion of Congress' due diligence to its satisfaction and finalization of loan documents satisfactory to the parties. There are no assurances that the Congress Loan will be completed. No assurance can be made that the Congress Loan will close in the near future or at all.

Steve Gorlin Stock Purchase Agreement

On July 30, 1997, the Company entered into a Stock Purchase Agreement ('Gorlin Agreement') with Mr. Steve Gorlin, a Director of the Company, whereby the Company agreed to sell and, and Mr. Gorlin agreed to purchase, 200,000 shares of the Company's Common Stock. The purchase price was \$2.125 per share representing the closing bid price of the Common Stock as quoted on the NASDAQ on July 30, 1997. Pursuant to the terms of the Gorlin Agreement, Mr. Gorlin agreed to pay the Company the aggregate purchase price of \$425,000 for the 200,000 shares of Common Stock. In order to induce Mr. Gorlin to enter into the amendment to the Gorlin Agreement, and to purchase the Common Stock on the terms and subject to the conditions thereof, PESI agreed to issue to Mr. Gorlin upon payment for the 200,000 shares, a three (3) year warrant to Mr. Gorlin for the purchase of 100,000 shares of Common Stock at \$2.40 per share. Under the Gorlin Agreement, Mr. Gorlin agreed to tender \$425,000 during August, 1997, however, pursuant to an amendment to the Gorlin Agreement, which was entered into on October 7, 1997, the payment schedule was modified such that Mr. Gorlin agreed to tender the \$425,000 on or before November 30, 1997. As of December 23, 1997, and as of the date of this Prospectus, Mr. Gorlin has not tendered the \$425,000 to the Company

and has not indicated when, or if, he will do so.

USE OF PROCEEDS

The Company will not receive any part of the proceeds of the sale of Shares. The Company will receive approximately \$3,954,531 if the Selling Shareholders exercise all of each warrant covering Shares included in this Prospectus. See "Plan Of Distribution." Any proceeds received by the Company from the exercise of such warrants, less the Company's share of the estimated expenses of the cost of this offering, will be used by the Company for general corporate purposes.

-28-

The Company has agreed to pay all costs and fees relating to the registration of the Common Stock covered by this Prospectus, except for any discounts, concessions or commissions payable to underwriters, dealers or agents incident to the offering of the Shares covered by this Prospectus or any legal fees incurred by any Selling Shareholders relating to this offering.

SUMMARY OF SECURITIES BEING OFFERED

The 3,677,074 Shares covered by this Prospectus are comprised of the following: (a) 1,379,311 shares of Common Stock issuable by the Company upon the conversion of 2,500 shares of Series 6 Preferred issued by the Company to RBB Bank in connection with the RBB Exchange Agreement; (b) 250,000 shares of Common Stock which may be issued by the Company to RBB Bank in payment of dividends accrued on the Series 6 Preferred; (c) 656,250 shares of Common Stock issuable upon the exercise of the Series 6 Warrants issued by the Company to RBB Bank in connection with the RBB Exchange Agreement, exercisable for three years at an exercise price of \$1.8125 per share as to 375,000 shares of Common Stock and \$2.125 per share as to 281,250 shares of Common Stock; (d) 300,000 shares of Common Stock issuable by the Company upon the exercise of the Charles Warrants issued by the Company to JW Charles in connection with the RBB Private Placement, 100,000 of which are exercisable for three years at \$1.50 per share and 200,000 of which are exercisable for five years at \$2.00 per share; (e) 200,000 shares of Common Stock issuable by the Company upon the conversion of 350 shares of Series 7 Preferred issued by the Company in connection with the Infinity Exchange Agreement; (f) 36,000 shares of Common Stock which may be issued by the Company to Infinity in payment of dividends accrued on the Series 7 Preferred; (g) 35,000 shares of Common Stock issuable upon the exercise of the Infinity Warrants issued by the Company to Infinity in connection with the Infinity Exchange Agreement, exercisable for three years at an exercise price of \$1.8125 per share; (h) 125,000 shares of Common Stock issuable by the Company upon the exercise of the Sun Bank Warrant issued by the Company to Sun Bank in connection with the extension of certain financial credits by Sun Bank to the Company, exercisable until June 16, 1999, at an exercise price of \$3.625 per share; (i) 7,000 shares of Common Stock issuable by the Company upon exercise of the Blair Remainder Warrant, exercisable until December 31, 1999, at an exercise price of \$2.375 per share, issued to Blair to reflect the unassigned portion of the Blair Warrant for 75,000 shares of Common Stock which was previously issued by the Company to Blair in connection with the extension of a promissory note and which was partially assigned by Blair to the following

officers and directors of Blair: (w) 28,000 shares of Common Stock issuable by the Company upon exercise of the Davis Warrant issued to Davis as a result of the assignment by Blair of a portion of the Blair Warrant, exercisable until December 31, 1999, at an exercise price of \$2.375 per share; (x) 28,000 shares of Common Stock issuable by the Company upon exercise of the Stahler Warrant issued to Stahler as a result of the assignment by Blair of a portion of the Blair Warrant, exercisable until December 31, 1999, at an exercise price of \$2.375 per share; (y) 7,000 shares of Common Stock issuable by the Company upon exercise of the Renov Warrant issued to Renov as a result of the assignment by Blair of a portion of the Blair Warrant, exercisable until December 31, 1999, at an exercise price of \$2.375 per share; (z) 5,000 shares of Common Stock issuable by the Company upon exercise of the Bell Warrant issued to Bell as a result of the assignment by Blair of a portion of the Blair Warrant, exercisable until December 31, 1999, at an exercise price of \$2.375 per share; (j) 20,513 shares of Common Stock issuable by the Company upon exercise of the Ally Warrant issued by the Company to Ally in connection with a loan to the Company, which warrant is exercisable until September 11, 2000, at an exercise price of \$2.4375 per share; (k) 100,000 shares of Common Stock issuable by the Company upon the exercise of the Dionysus Warrant issued by the Company to Dionysus in connection with the Private Placement and exercisable for three years at an exercise price of \$1.70 per share; and (l) 500,000 shares of Common Stock issuable upon the exercise of the following Service Warrants, each dated July 23, 1997: (x) 175,000 shares of Common Stock issuable at an exercise price of \$2.00 per share and 175,000 shares of Common Stock issuable at an exercise price of \$3.00 per share under the Ehler Warrants and (y) 75,000 shares of Common Stock issuable at an exercise price of \$2.00 per share and 75,000 shares of Common Stock issuable at an exercise price of \$2.50 per share

-29-

under the Fetter Warrants. See "'Private Placements and Exchange Agreements'" for further description of the Series 6 Preferred, the Series 6 Warrants, the Series 7 Preferred, the Infinity Warrants, the Charles Warrants, and the Dionysus Warrants.

The Sun Bank Warrant was issued to Sun Bank under the terms of a Loan Agreement, dated June 17, 1994, between the Company and Sun Bank (the "'Loan Agreement'"). The Loan Agreement provided for the extension of approximately \$3.4 million of financial credits by Sun Bank to the Company. Under the terms of the Sun Bank Warrant, if the Company declares or pays, without consideration, any dividend on the Common Stock payable in Common Stock, or effects a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by subdivision or reclassification) or if the outstanding shares of Common Stock are combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the number of shares of Common Stock issuable upon the exercise of the Sun Bank Warrant or the exercise price of such warrant will be adjusted appropriately. The initial exercise price of the Sun Bank Warrant was \$3.625 per share.

The Sun Bank Warrant is entitled to certain rights upon any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety. Upon such event, the holder of the Sun Bank Warrant will have the right, upon exercise of such warrants, to receive the kind and amount of securities, cash or other property which the holder

of the Sun Bank Warrant would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had such warrants been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance. Under the terms of the Sun Bank Warrant, the shares of Common Stock issuable upon exercise of the Sun Bank Warrant are entitled to certain registration rights.

