

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of  
The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) June 11, 1997

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

(Exact name of registrant as specified in its charter)

Delaware	1-11596	58-195-4497
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)
1940 N.W. 67th Place, Suite A Gainesville, Florida 32654		
(Address of principal executive offices)		(Zip Code)

Registrant's telephone number, including area code (352) 373-4200

Not applicable

(Former name or former address, if changed since last report)

Item 5. Other Events.

On or about June 11, 1997, Perma-Fix Environmental Services, Inc. (the "Company") issued to RBB Bank Aktiengesellschaft, located in Graz, Austria ("RBB Bank"), 2,500 shares of newly-created Series 4 Class D Convertible Preferred Stock, par value \$.001 per share ("Series 4 Preferred"), at a price of \$1,000 per share, for an aggregate sales price of \$2,500,000. The sale to RBB Bank was made in a private placement under Rule 506 of Regulation D under the Securities Acts of 1933, as amended, pursuant to the terms of a

Subscription and Purchase Agreement, dated June 9, 1997, between the Company and RBB Bank ("Subscription Agreement"). The Series 4 Preferred has a liquidation preference over the Company's common stock, par value \$.001 per share ("Common Stock"), equal to \$1,000 consideration per outstanding share of Series 4 Preferred (the "Liquidation Value"), plus an amount equal to all unpaid dividends accrued thereon. The Series 4 Preferred accrues dividends on a cumulative basis at a rate of four percent (4%) per annum of the Liquidation Value ("Dividend Rate"), and is payable semi-annually when and as declared by the Board of Directors. No dividend or other distribution may be paid or declared or set aside for payment on the Company's Common Stock until all accrued and unpaid dividends on all outstanding shares of Series 4 Class D Preferred Stock 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 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, times (b) a fraction, the numerator of which is the number of days elapsed during the period for which the dividend is to be paid and the denominator of which is 365.

The holder of the Series 4 Preferred may convert into Common Stock up to 1,250 shares of the Series 4 Preferred on and after October 5, 1997, and the remaining 1,250 shares of the Series 4 Preferred on and after November 5, 1997. The conversion price per share is the lesser of (a) the product of the average closing bid quotation for the five (5) trading days immediately preceding the conversion date multiplied by eighty percent (80%) or (b) \$1.75. The minimum conversion price is \$.75, which minimum will be eliminated from and after September 6, 1998.

As part of the sale of the Series 4 Preferred, the Company also issued to RBB Bank two common stock purchase warrants (collectively, the "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 anti-dissolution 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 Common Stock issuable on the conversion of the Series 4 Preferred and on the exercise of the Warrants is subject to certain registration rights pursuant to the Subscription Agreement. The Company intends to utilize the proceeds received on the sale of Series 4 Preferred for capital improvements at the

Company's various facilities, working capital and repayment of trade payables.

In connection with the placement of Series 4 Preferred to RBB Bank, the Company paid fees (excluding legal and accounting) of \$200,000 and issued to the investment banking firm that handled the placement two common stock purchase warrants entitling the investment banking firm to purchase an aggregate of up to 300,000 shares of Common Stock, subject to certain anti-dilution provisions, with one warrant for a five year term to purchase up to 200,000 shares at an exercise price of \$2.00 per share and the second warrant for a three year term to purchase up to 100,000 shares of Common Stock at an exercise price of \$1.50 per share. Under the terms of each warrant, the investment banking firm is entitled to certain registration rights with respect to the shares of Common Stock issuable on the exercise of such warrants.

Item 7. Financial Statements and Exhibits.

(c) Exhibits.