Under the terms of the Service Warrants, the Dionysus Warrant, the Blair Remainder Warrant, the Davis Warrant, the Stahler Warrant, the Renov Warrant, the Bell Warrant, and the Ally Warrant, (collectively, the "'Affected Warrants'") if at any time or from time to time after the date of each Affected Warrant, the Company (a) pays a dividend on its Common Stock in shares of Common Stock, (b) subdivides its outstanding shares of Common Stock into a greater number of shares, (c) combines its outstanding shares of Common Stock into a smaller number of shares, or (d) issues by reclassification of its Common Stock any shares of any other class of capital stock of the Company, then the number of shares issuable upon exercise of the Affected Warrant and the exercise price of the Affected Warrant in effect immediately prior to such event will be adjusted so that the holder will be entitled upon exercise of such Affected Warrant to purchase, without additional consideration, the number of shares of Common Stock or other capital stock of the Company which the holder would have owned or been entitled to purchase immediately following the happening of any of the events described in (a), (b) or (c) above had such Affected Warrant been exercised and the holder become the holder of record of the shares purchased pursuant to the Affected Warrant immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification. In such event the exercise price will be equal to the aggregate consideration which the holder would have had to pay for such shares issued pursuant to the Affected Warrant immediately prior to such event divided by the number of shares issued pursuant to the Affected Warrant the holder is entitled to receive immediately after such event. If as a result of an adjustment made as described in this paragraph the holder of such Affected Warrant thereafter surrendered for exercise becomes entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to all holders of the Affected Warrants promptly after such adjustment) will determine the allocation of the adjusted exercise price of the Affected Warrant between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

-30-

The terms of the Affected Warrants provide that upon any consolidation or merger to which the Company is a party, other than a merger or consolidation in which the Company is the continuing or surviving corporation, or in case of any sale or conveyance to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, the holder of the Affected Warrant will have the right thereafter, upon exercise of such warrant, to receive the kind and amount of securities, cash or other property which the holder would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had such Affected Warrant been exercised immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if

necessary, appropriate adjustment will be made in the application thereafter with respect to the rights and interests of the holder of such Affected Warrant to the end that the provisions of this paragraph and the preceding paragraph thereafter will be correspondingly applicable, as nearly as may reasonably be, to such securities and other property.

If the Company distributes pro rata to all of the holders of its then outstanding shares of Common Stock (a) securities, other than shares of Common Stock or stock options, or (b) property, other than cash, without payment therefor, then, and in each such case, the holder of a Affected Warrant, upon its exercise, will be entitled to receive the securities and property which such holder would hold on the date of such exercise if, on the date of such Affected Warrant, the holder had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of such warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by the holder during such period.

-31-

<TABLE>
<CAPTION>

SELLING SHAREHOLDERS

The following table sets forth, (a) the name of each Selling Shareholder, (b) the amount of shares beneficially owned by each Selling Shareholder as of the date of this Prospectus, (c) the number of shares of Common Stock under this Prospectus, (d) the number of shares beneficially owned after the offering, assuming that all shares of Common Stock being offered hereby are sold and that such are outstanding, and (e) the percentage of Common Stock beneficially owned after completion of the offering, assuming that all shares of Common Stock being offered hereby are sold and that such are outstanding.

Selling Shareholder	Common Stock Beneficially Owned Prior to Offering(1)	Common Stock Being Offered	Common Stock Beneficially Owned After Completion of Offering(2)	Percentage of Common Stock Beneficially Owned After Completion of Offering(3)
<S>	<C>	<C>	<C>	<C>
RBB Bank Aktiengesellschaft	8,040,373 (3)	2,285,561	5,754,812	35.0%
JW Charles Financial Services, Inc. (4)	412,500 (4)	300,000	112,500	(16)
Sun Bank, National Association (5)	125,000 (5)	125,000	0	-
The Infinity Fund, L.P. (6)	308,800 (6)	271,000	37,800	(16)
Karl H. Ehlert (7)	350,000 (7)	350,000	0	-

R. Keith Fetter(8)	240,000(8)	150,000	90,000	(16)
Dionysus Limited(9)	315,000(9)	100,000	215,000	1.8%
Ally Capital Management(10)	53,846(10)	20,513	33,000	(16)
D.H. Blair Investment Banking Corp.(11)	434,476(11)	7,000	427,476	3.6%
J. Morton Davis(12)	626,251(12)	28,000	598,251	5.3%
Esther Stahler(13)	67,100(13)	28,000	39,100	(16)
Ruki Renov(14)	46,100(14)	7,000	39,100	(16)
Martin A. Bell(15)	13,000(15)	5,000	8,000	(16)

<FN>

(1) Includes shares of Common Stock which may be acquired upon (a) the exercise of outstanding warrants, whether or not such are

-32-

currently exercisable and/or (b) conversion of outstanding shares of preferred stock.

(2) Assumes (a) all shares of Common Stock covered by this Prospectus are sold, (b) the Selling Stockholder does not acquire beneficial ownership of additional shares of Common Stock after the date of this Prospectus, and (c) the Company does not issue any additional shares of Common Stock after the date of this Prospectus, except the shares of Common Stock which a person has the right to acquire upon the exercise and conversion of preferred stock outstanding as of the date of this Prospectus, but are not determined to be outstanding for the purpose of computing the percentage ownership of any other person. The amounts indicated are based on outstanding Common Stock of 11,612,787 shares as of December 12, 1997.

(3) Includes (a) 2,656,250 shares that RBB Bank is entitled to receive upon exercise of all of the 1996 RBB Warrants and Series 6 Warrants; (b) 2,672,024 shares that RBB Bank is entitled to receive upon conversion of the 4,000 shares of Series 3 Preferred held by RBB Bank (assuming the average closing bid quotation for the Common Stock for the five trading days immediately preceding each conversion date equals or exceeds \$2.00 per share); (c) 1,379,311 shares that RBB Bank is entitled to receive upon conversion of the 2,500 shares of Series 6 Preferred (assuming the Conversion Price Adjustment is not in effect, or if in effect, assuming the average closing bid quotation for the Common Stock for the five trading days immediately preceding each conversion date equals or exceeds \$2.27 per share); (d) 151,221 shares of Common Stock that RBB Bank may receive in payment of the accrued dividends on the Series 3 Preferred; (e) 250,000 shares that RBB Bank may receive in payment of the accrued dividends on the Series 6 Preferred, and (f) 931,567 shares held directly by RBB Bank. The Company's Registration Statement on Form S-3, No. 333-14513, effective October 21, 1996 (the "'1996 Registration Statement'") currently covers the reoffer and resale of up to 6,030,000 of the 8,040,373

shares noted as beneficially owned by RBB Bank. The shares of Common Stock covered by the 1996 Registration Statement consist of 3,700,000 shares issuable upon conversion of the Series 3 Preferred held by RBB Bank, 2,000,000 shares issuable upon exercise of the 1996 RBB Warrants, and 330,000 shares issuable in payment of dividends accrued on the Series 3 Preferred.

(4) Includes (a) 112,000 shares that JW Charles's wholly-owned subsidiary, JW Charles Securities, Inc. ('Charles Securities') is entitled to receive upon exercise of a warrant dated September 16, 1996 (the 'JWCS Warrant'); and (b) 300,000 shares that JW Charles is entitled to receive upon exercise of the Charles Warrants. The 1996 Registration Statement (defined in footnote (3) to this table) covers the reoffer and resale of the 112,000 shares issuable upon exercise of the JWCS Warrant.

(5) Includes 125,000 shares that Sun Bank is entitled to receive upon exercise of the Sun Bank Warrant. Sun Bank currently provides the Company with certain banking services and financial credits.

(6) Includes (a) 200,000 shares that Infinity is entitled to receive upon conversion of all of the Series 7 Preferred held by Infinity (assuming a conversion price of \$1.8125 per share), (b) 36,000 shares of Common Stock that Infinity may receive in payment of the accrued dividends on the Series 7 Preferred, and (c) 35,000 shares that are issuable upon exercise of the Infinity Warrants.

(7) Includes 350,000 shares that Mr. Ehlert is entitled to receive upon exercise of the Ehlert Warrants. Mr. Ehlert currently provides investor relations, marketing, and consulting services to the Company.