- 4.1 Subscription and Purchase Agreement, dated June 9, 1997, between the Company and RBB Bank Aktiengesellschaft.
- 4.2 Certificate of Designations of Series 4 Class D Convertible Preferred Stock, dated June 9, 1997.
- 4.3 Specimen copy of Certificate relating to the Series 4 Class D Convertible Preferred Stock.
- 4.4 Common Stock Purchase Warrant (\$2.10) dated June 9, 1997, between the Company and RBB Bank Aktiengesellschaft.
- 4.5 Common Stock Purchase Warrant (\$2.50) dated June 9, 1997, between the Company and RBB Bank Aktiengesellschaft.
- 4.6 Common Stock Purchase Warrant (\$1.50) dated June 9, 1997, between the Company and J W Charles Securities, Inc.
- 4.7 Common Stock Purchase Warrant (\$2.00) dated June 9, 1997, between the Company and J W Charles Securities, Inc.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By: /s/ Richard T. Kelecyc

Richard T. Kelecyc  
Chief Financial Officer

Date: June 18, 1997

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THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER THE 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 THE WRITTEN OPINION OF COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY TO THE EFFECT THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR TRANSFER.

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE FLORIDA SECURITIES AND INVESTOR PROTECTION ACT ("FLORIDA ACT") AND ARE BEING GRANTED AND SOLD IN RELIANCE UPON AN EXEMPTION CONTAINED IN SECTION 517.061 (11) THEREOF. THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT MAY NOT BE REOFFERED FOR SALE OR RESOLD IN THE STATE OF FLORIDA UNLESS SUCH ARE REGISTERED OR THE TRANSACTION IS EXEMPT UNDER THE FLORIDA ACT. ANY SALE MADE UNDER THIS WARRANT TO A PERSON IN FLORIDA UNDER SUCH SUBSECTION IS VOIDABLE AT THE OPTION OF SUCH PERSON WITHIN THREE (3) DAYS AFTER THE FIRST TENDER OF CONSIDERATION IS MADE BY SUCH PERSON TO THE ISSUER OR ITS AGENT, OR WITHIN THREE DAYS AFTER THE AVAILABILITY OF THIS PRIVILEGE IS COMMUNICATED TO SUCH PERSON, WHICH EVER OCCURS LATER.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

No. 6-97-2  
June 9, 1997

200,000 shares of  
Common Stock

FOR VALUE RECEIVED, PERMA-FIX ENVIRONMENTAL SERVICES, INC. (the "Company"), a Delaware corporation, hereby certifies that J W CHARLES FINANCIAL SERVICES, INC., or any permitted assignee thereof (the "Holder"), is entitled to purchase from the Company, at any time in whole, or from time to time in part, during the period commencing the date of this Warrant and ending at 5:00 p.m. Eastern Daylight Savings Time on June 9, 2002 (the "Exercise Period"), up to two hundred thousand (200,000) fully paid and nonassessable shares of common stock, \$.001 par value, of the Company (the "Common Stock"), at a purchase price of \$2.00 per share; provided, however, that the number of shares of Common Stock to be issued and delivered by the Company upon any exercise of this Warrant and the purchase price to be paid for each such share shall be subject to adjustment from time to time as hereinafter provided in this Warrant. 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 "Warrants"; the shares of Common Stock issuable and issued upon exercise of the Warrants are 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 the Holder by the surrender of this Warrant (with the subscription form at the end hereof duly executed by the Holder) at the address set forth in Section 9 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, payable in New York Clearing House funds, 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 the Holder shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised. Upon any exercise and surrender of this Warrant, the Company (a) will issue and deliver to the Holder a certificate or certificates in the name of the Holder for the largest whole number of Warrant Shares to which the Holder shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which the Holder 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 (b) will deliver to the Holder such other securities and properties which the Holder 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.

## 2. Reservation of Warrant Shares.

2.1 The Company covenants and agrees that all Warrant Shares which may be acquired by the Holder under this Warrant will, when issued and upon delivery, be duly and validly authorized and issued, fully paid and nonassessable, and free from all restrictions on the sale or transfer thereof, except such restrictions as may be imposed under applicable federal and state securities laws and applicable exchange on which the Common Stock may be listed, and free and clear of all preemptive rights.