(8) Includes 150,000 shares that Mr. Fetter is entitled to receive upon exercise of the Fetter Warrants. Mr. Fetter currently provides investor relations, marketing, and consulting services to the Company under a certain two year Consulting Agreement, dated May 1, 1996, between Mr. Fetter and the Company.

(9) Includes 100,000 shares that Dionysus is entitled to receive upon exercise of the Dionysus Warrant.

-33-

(10) Includes 20,513 shares that Ally is entitled to receive upon exercise of the Ally Warrant.

(11) Includes 7,000 shares that Blair is entitled to receive upon exercise of the Blair Remainder Warrant issued to Blair to reflect the unassigned portion of the Blair Warrant for 75,000 shares of Common Stock which was previously issued by the Company to Blair in connection with the extension of a promissory note. Effective March 23, 1995, the Blair Warrant was partially assigned by Blair to the following officers and directors of Blair: Davis, Stahler, Renov and Bell to purchase 28,000, 28,000, 7,000 and 5,000 shares thereunder, respectively. See 'Summary of Securities Being Offered.' Includes (i) 217,701 shares held by Blair, (ii) 200,000 shares issuable upon exercise of one warrant, and (iii) 9,775 shares issuable upon exercise of one warrant. The 1996 Registration

Statement currently covers the reoffer and resale of up to 200,000 shares issuable upon exercise of the warrant for 200,000 shares issued to Blair. All of the Common Stock held by Blair may be considered to be beneficially owned by Davis, the sole shareholder of Blair. See footnote 12 to this Table

(12) Mr. Davis is an investment banker and sole shareholder of Blair, a broker-dealer registered under the Exchange Act. Includes (i) 28,000 shares that Davis is entitled to receive upon exercise of the Davis Warrant; (ii) 154,000 shares owned by Davis' spouse; (iii) 9,775 shares that Davis is entitled to receive upon exercise of a warrant; and (iv) 434,476 shares held by Blair and described in footnote 11 to this Table. Mr. Davis disclaims beneficial ownership over the shares held by his spouse. The number of shares indicated does not include 570,494 shares which are beneficially owned by Steve Gorlin, a director of the Company, and which are pledged to Davis and Blair pursuant to a Pledge Agreement dated June, 1992. Davis and Blair have filed a joint Schedule 13G, as amended from time to time, regarding the Common Stock, which states that Davis has sole voting and dispositive control over the shares of Common Stock held by Blair. Davis is, therefore, considered to be the beneficial owner of the Common Stock held by Blair.

(13) Includes 28,000 shares that Stohler is entitled to receive upon exercise of the Stohler Warrant.

(14) Includes 7,000 shares that Renov is entitled to receive upon exercise of the Renov Warrant.

(15) Includes 5,000 shares that Bell is entitled to receive upon exercise of the Bell Warrant.

(16) Less than 1.0%.

</FN>

</TABLE>

PLAN OF DISTRIBUTION

The Shares may be offered and sold from time to time by the Selling Shareholders, or by pledges, donees, transferees or other successors in interest. The Selling Shareholders will act independently of the Company in making decisions with respect to the timing, market, or otherwise at prices related to the then current market price or in negotiated transactions. The Shares may be sold by the Selling Shareholders in one or more transactions on the NASDAQ and the BSE or otherwise at market prices then prevailing or in privately negotiated transactions. The Shares may be sold by one or more of the following: (i) ordinary brokerage transactions and transactions in which the broker solicits purchasers; (ii) purchases and resale by a broker-dealer for its account pursuant to this Prospectus, and (iii) a block trade in which the broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction. The Company has not been advised by the Selling Shareholders that they have, as of the date hereof, made any arrangements relating to the distribution of the Shares covered by this Prospectus, except that certain of the Selling Shareholders are broker-dealers. See "'Selling Shareholders.'" In effecting sales, broker-dealers engaged by the Selling Shareholders may arrange for other broker-dealers to

participate, and, in such case, broker-dealers will receive commissions or discounts from the Selling Shareholders in amounts to be negotiated immediately prior to sale.

In offering the Shares, the Selling Shareholders and any broker-dealers and any other participating broker-dealers who execute sales for the Selling Shareholders may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. Accordingly, any profits realized by the Selling Shareholders and the compensation of such broker-dealer may be deemed to be underwriting discounts and commissions. Any Shares covered by this Prospectus which qualify for sale pursuant to Rule 144 may be sold under Rule 144 rather than pursuant to this Prospectus.

LEGAL OPINION

Certain legal matters in connection with the Common Stock offered hereby will be passed upon for the Company by Conner & Winters, A Professional Corporation, Oklahoma City, Oklahoma.

EXPERTS

The financial statements and schedules incorporated by reference in this Prospectus and elsewhere in the Registration Statement, to the extent and for the periods indicated in their reports, have been audited by BDO Seidman LLP, independent public accountants, and are included herein in reliance upon the authority of said firms as experts in giving such reports.

No dealer, salesman or other person has been authorized to give any information not contained in this Prospectus and, if given or made, such information or representations must not be relied upon as having been authorized by the Company or the Standby Purchasers. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy any of the securities offered hereby in any jurisdiction to any person to whom it is unlawful to make such offer in such jurisdiction. Neither the delivery of this Prospectus nor any sale hereunder shall under any circumstances create any implication that there has been no change in the affairs of the Company since the date hereof.

3,677,074 Shares

Perma-Fix Environmental
Services, Inc.

Incorporation by Reference.	5	
Risk Factors	6	
The Company.	13	Prospectus
Recent Developments. . . .	28	
Use of Proceeds.	28	
Summary of Securities Being Offered.	29	
Selling Shareholders . . .	32	
Plan of Distribution . . .	34	
Legal Opinion.	35	December ___, 1997
Experts.	35	

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

<TABLE>

<CAPTION>

Nature of Expense

<S>	<C>
SEC Registration Fee	\$ 2,748.75
Legal Fees (Including Blue Sky).	\$ 25,000.00
Accounting Fees and Expenses	\$ 2,500.00
Printing	\$ 2,500.00
Miscellaneous.	\$ 2,500.00
Total	\$ 35,248.75
	=====

</TABLE>

The foregoing expenses, except for the registration fee, are estimated pursuant to Item 511 of Regulation S-K.

Item 15. Indemnification of Officers and Directors

Section 145 of the Delaware Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, no indemnification shall be made with respect to any matter as to which such person

shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that, despite the adjudication of liability but in view of all the circumstance of the case, such person is fairly and reasonably entitled to indemnification.

Article EIGHTH of the Company's Restated Certificate of Incorporation provides as follows with respect to the indemnification of officers and directors of the Company:

All persons who the Corporation is empowered to indemnify pursuant to the provisions of Section 145 of the General Corporation Law of the State of Delaware (or any similar provision or provisions of applicable law at the time in effect), shall be indemnified by the Corporation to the full extent permitted thereby. The foregoing right of indemnification shall not be deemed to be exclusive of any other rights to which those seeking indemnification may be entitled under any bylaw, 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.

The Company's Restated Certificate of Incorporation provides that no director of the Company shall be personally liable to the Company or its stockholders for any monetary damages for breaches of fiduciary duty as a director, provided that this provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the Company 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.

Item 16. Exhibits

Exhibit

No.	Description
4.1	Subscription and Purchase Agreement, dated June 9, 1997, between the Company and RBB Bank Aktiengesellschaft as incorporated by reference from Exhibit 4.1 to the Company's Form 8-K, dated June 11, 1997.
4.2	Subscription and Purchase Agreement, dated July 7, 1997, between the Company and the Infinity Fund, L.P. as incorporated by reference from Exhibit 4.1 to the Company's Form 8-K, dated July 7, 1997.
4.3	Exchange Agreement, dated November 6, 1997, to be considered effective as of September 16, 1997, between the Company and RBB Bank, as incorporated by reference from Exhibit 4.11 from the Company's Report on Form 10-Q for the period ended September 30, 1997.
4.4	Certificate of Designations of Series 6 Class F Convertible Preferred Stock, dated November 6, 1997, incorporated by reference from Exhibit 4.7 to the Company's Report on Form

10-Q for the period ended September 30, 1997.