2.2 The Company covenants and agrees that it will, at all times, reserve and keep available an authorized number of shares of its Common Stock and other applicable securities sufficient to permit the exercise in full of this Warrant; and, if at the time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action at its next annual meeting of stockholders as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

## 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 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, upon the exercise of this Warrant, shall be entitled to receive the securities and property which the Holder would hold on the date of such exercise if, on the date of this 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 this 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.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (a) pay a dividend on its Common Stock in shares of Common Stock, (b) subdivide its outstanding shares of Common Stock into a greater number of shares, (c) combine its outstanding shares of Common Stock into a smaller number of shares, or (d) 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, the Holder 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 the Holder 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 the Holder would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares the Holder 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, the Holder of this Warrant thereafter surrendered for exercise 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 all holders of the Warrants 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 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 this Warrant shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which he would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had this 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 shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of the Holder of this Warrant 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. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be mailed to the Holder not less than thirty (30) 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.

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 this 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 Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company receives a written request from the Holder (whether or not the Holder theretofore shall have exercised this Warrant in whole or in part), and provided that (a) at the time of such request the Holder is the owner of, and/or has the right pursuant to this Warrant to purchase, Warrant Shares representing at least fifty percent (50%) of the total number of Warrant Shares, and (b) the Company has not theretofore included within the coverage of a Registration Statement filed by the Company with the Securities and Exchange Commission ("Commission") under the Securities Act of 1933, as amended (the "Act"), which Registration Statement has been declared effective by the Commission, at least fifty percent (50%) of the Warrant Shares, the Company shall (x) prepare promptly and file with the Commission a Registration Statement under the Act covering all of the Warrant Shares theretofore issued and which thereafter may be issuable upon the exercise of Warrants (provided, that the audited financial statements to be included in such Registration Statement shall be the year-end financial statements customarily included in the Company's Annual Report on Form 10-K under the Securities Exchange Act of 1934 (the "Exchange Act"), and provided further, that, if the request for registration is received within three (3) months prior to the commencement of a fiscal year of the Company, the Company may delay the preparation and filing of such Registration Statement for a period of not more than ninety (90) days following the commencement of such fiscal year in order to prepare and include in such Registration Statement audited financial statements for the immediately preceding fiscal year); (y) use its reasonable efforts to



cause such Registration Statement to become effective and to remain effective and current with respect to the Warrant Shares for an aggregate period of one (1) year (exclusive of any period during which the prospectus included therein shall not meet the requirements of Section 10 of the Act); and (z) take all other action necessary or appropriate to cause the prospectus included therein to be available for the sale of Warrant Shares from time to time during such period by the holders thereof in ordinary brokerage transactions in the over-the-counter market or on any national securities exchange on which the Common Stock is then listed. The right to demand the filing of a Registration Statement pursuant to this subsection 5.1 shall be exercisable on one (1) occasion only. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of such time as the Holder shall receive from counsel for the Company a written opinion of such counsel that the Holder has the right, pursuant to Rule 144 promulgated under the Act, to sell as of the date of such opinion, any portion of the Warrant Shares then held and/or purchasable upon the exercise of this Warrant by the Holder, or upon a Registration Statement being declared effective by the Commission in which the Company has included at least fifty percent (50%) of the Warrant Shares within the coverage of such Registration Statement.