- 4.5 Specimen copy of Series 6 Class F Convertible Preferred Stock Certificate, as incorporated by reference from Exhibit 4.8 to the Company's Report on Form 10-Q for the quarter ended September 30, 1997.
- 4.6 Exchange Agreement dated as of October 31, 1997, to be considered effective as of September 16, 1997, between the Company and the Infinity Fund, L.P., as incorporated by reference from Exhibit 4.12 to the Company's Report on Form 10-Q for the period ended September 30, 1997.
- 4.7 Certificate of Designations of Series 7 Class G Convertible Preferred Stock, dated October 30, 1997, incorporated by reference from Exhibit 4.9 to the Company's Report on Form 10-Q for the period ended September 30, 1997.
- 4.8 Specimen copy of Series 7 Convertible Preferred Stock Certificate, as incorporated by reference from Exhibit 4.10 to the Company's Report on Form 10-Q for the quarter ended September 30, 1997.
- 4.9 Common Stock Purchase Warrant (\$1.8125) No. RBB 9-97-1, dated September 16, 1997, between the Company and RBB Bank Aktiengesellschaft.
- 4.10 Common Stock Purchase Warrant (\$1.8125) No. RBB 9-97-2, dated September 16, 1997, between the Company and RBB Bank Aktiengesellschaft.
- 4.11 Common Stock Purchase Warrant (\$2.125) No. RBB 9-97-3, dated September 16, 1997, between the Company and RBB Bank Aktiengesellschaft.
- 4.12 Common Stock Purchase Warrant No. INF 9-97-1, dated September 16, 1997, between the Company and The Infinity Fund, L.P.
- 4.13 Common Stock Purchase Warrant No. INF 9-97-2, dated September 16, 1997, between the Company and The Infinity Fund, L.P.

II-2

- 4.14 Common Stock Purchase Warrant (\$1.50), dated June 9, 1997, between the Company and JW Charles Financial Services, Inc., as incorporated by reference from Exhibit 4.6 to the Company's Form 8-K, dated June 11, 1997.
- 4.15 Common Stock Purchase Warrant (\$2.00), dated June 9, 1997, between the Company and JW Charles Financial Services, Inc. as incorporated by reference from Exhibit 4.7 to the Company's Form 8-K, dated June 11, 1997.
- 4.16 Warrant Agreement, dated June 17, 1994, between the Company and Sun Bank, National Association as incorporated by reference from Exhibit 4.2 to the Company's Form 8-K, dated June 17, 1994.
- 4.17 Common Stock Purchase Warrant (\$2.00), dated July 25, 1997, between the Company and Karl Ehlert.

- 4.18 Common Stock Purchase Warrant (\$3.00), dated July 25, 1997, between the Company and Karl Ehlert.
- 4.19 Common Stock Purchase Warrant (\$2.00), dated July 25, 1997, between the Company and Keith Fetter.
- 4.20 Common Stock Purchase Warrant (\$2.50), dated July 25, 1997, between the Company and Keith Fetter.
- 4.21 Common Stock Purchase Warrant, dated effective as of September 16, 1997, between the Company and Dionysus Limited.
- 4.22 Common Stock Purchase Warrant dated January, 1995, between the Company and D. H. Blair Investment Banking Corp.
- 4.23 Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and D. H. Blair Investment Banking Corp.
- 4.24 Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and J. Morton Davis.
- 4.25 Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and Esther Stahler.
- 4.26 Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and Martin Bell.
- 4.27 Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and Ruki Renov.
- 4.28 Common Stock Purchase Warrant dated September 11, 1995 between the Company and Ally Capital Management, Inc.
- 5.1 Opinion of Conner & Winters, a Professional Corporation.
- 23.1 Consent of BDO Seidman, LLP.
- 23.2 Consent of Conner & Winters, as contained in Exhibit 5.1 hereto and incorporated herein by reference.
- 24.1 Power of Attorney (included on signature page).

II-3

Item 17. Undertakings

The Company hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to the Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the 'Securities Act');

(ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (1)(i) and (1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Company pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "'Exchange Act'"), that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The Company hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Company's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the indemnification provisions described herein, or otherwise, the Company has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

II-4

SIGNATURES FOR FORM S-3

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and

has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Gainesville, State of Florida, on the 22nd day of December, 1997.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: /s/ Louis Centofanti

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

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that each person whose signature appears below hereby constitutes and appoints Dr. Louis F. Centofanti as his true and lawful attorney-in-fact and agent, with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do them in person, hereby ratifying and confirming all that said attorney-in-fact and agent or any of them, or their or his substitute or substitutes, shall do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

/s/ Louis Centofanti		
<hr/> Dr. Louis F. Centofanti	Chairman of the Board of Director, President and Chief Executive Officer (Principal Executive Officer)	December 22, 1997

/s/ Richard T. Kelecy		
<hr/> Richard T. Kelecy	Chief Financial Officer (Principal Financial And Accounting Officer)	December 22, 1997

/s/ Mark A. Zwecker		
<hr/> Mark A. Zwecker	Director	December 22, 1997

/s/ Steve Gorlin		
<hr/> Steve Gorlin	Director	December 22, 1997

Jon Colin

EXHIBIT INDEX

Exhibit No.	Description	Page No.
4.1	Subscription and Purchase Agreement, dated June 9, 1997, between the Company and RBB Bank Aktiengesellschaft as incorporated by reference from Exhibit 4.1 to the Company's Form 8-K, dated June 11, 1997.	*
4.2	Subscription and Purchase Agreement, dated July 7, 1997, between the Company and the Infinity Fund, L.P. as incorporated by reference from Exhibit 4.1 to the Company's Form 8-K, dated July 7, 1997.	*
4.3	Exchange Agreement, dated November 6, 1997, to be considered effective as of September 16, 1997, between the Company and RBB Bank, as incorporated by reference from Exhibit 4.11 from the Company's Report on Form 10-Q for the period ended September 30, 1997.	*
4.4	Certificate of Designations of Series 6 Class F Convertible Preferred Stock, dated November 6, 1997, incorporated by reference from Exhibit 4.7 to the Company's Report on Form 10-Q for the period ended September 30, 1997.	*
4.5	Specimen copy of Series 6 Class F Convertible Preferred Stock Certificate, as incorporated by reference from Exhibit 4.8 to the Company's Report on Form 10-Q for the quarter ended September 30, 1997.	*
4.6	Exchange Agreement dated as of October 31, 1997, to be considered effective as of September 16, 1997, between the Company and the Infinity Fund, L.P., as incorporated by reference from Exhibit 4.12 to the Company's Report on Form 10-Q for the period ended September 30, 1997.	*
4.7	Certificate of Designations of Series 7 Class G Convertible Preferred Stock, dated October 30, 1997, incorporated by reference from Exhibit 4.9 to the Company's Report on Form 10-Q for the period ended September 30, 1997.	*
4.8	Specimen copy of Series 7 Convertible Preferred Stock Certificate, as incorporated by reference from Exhibit 4.10 to the Company's Report on Form 10-Q for the quarter ended September 30, 1997.	*
4.9	Common Stock Purchase Warrant (\$1.8125) No. RBB	