5.2 Whenever the Company includes Warrant Shares in a Registration Statement, the Company shall (a) furnish the Holder of Warrant Shares included in such Registration Statement and each underwriter of such Warrant Shares with such copies of a current prospectus, including the preliminary prospectus, conforming to the requirements of Section 10 of the Act (and such other documents as each such Holder or each such underwriter may reasonably request), as such Holder(s) and underwriter(s) may reasonably require in order to effectuate the offer and sale of the Warrant Shares included in such Registration Statement; (b) use its reasonable efforts to register or qualify such Warrant Shares under the blue sky laws (to the extent applicable) of such jurisdiction or jurisdictions which the Company deems appropriate or necessary, provided, however, that the Company shall not be obligated to register or qualify any Warrant Shares under those "blue sky" securities laws which the Company deems are unduly burdensome in connection with such registration or qualification of Warrant Shares in such state; and, (c) take such other actions as may be reasonably necessary or advisable to enable such Holder(s) and such underwriters to consummate the sale or distribution in such jurisdiction or jurisdictions in which such Holder(s) shall have reasonably requested that the Warrant Shares be sold; provided, however, that the Company shall not be required to qualify as a foreign corporation or broker-dealer in any jurisdiction or to file a consent to service of process in any jurisdiction in any action other than one arising out of the offering or sale of the Warrant Shares.

5.3 The Company shall pay all expenses incurred in connection with any registration of the Warrant Shares pursuant to the provisions of this Section 5, except underwriting discounts, brokerage commissions, and applicable

insurance and transfer taxes relating to the sale of the Warrant Shares are to be paid by the Holder, and, should the Holder elect to be separately represented by counsel, the fees and disbursements payable to such counsel for the Holder shall be paid by the Holder.

5.4 In the event the Company includes any Warrant Shares in a Registration Statement filed by the Company with the Commission:

5.4.1 Except as otherwise provided in this Section 5.4, 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 supplements 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; provided, however, that the indemnity agreement contained in this Section 5.4.1 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.

5.4.2 Except as otherwise provided in this Section 5.4, 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 that

includes Warrant Shares, 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, officer, 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 supplements 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 untrue statement or 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 Registration Statement; provided, however, that the indemnity agreement contained in this section 5.4.2 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.

- 5.4.3 Upon receipt by a person entitled to indemnification pursuant to this Section 5.4 (an "Indemnified Party") 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 5.4, notify promptly in writing the indemnifying party of the commencement thereof, but the omission so to notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such claim or 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 reasonably 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 5.4 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 paid by the Indemnified Party, except that the indemnifying party shall pay such reasonable fees and expenses of such counsel only in the event that (a) the employment of such counsel has been specifically authorized in writing by the indemnifying party and the indemnifying party has agreed, in writing, to pay such fees and expenses, or (b) 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 by counsel for the indemnifying party that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept or counsel for the indemnifying party reasonably determines that there may be a conflict between the position of the indemnifying party and the Indemnified Party in conducting the defense of such action, then counsel for the Indemnified Party (at the indemnifying party's expense) shall be entitled to conduct only that part of the Indemnified Party's or parties' defense that counsel for the indemnifying party declines to, or cannot, conduct because of the foregoing reasons, 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 (1) separate firm of attorneys for all such Indemnified Party or parties.

## 6. Investment Representation and Transferability.

6.1 By acceptance hereof, the Holder 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 the Holder solely for the account of such Holder, 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 of the Commission promulgated thereunder. The Holder covenants and agrees that this Warrant and the Warrant Shares will not be sold or transferred except under cover of a Registration Statement under the Act which the Commission has declared effective and the applicable state securities laws and which is current with respect to such Warrant and the Warrant Shares or pursuant to an

opinion of counsel reasonably satisfactory to the Company that registration under the Act and the applicable state securities laws 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, or any applicable state securities laws, 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 and applicable state securities laws 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 and applicable state securities laws.

6.2 The Holder agrees that the Company may refuse to permit the sale, transfer or disposition of this Warrant or any of the Warrant Shares unless there is in effect a Registration Statement under the Act and any applicable state securities law covering such transfer or the Holder furnishes an opinion of counsel, reasonably satisfactory to counsel for the Company, to the effect that such registration is not required.

6.3 The Holder understands that under the Act, this Warrant and the Warrant Shares must be held indefinitely unless they are subsequently registered under the Act or unless an exemption from such registration is available with respect to any proposed transfer or disposition of the Warrant or the Warrant Shares.

7. 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 the Holder a new Warrant of like date, tenor and denomination.

8. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon the Holder any right to vote or to consent to or receive notice as a shareholder of the Company, as such, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

9. Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (a) on the business day actually received if given by hand or by fax, (b) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (c) five (5) business days following the mailing thereof, if mailed

by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 9) to:

If to the Company: Perma-Fix Environmental  
Services, Inc.  
1940 Northwest 67th Place  
Gainesville, Florida 32606-1649  
Attention: Dr. Louis F. Centofanti  
Chief Executive Officer

Fax No.: (352) 373-0040

If to the Holder: J W Charles Financial Services, Inc.  
980 North Federal Highway, Suite 310  
Boa Radon, Florida 33432  
Attention: Mr. Joel Marks  
Vice Chairman

Fax No.: (561) 338-2827

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

11. 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.

IN WITNESS WHEREOF, this Warrant has been signed by the parties hereto effective the ninth day of June, 1997.

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By

\_\_\_\_\_  
Dr. Louis F. Centofanti  
Chief Executive Officer

(the "Company")

J W CHARLES FINANCIAL SERVICES, INC.

By

\_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

(the "Holder")

#### 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 pursuant to the terms of 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 sells, assigns and transfers unto \_\_\_\_\_ the right to purchase \_\_\_\_\_ shares of the Common Stock of PERMA-FIX ENVIRONMENTAL SERVICES, INC. by the foregoing Warrant and all rights evidenced thereby, 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 \_\_\_\_\_

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER THE 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 THE WRITTEN OPINION OF COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY TO THE EFFECT THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR TRANSFER.

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE FLORIDA SECURITIES AND INVESTOR PROTECTION ACT ("FLORIDA ACT") AND ARE BEING GRANTED AND SOLD IN RELIANCE UPON AN EXEMPTION CONTAINED IN SECTION 517.061 (11) THEREOF. THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT MAY NOT BE REOFFERED FOR SALE OR RESOLD IN THE STATE OF FLORIDA UNLESS SUCH ARE REGISTERED OR THE TRANSACTION IS EXEMPT UNDER THE FLORIDA ACT. ANY SALE MADE UNDER THIS WARRANT TO A PERSON IN FLORIDA UNDER SUCH SUBSECTION IS VOIDABLE AT THE OPTION OF SUCH PERSON WITHIN THREE (3) DAYS AFTER THE FIRST TENDER OF CONSIDERATION IS MADE BY SUCH PERSON TO THE ISSUER OR ITS AGENT, OR WITHIN THREE DAYS AFTER THE AVAILABILITY OF THIS PRIVILEGE IS COMMUNICATED TO SUCH PERSON, WHICH EVER OCCURS LATER.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

No. 6-97-2  
June 9, 1997

200,000 shares of  
Common Stock

FOR VALUE RECEIVED, PERMA-FIX ENVIRONMENTAL SERVICES, INC. (the "Company"), a Delaware corporation, hereby certifies that J W CHARLES FINANCIAL SERVICES, INC., or any permitted assignee thereof (the "Holder"), is entitled to purchase from the Company, at any time in whole, or from time to time in part, during the period commencing the date of this Warrant and ending at 5:00 p.m. Eastern Daylight Savings Time on June 9, 2002 (the "Exercise Period"), up to two hundred thousand (200,000) fully paid and nonassessable shares of common stock, \$.001 par value, of the Company (the "Common Stock"), at a purchase price of \$2.00 per share; provided, however, that the number of shares of Common Stock to be issued and delivered by the Company upon any exercise of this Warrant and the purchase price to be paid for each such share shall be subject to adjustment from time to time as hereinafter provided in this Warrant. 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 "Warrants"; the shares of Common Stock issuable and issued upon exercise of the Warrants are 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 the Holder by the surrender of this Warrant (with the subscription form at the end hereof duly executed by the Holder) at the address set forth in Section 9 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, payable in New York Clearing House funds, 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 the Holder shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised. Upon any exercise and surrender of this Warrant, the Company (a) will issue and deliver to the Holder a certificate or certificates in the name of the Holder for the largest whole number of Warrant Shares to which the Holder shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which the Holder 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 (b) will deliver to the Holder such other securities and properties which the Holder 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.