	9-97-1, dated September 16, 1997, between the Company and RBB Bank Aktiengesellschaft.	45
4.10	Common Stock Purchase Warrant (\$1.8125) No. RBB 9-97-2, dated September 16, 1997, between the Company and RBB Bank Aktiengesellschaft.	54
4.11	Common Stock Purchase Warrant (\$2.125) No. RBB 9-97-3, dated September 16, 1997, between the Company and RBB Bank Aktiengesellschaft.	61
4.12	Common Stock Purchase Warrant No. INF 9-97-1, dated September 16, 1997, between the Company and The Infinity Fund, L.P.	70
4.13	Common Stock Purchase Warrant No. INF 9-97-2, dated September 16, 1997, between the Company and The Infinity Fund, L.P.	80
4.14	Common Stock Purchase Warrant (\$1.50), dated June 9, 1997, between the Company and JW Charles Financial Services, Inc., as incorporated by reference from Exhibit 4.6 to the Company's Form 8-K, dated June 11, 1997.	*
4.15	Common Stock Purchase Warrant (\$2.00), dated June 9, 1997, between the Company and JW Charles Financial Services, Inc. as incorporated by reference from Exhibit 4.7 to the Company's Form 8-K, dated June 11, 1997.	*
4.16	Warrant Agreement, dated June 17, 1994, between the Company and Sun Bank, National Association as incorporated by reference from Exhibit 4.2 to the Company's Form 8-K, dated June 17, 1994.	*
4.17	Common Stock Purchase Warrant (\$2.00), dated July 25, 1997, between the Company and Karl Ehlert.	90
4.18	Common Stock Purchase Warrant (\$3.00), dated July 25, 1997, between the Company and Karl Ehlert.	104
4.19	Common Stock Purchase Warrant (\$2.00), dated July 25, 1997, between the Company and Keith Fetter.	118
4.20	Common Stock Purchase Warrant (\$2.50), dated July 25, 1997, between the Company and Keith Fetter.	132
4.21	Common Stock Purchase Warrant, dated effective as of September 16, 1997, between the Company and Dionysus Limited.	140
4.22	Common Stock Purchase Warrant dated January, 1995, between the Company and D. H. Blair Investment Banking Corp.	149
4.23	Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and D. H. Blair Investment Banking Corp.	170

4.24	Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and J. Morton Davis.	182
4.25	Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and Esther Stahler.	195
4.26	Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and Martin Bell.	208
4.27	Common Stock Purchase Warrant dated effective as of March 23, 1995, between the Company and Ruki Renov.	221
4.28	Common Stock Purchase Warrant dated September 11, 1995, between the Company and Ally Capital Management, Inc.	234
5.1	Opinion of Conner & Winters, a Professional Corporation.	250
23.1	Consent of BDO Seidman, LLP.	256
23.2	Consent of Conner & Winters, as contained in Exhibit 5.1 hereto and incorporated herein by reference.	257
24.1	Power of Attorney (included on signature page).	*

*incorporated by reference

BALL:\N-P\PESI\S-3\1997\RegSt\S3.13

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32606-1649
Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
2330 Marinship Way
Sausalito, California
Attention: Vice President -
Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
1657 North California Boulevard
Suite 201
Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32606-1649
Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
2330 Marinship Way
Sausalito, California
Attention: Vice President -
Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
1657 North California Boulevard
Suite 201
Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32606-1649
Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
2330 Marinship Way
Sausalito, California
Attention: Vice President -
Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
1657 North California Boulevard
Suite 201
Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32606-1649
Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
2330 Marinship Way
Sausalito, California
Attention: Vice President -
Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
1657 North California Boulevard
Suite 201
Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
Services, Inc.
1940 Northwest 67th Place
Gainesville, Florida 32606-1649
Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
2330 Marinship Way
Sausalito, California
Attention: Vice President -
Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
1657 North California Boulevard
Suite 201
Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE

OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER SUCH ACT WHICH IS EFFECTIVE AND CURRENT WITH RESPECT TO THIS WARRANT OR SUCH SHARES OF COMMON STOCK, AS THE CASE MAY BE, OR (ii) PURSUANT TO AN EXCEPTION FROM REGISTRATION UNDER SUCH ACT.

No. 2 - Ally

20,513 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

WHEREAS, in connection with the extension of an additional Five Hundred Thousand Dollars (\$500,000) in financial credits by Ally Capital Management, Inc., a Delaware corporation ("Ally"), to Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), or subsidiaries of the Company, under the terms of an amendment to the Equipment Lease Agreement between the Company and/or subsidiaries of the Company and Ally ("Lease Agreement"), the Company has agreed to grant to Ally this Warrant which provides, in part, that Ally may purchase up to twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, par value \$.001 per share, for \$2.4375 per share (the "Warrant Price"), subject and pursuant to the terms and conditions of this Warrant.

NOW, THEREFORE, FOR VALUE RECEIVED, the Company, hereby grants to Ally, or any permitted assignee thereof (the "Holder"), the right to purchase from the Company, at any time in whole or from time to time in part, during the period commencing the 11th day of September, 1995, and ending at 5:00 p.m., Atlanta, Georgia time, on September 10, 2000 (the "Exercise Period"), twenty thousand five hundred thirteen (20,513) shares of the Company's Common Stock, \$.001 par value ("Common Stock"), all of which shall be fully paid and nonassessable, at a purchase price of \$2.4375 per share, to be issued and delivered by the Company upon any exercise of this Warrant and the payment of the Warrant Price (as hereafter defined) to be paid for each such share of Common Stock to be purchased upon such exercise pursuant to the terms thereof, which shall be subject to adjustment from time to time as hereinafter provided. This Warrant and all warrants of like tenor which may be issued by the Company in exchange or substitution for or upon the transfer or partial exercise of this Warrant are hereinafter collectively referred to as the "Warrant", the shares of Common Stock of the Company issuable and issued upon exercise of this Warrant is hereinafter collectively referred to as the "Warrant Shares", and the price payable for each of the Warrant Shares upon such exercise is hereinafter referred to as the "Warrant Price".

1. Exercise of Warrant. This Warrant may be exercised, as a whole at any one time or in part from time to time, during the Exercise Period, by Ally, the holder of this Warrant, by the surrender of this Warrant (with the subscription form at the end hereof duly executed in a manner satisfactory to the Company) at

the address set forth in Subsection 10(a) hereof, together with payment in the manner hereinafter set forth of an amount equal to the Warrant Price in effect at the date of such exercise multiplied by the total number of Warrant Shares to be purchased upon such exercise. Payment for Warrant Shares shall be made by a cashier's or certified check or money order, to the order of the Company. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares and Ally shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised, unless this Warrant has expired pursuant to its terms. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to Ally a certificate or certificates in the name of Ally for the largest whole number of Warrant Shares to which Ally shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which Ally otherwise might be entitled, cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) will deliver to Ally such other securities and properties which Ally may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant. This Warrant may not be exercised after the Exercise Period.

2. Reservation of Warrant Shares. The Company agrees that at all times prior to the expiration of the Warrant, the Company will have authorized and in reserve, and will keep available, solely for issuance or delivery upon the exercise of the Warrant such number of shares of the Common Stock and such amount of other securities and properties as from time to time shall be deliverable upon the exercise of the Warrant, free and clear of all restrictions on sale or transfer (except as otherwise provided by this Agreement or as may be imposed under applicable federal and state securities laws or the applicable exchange upon which the Common Stock may be listed) and free and clear of all preemptive rights.

3. Protection Against Dilution.

3.1 If, at any time or from time to time after the date of this Warrant, the Company shall distribute to all of the holders of its outstanding Common Stock, (i) securities, or (ii) property, other than cash, without payment therefor, then, and in each such case, Ally, upon the exercise of this Warrant, shall be entitled to receive the securities and property which Ally would hold on the date of such exercise if, on the date of this Warrant, Ally had been the holder of record of the number of shares of the Common Stock subscribed for upon such exercise and, during the period from the date of this Warrant to and including the date of such exercise, had retained such shares and the securities and properties receivable by Ally during such period. Notice of each such distribution shall be forthwith mailed to Ally.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (i) pay a dividend or make a distribution on its Common Stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares, or (iv) issue by reclassification of its Common Stock any shares of any

other class of capital stock of the Company, the number of Warrant Shares and the Warrant Price in effect immediately prior to such event shall be adjusted so that, upon exercise of this Warrant, Ally shall be entitled to purchase under this Warrant, without additional consideration therefor, the number of shares of Common Stock or other capital stock of the Company which he would have owned or been entitled to purchase immediately following the happening of any of the events described above in this subsection 3.2 had this Warrant been exercised and Ally become the holder of record of the Warrant Shares purchased upon such exercise immediately prior to the record date fixed for the determination of stockholders entitled to receive such dividend or distribution or the effective date of such subdivision, combination or reclassification at a Warrant Price equal to the aggregate consideration which Ally would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares Ally is entitled to receive immediately after such event. An adjustment made pursuant to this subsection 3.2 shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification. If, as a result of an adjustment made pursuant to this subsection 3.2, Ally shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to Ally promptly after such adjustment) shall determine the allocation of the adjusted Warrant Price between or among shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