## 2. Reservation of Warrant Shares.

2.1 The Company covenants and agrees that all Warrant Shares which may be acquired by the Holder under this Warrant will, when issued and upon delivery, be duly and validly authorized and issued, fully paid and nonassessable, and free from all restrictions on the sale or transfer thereof, except such restrictions as may be imposed under applicable federal and state securities laws and applicable exchange on which the Common Stock may be listed, and free and clear of all preemptive rights.

2.2 The Company covenants and agrees that it will, at all times, reserve and keep available an authorized number of shares of its Common Stock and other applicable securities sufficient to permit the exercise in full of this Warrant; and, if at the time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action at its next annual meeting of stockholders as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

## 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 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, upon the exercise of this Warrant, shall be entitled to receive the securities and property which the Holder would hold on the date of such exercise if, on the date of this 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 this 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.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (a) pay a dividend on its Common Stock in shares of Common Stock, (b) subdivide its outstanding shares of Common Stock into a greater number of shares, (c) combine its outstanding shares of Common Stock into a smaller number of shares, or (d) 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, the Holder 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 the Holder 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 the Holder would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares the Holder 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, the Holder of this Warrant thereafter surrendered for exercise 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 all holders of the Warrants 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 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 this Warrant shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which he would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had this 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 shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of the Holder of this Warrant 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. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be mailed to the Holder not less than thirty (30) 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.

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 this 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 Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company receives a written request from the Holder (whether or not the Holder theretofore shall have exercised this Warrant in whole or in part), and provided that (a) at the time of such request the Holder is the owner of, and/or has the right pursuant to this Warrant to purchase, Warrant Shares representing at least fifty percent (50%) of the total number of Warrant Shares, and (b) the Company has not theretofore included within the coverage of a Registration Statement filed by the Company with the Securities and Exchange Commission ("Commission") under the Securities Act of 1933, as amended (the "Act"), which Registration Statement has been declared effective by the Commission, at least fifty percent (50%) of the Warrant Shares, the Company shall (x) prepare promptly and file with the Commission a Registration Statement under the Act covering all of the Warrant Shares theretofore issued and which thereafter may be issuable upon the exercise of Warrants (provided, that the audited financial statements to be included in such Registration Statement shall be the year-end financial statements customarily included in the Company's Annual Report on Form 10-K under the Securities Exchange Act of 1934 (the "Exchange Act"), and provided further, that, if the request for registration is received within three (3) months prior to the commencement of a fiscal year of the Company, the Company may delay the preparation and filing of such Registration Statement for a period of not more than ninety (90) days following the commencement of such fiscal year in order to prepare and include in such Registration Statement audited financial statements for the immediately preceding fiscal year); (y) use its reasonable efforts to

cause such Registration Statement to become effective and to remain effective and current with respect to the Warrant Shares for an aggregate period of one (1) year (exclusive of any period during which the prospectus included therein shall not meet the requirements of Section 10 of the Act); and (z) take all other action necessary or appropriate to cause the prospectus included therein to be available for the sale of Warrant Shares from time to time during such period by the holders thereof in ordinary brokerage transactions in the over-the-counter market or on any national securities exchange on which the Common Stock is then listed. The right to demand the filing of a Registration Statement pursuant to this subsection 5.1 shall be exercisable on one (1) occasion only. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of such time as the Holder shall receive from counsel for the Company a written opinion of such counsel that the Holder has the right, pursuant to Rule 144 promulgated under the Act, to sell as of the date of such opinion, any portion of the Warrant Shares then held and/or purchasable upon the exercise of this Warrant by the Holder, or upon a Registration Statement being declared effective by the Commission in which the Company has included at least fifty percent (50%) of the Warrant Shares within the coverage of such Registration Statement.

5.2 Whenever the Company includes Warrant Shares in a Registration Statement, the Company shall (a) furnish the Holder of Warrant Shares included in such Registration Statement and each underwriter of such Warrant Shares with such copies of a current prospectus, including the preliminary prospectus, conforming to the requirements of Section 10 of the Act (and such other documents as each such Holder or each such underwriter may reasonably request), as such Holder(s) and underwriter(s) may reasonably require in order to effectuate the offer and sale of the Warrant Shares included in such Registration Statement; (b) use its reasonable efforts to register or qualify such Warrant Shares under the blue sky laws (to the extent applicable) of such jurisdiction or jurisdictions which the Company deems appropriate or necessary, provided, however, that the Company shall not be obligated to register or qualify any Warrant Shares under those "blue sky" securities laws which the Company deems are unduly burdensome in connection with such registration or qualification of Warrant Shares in such state; and, (c) take such other actions as may be reasonably necessary or advisable to enable such Holder(s) and such underwriters to consummate the sale or distribution in such jurisdiction or jurisdictions in which such Holder(s) shall have reasonably requested that the Warrant Shares be sold; provided, however, that the Company shall not be required to qualify as a foreign corporation or broker-dealer in any jurisdiction or to file a consent to service of process in any jurisdiction in any action other than one arising out of the offering or sale of the Warrant Shares.

5.3 The Company shall pay all expenses incurred in connection with any registration of the Warrant Shares pursuant to the provisions of this Section 5, except underwriting discounts, brokerage commissions, and applicable

insurance and transfer taxes relating to the sale of the Warrant Shares are to be paid by the Holder, and, should the Holder elect to be separately represented by counsel, the fees and disbursements payable to such counsel for the Holder shall be paid by the Holder.

5.4 In the event the Company includes any Warrant Shares in a Registration Statement filed by the Company with the Commission:

5.4.1 Except as otherwise provided in this Section 5.4, 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 supplements 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; provided, however, that the indemnity agreement contained in this Section 5.4.1 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.

5.4.2 Except as otherwise provided in this Section 5.4, 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 that

includes Warrant Shares, 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, officer, 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 supplements 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 untrue statement or 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 Registration Statement; provided, however, that the indemnity agreement contained in this section 5.4.2 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.

- 5.4.3 Upon receipt by a person entitled to indemnification pursuant to this Section 5.4 (an "Indemnified Party") 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 5.4, notify promptly in writing the indemnifying party of the commencement thereof, but the omission so to notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such claim or 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 reasonably 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 5.4 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 paid by the Indemnified Party, except that the indemnifying party shall pay such reasonable fees and expenses of such counsel only in the event that (a) the employment of such counsel has been specifically authorized in writing by the indemnifying party and the indemnifying party has agreed, in writing, to pay such fees and expenses, or (b) 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 by counsel for the indemnifying party that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept or counsel for the indemnifying party reasonably determines that there may be a conflict between the position of the indemnifying party and the Indemnified Party in conducting the defense of such action, then counsel for the Indemnified Party (at the indemnifying party's expense) shall be entitled to conduct only that part of the Indemnified Party's or parties' defense that counsel for the indemnifying party declines to, or cannot, conduct because of the foregoing reasons, 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 (1) separate firm of attorneys for all such Indemnified Party or parties.

## 6. Investment Representation and Transferability.

6.1 By acceptance hereof, the Holder 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 the Holder solely for the account of such Holder, 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 of the Commission promulgated thereunder. The Holder covenants and agrees that this Warrant and the Warrant Shares will not be sold or transferred except under cover of a Registration Statement under the Act which the Commission has declared effective and the applicable state securities laws and which is current with respect to such Warrant and the Warrant Shares or pursuant to an

opinion of counsel reasonably satisfactory to the Company that registration under the Act and the applicable state securities laws 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, or any applicable state securities laws, 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 and applicable state securities laws 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 and applicable state securities laws.