3.3 In case of any consolidation or merger of the Company in which the Company is not the surviving entity, or in case of any sale or conveyance by the Company to another entity of all or substantially all of the property of the Company as an entirety or substantially as an entirety, Ally shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which Ally would have owned or been entitled to receive immedi-

ately after such consolidation, merger, sale or conveyance had this Warrant been exercised in full immediately prior to the effective date of such consolidation, merger, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of Ally to the end that the provisions of this Section 3 thereafter shall be correspondingly applicable, as nearly as may reasonably be, to such securities and other property. The provisions of this subsection 3.3 shall similarly apply to successive consolidations, mergers, sales or conveyances. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be

mailed to Ally not less than twenty (20) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

3.4 No adjustment of the Warrant Price shall be required unless such adjustment would require an increase or decrease of at least \$0.10; provided, however, that any adjustments which by reason of this subsection 3.4 are not required to be made shall be carried forward and taken into account in any subsequent adjustment, and provided further, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this subsection 3.4) not later than such time as may be required in order to preserve the tax-free nature of a distribution to Ally. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Warrant Price, in addition to those required by this Section 3, as it shall deem to be advisable in its discretion in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its shareholders shall not be taxable.

3.5 Whenever the Warrant Price is adjusted as provided in this Section 3 and upon any modification of the rights of Ally in accordance with this Section 3, the Chief Financial Officer of the Company promptly shall certify the Warrant Price and the number of Warrant Shares after such adjustment or modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same, and shall cause such certificate to be mailed to Ally.

3.6 For purposes of this Section 3, in case any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock shall be or are to be sold or issued by the Company for cash, the net proceeds received by the Company shall be deemed to be the consideration received by the Company therefor. If any shares of Common Stock, options or securities entitling the holders thereof to purchase Common Stock or to convert such securities into Common Stock shall be or are to be sold or issued for a consideration other than cash, the amount of the consideration other than cash received by the Company shall be deemed to be the fair value of such consideration as determined in good-faith by the Board of Directors of the Company, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Company in connection therewith.

3.7 No adjustment to the Warrant Price shall be required, however (i) upon the exercise of any of the options presently outstanding under the Company's 1991 Per-

formance Equity Plan (the "1991 Plan"), 1992 Outside Directors Stock Option Plan (the "1992 Plan"), and 1993 Nonqualified Stock Option Plan (the "1993 Plan") (the

1991 Plan, 1992 Plan, and the 1993 Plan are referred to collectively as the "Plans"); or (ii) upon the issuance or exercise of any options or securities which may hereafter be granted or exercised under the Plans or under any other employee benefit plan of the Company provided such securities are issued with a conversion or exercise price equal to not less than eighty-five percent (85%) of the fair market value of the Common Stock pursuant to the terms of the employee benefit plan; or (iii) upon the exercise of outstanding warrants to purchase shares of the Common Stock; or (iv) upon the sale of any shares of Common Stock or convertible securities in a private placement or in a firm commitment underwritten public offering for value received or to be received by the Company; or (v) upon the issuance or sale of Common Stock or convertible securities upon the exercise of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or convertible securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrants or were thereafter issued or sold; or (vi) upon the issuance by the Company of Common Stock to Quadrex Corporation or Quadrex Environmental Company.

3.8 As used in this Section 3, the term "Common Stock" shall mean and include the Company's Common Stock authorized on the date of the original issue of the Warrants and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of this Warrant shall include only shares of such class designated in the Company's Certificate of Incorporation as Common Stock on the date of the original issue of the Warrants or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Subsection 3.3 hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon exercise of the Warrants as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

4. Fully Paid Stock; Taxes. The Company agrees that the shares of the Common Stock represented by each and every certificate for Warrant Shares delivered upon the exercise of the Warrant shall, at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Common Stock is at all times equal to or less than the Warrant Price. The Company further covenants and agrees that it will pay, when due and payable, any and all federal and state stamp, original issue or similar taxes which may be payable in respect of the issuance of any Warrant Share or certificate therefor.

5. Registration under the Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company proposes to register shares of the Company Common Stock for public sale in a firm commitment underwriting for its own account under a Form S-1 or S-2 registration statement (collectively, the "Registration Statement"), the Company shall give the Holder notice of such proposed registration at least twenty (20) calendar days prior to the filing of the Registration Statement. At the written request of the Holder delivered to the Company within seven (7) calendar days after the receipt of the notice from the Company, which request shall state the Holder's intent to sell all of the Warrant Shares then owned by the Holder, the Company shall use its reasonable efforts to register such Warrant Shares under the same Registration Statement otherwise being filed by the Company, and to use reasonable efforts to cause such registration to become and remain effective so long as the Company keeps such registration effective as to such other Company Common Stock being sold for the account of the Company. The Company shall not be required to include any of the Warrant Shares in any Registration Statement unless the Holder accepts the terms of the underwriting as agreed upon between the Company and the managing underwriter or underwriters, jeopardize the success or the offering by the Company. If the total amount of the Warrant Shares requested to be included in the registration by the Holder and other shareholders of the Company that request the inclusion of securities of the Company in such Registration Statement (the "Other Shareholders") exceeds the amount of securities that the managing underwriters reasonably believe compatible with the success of the offering, the Company shall only be required to include in the offering so many of the Warrant Shares held by the Holder and other securities of the Company held by the Other Shareholders as the managing underwriters believe will not jeopardize the success of the offering (the Warrant Shares and other securities of the Company held by the Other Shareholders so included to be apportioned pro rata among the Holder and the Other Shareholders according to the amounts of Warrant Shares and other securities of the Company held by the Other Shareholders so requested to be included in the Registration Statement or in such other proportions as have been mutually agreed by the Holder and the Other Shareholders); provided, however, that no such reduction shall be made with respect to any securities offered by the Company or any Other Shareholders whose shares are included in such Registration Statement other than pursuant to piggyback registration rights. All Warrant Shares registered pursuant to this Section 5 must be offered for sale in the public offering by the same underwriter or underwriters that are offering the other shares of the Company Common Stock being registered. The Company may withdraw the Registration Statement at any time before it becomes effective or postpone the offering without obligation to, or the consent of, the Holder. The Company will use reasonable efforts to obtain

appropriate approvals or registrations under state "blue sky" securities laws. With respect to any such securities, however, this Warrant may not be exercised by, or shares of Common Stock issued to, the Holder in any state in which such exercise would be unlawful. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of (i) such time as the Holder shall have received from counsel to the Company an unqualified written opinion of such counsel that the Holder has the right, pursuant to the provisions of Rule 144 under the Act, to sell within any three (3) month period all Warrant Shares then held and purchasable upon the exercise of Warrants by the Holder or (ii) termination of the Exercise Period.

5.2 The Company shall bear the expenses of preparing the Registration Statement contemplated by this Section 5, including, without limitation, costs of complying with federal and state securities laws and regulations, attorneys' fees of the Company, accounting fees, printing expenses and federal and state filing fees; provided, however, that the Holder shall bear all transfer fees, underwriting commissions and discounts, and fees of counsel to the Holder relating to the Warrant Shares included in such Registration Statement.

5.3 In the event any Warrant Shares are included in a Registration Statement pursuant to Section 5.1 hereof:

5.3.1 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Company will indemnify and hold harmless the Holder and each other entity or person, if any, controlling the Holder within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (collectively, the "Controlling Party") against any losses, claims, damages or liabilities to which the Holder or the Controlling Party may become subject under the Act, insofar as such losses, claims, damage or liabilities (or actions in respect thereof) arise out of or are based on any untrue or alleged untrue statement of any material fact contained in such Registration Statement registering the Warrant Shares filed by the Company with the Commission, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading or arise out of any violation by the Company of any rule or regulation promulgated under the Act applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, and will reimburse the Holder and such Controlling Party for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss,

claim, damage, liability or action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.1 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld) nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon any untrue statement or alleged untrue statement or omission or alleged omission made in connection with such Registration Statement, preliminary prospectus, final prospectus, or amendments or supplements thereto, in reliance upon and in conformity with written information furnished expressly for use in connection with such Registration Statement by the Holder, any underwriter or Controlling Party thereof.

5.3.2 Except as otherwise provided in this Section 5.3, to the extent permitted by law, the Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, each person, if any, who controls the Company within the meaning of the Act or the Exchange Act, and each agent for the Company against any losses, claims, damages, or liabilities to which the Company or any such director, officers, controlling person, agent, or underwriter may become subject under the Act, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supple-

ments 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 not misleading, in each case to the extent, but only to the extent, that such untrue statement or omission or alleged omission was made in such Registration Statement, preliminary or final prospectus or amendments or supplements thereto, in reliance upon and in conformity with written information furnished by or on behalf of the Holder for use in connection with such Regis-

tration Statement, and the Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person or agent in connection with investigating or defending any such loss, claim, damage, liability or

action, except as otherwise provided in Section 5.3; provided, however, that the indemnity agreement contained in this Section 5.3.2 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and that the obligation of the Holder hereunder shall be limited to an amount equal to the proceeds to the Holder of Warrant Shares sold pursuant thereto.

5.3.3 Promptly after receipt by a person entitled to indemnification pursuant to this Section 5 (an "Indemnified Party") under this section of notice of the commencement of any action, the Indemnified Party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 5.3, notify in writing the indemnifying party of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such action is brought against an Indemnified Party and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, subject to the provisions herein stated, with counsel reason-

ably satisfactory to the Indemnified Party, and after notice from the indemnifying party to the Indemnified Party of its election so to assume the defense thereof, the indemnifying party will not be liable to the Indemnified Party under this Section 5.3 for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof. The Indemnified Party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the indemnifying party only if (i) the employment of such counsel has been specifically authorized in writing by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the Indemnified Party or parties and the indemnifying party and the Indemnified Party has been advised that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept and in which case the indemnifying party shall not have the right to assume the defense of such action on behalf of the Indemnified Party or parties, it being understood, however, that the indemnifying party or parties shall not,

in connection with any one such action or separate, but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Indemnified Party or parties.

6. Limited Transferability and Investment Representation.

6.1 This Warrant shall not be transferable or assignable by Ally, except to any bank, corporation or association which is a successor to Ally or to an Affiliate (as that term is defined in Rule 405 promulgated under the Act) of Ally, and shall be so transferable upon the books of the Company which it shall cause to be maintained for that purpose; provided that any such assignee shall be bound by the terms hereof and prior to such assignment or transfer such transferee or assignee shall execute such documents as may reasonably be required by the Company to evidence that such assignee or transferee is bound by the terms hereof; provided however, that prior to such permitted transfer or assignment the Company shall have received from counsel for Ally, which counsel is reasonably satisfactory to the Company, an opinion that this Warrant may be sold, transferred or assigned to such successor or Affiliate without registration under the Securities Act of 1933, as amended, and any applicable state laws, pursuant to an exemption from registration under the Act and applicable state law. The Company may treat the registered holder of this Warrant as he or it appears on the Company's books at any time as Ally for all purposes. The Company shall permit Ally or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holder of this Warrant. Any Warrant issued in substitution of this Warrant will be dated the same date as this Warrant.

6.2 By acceptance hereof, Ally represents and warrants that this Warrant is being acquired, and all Warrant Shares to be purchased upon the exercise of this Warrant will be acquired, by Ally solely for the account of Ally and not with a view to the fractionalization and distribution thereof, and will not be sold or transferred except in accordance with the applicable provisions of the Act and the rules and regulations promulgated thereunder, and Ally agrees that neither this Warrant nor any of the Warrant Shares may be sold or transferred except under cover of a registration statement under the Act which is effective and current with respect to such Warrant Shares or pursuant to an opinion of counsel reasonably satisfactory to the Company that registration under the Act is not required in connection with such sale or transfer. Any Warrant Shares issued upon exercise of this Warrant shall bear the following legend:

The securities represented by this certificate have not been registered under the Securities

Act of 1933, as amended (the "Act"), and are restricted securities within the meaning thereof. Such securities may not be sold or transferred except pursuant to a registration statement under such Act which is effective and current with respect to such securities or pursuant to an opinion of counsel reasonably satisfactory to the issuer of such securities that such sale or transfer is exempt from the registration requirements of such Act.

7. Nasdaq; Boston Stock Exchange. Notwithstanding anything herein to the contrary, this Warrant may not be exercised by Ally until the Company has listed the Warrant Shares with the National Association of Securities Dealers Automated Quotation system ("Nasdaq") and the Boston Stock Exchange (the "Exchange"). The Company will use, at its expense, reasonable efforts to list the Warrant Shares with the Nasdaq and the Exchange at the earlier of (i) exercise of the Warrant Shares or (ii) registration of the Warrant Shares under the Act.

8. Loss, etc., of Warrant. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to Ally a new Warrant of like date, tenor and denomination.

9. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon Ally any right as a stockholder of the Company, including, but not limited to, rights as a stockholder to receive dividends or to vote the Warrant Shares or to consent to or receive notice as a shareholder of the Company, as such, because of this Warrant, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

10. Notices. No notice or other communication pursuant to or in respect of this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have given if and when, the same is in writing and is mailed by first-class mail, postage prepaid, addressed:

If to the Company: Perma-Fix Environmental
 Services, Inc.
 1940 Northwest 67th Place
 Gainesville, Florida 32606-1649
 Attention: Mr. Robert W. Foster, Jr.

If to Ally: Ally Capital Management, Inc.
 2330 Marinship Way
 Sausalito, California
 Attention: Vice President -
 Venture Investments

With a copy to: Jeremy D. Weinstein, Esquire
 1657 North California Boulevard
 Suite 201
 Walnut Creek, California 94596

or such other address as the Company and Ally previously may have

designated in conformity with the foregoing.

11. Headings. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

12. Applicable Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to the principles of conflicts of law thereof.

13. Survival of Representations. All representations and warranties contained herein shall survive the execution of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and its corporate seal to be hereunto affixed and attested by its Secretary this 11th day of September, 1995.

PERMA-FIX ENVIRONMENTAL
SERVICES, INC.

By: _____
Robert W. Foster
President

(the "Company")

ALLY CAPITAL MANAGEMENT, INC.

By: _____
Name: _____
Title: _____

("Ally")

SUBSCRIPTION

The undersigned, _____,
pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock of Perma-Fix Environmental Services, Inc. covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: _____ Signature _____
Address _____

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells,
assigns and transfers unto _____ the foregoing
Warrant and all rights evidenced thereby, and does irrevocably
constitute and appoint _____, attorney, to transfer
said Warrant on the books of Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns
and transfers unto _____ the right to
purchase _____ shares of the Common Stock of Perma-Fix
Environmental Services, Inc. by the foregoing Warrant, and a
proportionate part of said Warrant and the rights evidenced hereby,
and does irrevocably constitute and appoint _____,
attorney, to transfer that part of said Warrant on the books of
Perma-Fix Environmental Services, Inc.

Dated: _____ Signature _____

Address _____

ISTE:\N-P\PESI\ALLY\WARRANT.2

CONNER & WINTERS
A PROFESSIONAL CORPORATION
LAWYERS
ONE LEADERSHIP SQUARE
211 NORTH ROBINSON, SUITE 1700
OKLAHOMA CITY, OKLAHOMA 73102-7101

December 22, 1997

Perma-Fix Environmental Services, Inc.
1940 Northwest 67th Place, Suite A
Gainesville, Florida 32653

Re: Perma-Fix Environmental Services, Inc.; Form S-3
Registration Statement Registering 3,677,074 Shares
of Common Stock; Our File No. 7034.29

Ladies and Gentlemen:

We have acted as special counsel to Perma-Fix Environmental Services, Inc. (the "Company") in connection with the Form S-3 Registration Statement (the "Registration Statement") to be filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Act") registering up to 3,677,074 shares of the Company's Common Stock to be reoffered or resold by certain Selling Shareholders (as defined in the Registration Statement). The Registration Statement relates to the proposed reoffer or resale from time to time by certain Selling Shareholders, of the following:

(i) up to 2,285,561 shares of the Company's Common Stock, par value \$.001 per share ("Common Stock"), by RBB Bank Aktiengesellschaft ("RBB Bank") that are issuable by the Company to RBB Bank ("RBB Shares") as follows:

(a) up to 1,379,311 shares being acquired by RBB Bank upon conversion of the Company's Series 6 Class F Convertible Preferred Stock, par value \$.001 per share ("Series 6 Class F Preferred Stock"),

(b) up to 250,000 shares being acquired by RBB Bank as payment of dividends on the Series 6 Class F Preferred Stock, and

(c) up to 656,250 shares being acquired by RBB Bank upon exercise of the Series 6 Warrants (as defined in the Registration Statement);

(ii) up to 271,000 shares of the Company's Common Stock by The Infinity Fund, L.P. ("Infinity") that are issuable by the Company to Infinity ("Infinity Shares") as follows:

(a) up to 200,000 shares being acquired by Infinity upon conversion of the Company's Series 7 Class G Convertible Preferred Stock, par value \$.001 per share ("Series 7 Class G Preferred Stock"),

(b) up to 36,000 shares being acquired by Infinity as payment of dividends on the Series 7 Class G Preferred Stock, and

(c) up to 35,000 shares being acquired by Infinity upon exercise of the Infinity Warrants (as defined in the Registration Statement);

(iii) up to 300,000 shares of Common Stock by JW Charles Financial Services, Inc. ("JW Charles") that are issuable by the Company to JW Charles (the "JW Charles Shares") upon the exercise of two (2) warrants previously issued by the Company to JW Charles ("JW Charles Warrants");

(iv) up to 125,000 shares of Common Stock by Sun Bank , National Association ("Sun Bank") that are issuable by the Company to Sun Bank ("Sun Bank Shares") upon the exercise of a warrant previously issued by the Company to Sun Bank ("Sun Bank Warrant");

(v) up to 7,000 shares of Common Stock by D. H. Blair Investment Banking Corporation ("Blair") that are issuable by the Company to Blair ("Blair Shares") upon the exercise of a warrant previously issued by the Company to Blair ("Blair Remainder Warrant") to reflect the remainder of a warrant for 75,000 shares of Common Stock which was previously issued by the Company to Blair ("Blair Warrant") and which was partially assigned by Blair to certain officers and directors of Blair;

(vi) up to 28,000 shares of Common Stock by J. Morton Davis ("Davis") that are issuable by the Company to Davis ("Davis Shares") upon the exercise of a warrant previously issued by the Company to Davis ("Davis Warrant") as a result of the assignment by Blair of a portion of the Blair Warrant;

(vii) up to 28,000 shares of Common Stock by Esther Stahler ("Stahler") that are issuable by the Company to Stahler ("Stahler Shares") upon the exercise of a warrant previously issued by the Company to Stahler ("Stahler Warrant") as a result of the assignment by Blair of a portion of the Blair Warrant;

(viii) up to 7,000 shares of Common Stock by Martin A. Bell ("Bell") that are issuable by the Company to Bell ("Bell Shares") upon the exercise of a warrant previously issued by the Company to Bell ("Bell Warrant") as a result of the assignment by Blair of a portion of the Blair Warrant;

(ix) up to 5,000 shares of Common Stock by Ruki Renov ("Renov") that are issuable by the Company to Renov ("Renov Shares") upon the exercise of a warrant previously issued by the Company to Renov ("Renov Warrant") as a result of the assignment by Blair of a portion of the Blair Warrant;

(x) up to 20,513 shares of Common Stock by Ally Capital Management ("Ally") that are issuable by the Company to Ally ("Ally Shares") upon the exercise of a warrant previously issued by the Company to Ally ("Ally Warrant");

(xi) up to 100,000 shares of Common Stock by Dionysus Limited ("Dionysus") that are issuable by the Company

to Dionysus ("Dionysus Shares") upon the exercise of a warrant previously issued by the Company to Dionysus ("Dionysus Warrant");

(xii) up to 350,000 shares of Common Stock by Karl H. Ehlert ("Ehlert") that are issuable by the Company to Ehlert ("Ehlert Shares") upon the exercise of two (2) warrants previously issued by the Company to Ehlert ("Ehlert Warrants"); and

(xiii) up to 150,000 shares of Common Stock by R. Keith Fetter ("Fetter") that are issuable by the Company to Fetter ("Fetter Shares") upon the exercise of two (2) warrants previously issued by the Company to Fetter ("Fetter Warrants").

We have examined such corporate records, certificates of officers, other documents and questions of law, as we have considered necessary or appropriate for the purposes of this opinion.

On the basis of such examination and review, we are of the opinion that:

(i) the RBB Shares will constitute, if and when issued pursuant to the terms of the Series 6 Class F Preferred Stock and the Series 6 Warrants, validly issued and fully paid and nonassessable shares of Common Stock;

(ii) the Infinity Shares will constitute, if and when issued by the Company pursuant to the terms of the Series 7 Class G Preferred Stock and the Infinity Warrant, validly issued and fully paid and nonassessable shares of Common Stock;

(iii) the JW Charles Shares will constitute, if and when issued by the Company pursuant to the terms of the JW Charles Warrant, validly issued and fully paid and nonassessable shares of Common Stock;

(iv) the Sun Bank Shares will constitute, if and when issued by the Company pursuant to the terms of the Sun Bank Warrant, validly issued and fully paid and nonassessable shares of Common Stock;

(v) the Blair Shares will constitute, if and when issued by the Company pursuant to the terms of the Blair Remainder Warrant, validly issued and fully paid and nonassessable shares of Common Stock; and,

(vi) the Davis Shares will constitute, if and when issued by the Company pursuant to the terms of the Davis Warrant, validly issued and fully paid and nonassessable shares of Common Stock.

(vii) the Stahler Shares will constitute, if and when issued by the Company pursuant to the terms of the Stahler Warrant, validly issued and fully paid and nonassessable shares of Common Stock.

(viii) the Bell Shares will constitute, if and when issued by the Company pursuant to the terms of the Bell Warrant, validly issued and fully paid and nonassessable shares of Common Stock.

(ix) the Renov Shares will constitute, if and when issued by the Company pursuant to the terms of the Renov Warrant, validly

issued and fully paid and nonassessable shares of Common Stock.

(x) the Ally Shares will constitute, if and when issued by the Company pursuant to the terms of the Ally Warrant, validly issued and fully paid and nonassessable shares of Common Stock.

(xi) the Dionysus Shares will constitute, if and when issued by the Company pursuant to the terms of the Dionysus Warrant, validly issued and fully paid and nonassessable shares of Common Stock.

(xii) the Ehlert Shares will constitute, if and when issued by the Company pursuant to the terms of the Ehlert Warrants, validly issued and fully paid and nonassessable shares of Common Stock.

(xiii) the Fetter Shares will constitute, if and when issued by the Company pursuant to the terms of the Fetter Warrants, validly issued and fully paid and nonassessable shares of Common Stock.

We consent to the reference to our firm under the heading "Legal Opinion" and to the filing of this opinion as Exhibit 5.1 to said Registration Statement.

Very truly yours,

CONNER & WINTERS,
A Professional Corporation

/s/ Conner & Winters

IHS:plh

BALL:\N-P\PESI\S-3\1997\RegSt\Opinion.wpd

CONSENT OF INDEPENDENT
CERTIFIED PUBLIC ACCOUNTANTS

Perma-Fix Environmental Services, Inc.
Gainesville, Florida

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated September 11, 1997, except for Note 15 which is as of October 7, 1997, relating to the consolidated financial statements and schedule of Perma-Fix Environmental Services, Inc. appearing in the Company's Annual Report on Form 10-K/A for the year ended December 31, 1996.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO Seidman, LLP

BDO Seidman, LLP

Orlando, Florida
December 22, 1997