6.2 The Holder agrees that the Company may refuse to permit the sale, transfer or disposition of this Warrant or any of the Warrant Shares unless there is in effect a Registration Statement under the Act and any applicable state securities law covering such transfer or the Holder furnishes an opinion of counsel, reasonably satisfactory to counsel for the Company, to the effect that such registration is not required.

6.3 The Holder understands that under the Act, this Warrant and the Warrant Shares must be held indefinitely unless they are subsequently registered under the Act or unless an exemption from such registration is available with respect to any proposed transfer or disposition of the Warrant or the Warrant Shares.

7. 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 the Holder a new Warrant of like date, tenor and denomination.

8. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon the Holder any right to vote or to consent to or receive notice as a shareholder of the Company, as such, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

9. Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (a) on the business day actually received if given by hand or by fax, (b) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (c) five (5) business days following the mailing thereof, if mailed



by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 9) to:

If to the Company: Perma-Fix Environmental  
Services, Inc.  
1940 Northwest 67th Place  
Gainesville, Florida 32606-1649  
Attention: Dr. Louis F. Centofanti  
Chief Executive Officer

Fax No.: (352) 373-0040

If to the Holder: J W Charles Financial Services, Inc.  
980 North Federal Highway, Suite 310  
Boa Radon, Florida 33432  
Attention: Mr. Joel Marks  
Vice Chairman

Fax No.: (561) 338-2827

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

11. 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.

IN WITNESS WHEREOF, this Warrant has been signed by the parties hereto effective the ninth day of June, 1997.

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By

\_\_\_\_\_  
Dr. Louis F. Centofanti  
Chief Executive Officer

(the "Company")

J W CHARLES FINANCIAL SERVICES, INC.

By

\_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

(the "Holder")

#### 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 pursuant to the terms of 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 sells, assigns and transfers unto \_\_\_\_\_ the right to purchase \_\_\_\_\_ shares of the Common Stock of PERMA-FIX ENVIRONMENTAL SERVICES, INC. by the foregoing Warrant and all rights evidenced thereby, 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 \_\_\_\_\_

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER THE 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 THE WRITTEN OPINION OF COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY TO THE EFFECT THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR TRANSFER.

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE FLORIDA SECURITIES AND INVESTOR PROTECTION ACT ("FLORIDA ACT") AND ARE BEING GRANTED AND SOLD IN RELIANCE UPON AN EXEMPTION CONTAINED IN SECTION 517.061 (11) THEREOF. THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT MAY NOT BE REOFFERED FOR SALE OR RESOLD IN THE STATE OF FLORIDA UNLESS SUCH ARE REGISTERED OR THE TRANSACTION IS EXEMPT UNDER THE FLORIDA ACT. ANY SALE MADE UNDER THIS WARRANT TO A PERSON IN FLORIDA UNDER SUCH SUBSECTION IS VOIDABLE AT THE OPTION OF SUCH PERSON WITHIN THREE (3) DAYS AFTER THE FIRST TENDER OF CONSIDERATION IS MADE BY SUCH PERSON TO THE ISSUER OR ITS AGENT, OR WITHIN THREE DAYS AFTER THE AVAILABILITY OF THIS PRIVILEGE IS COMMUNICATED TO SUCH PERSON, WHICH EVER OCCURS LATER.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

No. 6-97-2  
June 9, 1997

200,000 shares of  
Common Stock

FOR VALUE RECEIVED, PERMA-FIX ENVIRONMENTAL SERVICES, INC. (the "Company"), a Delaware corporation, hereby certifies that J W CHARLES FINANCIAL SERVICES, INC., or any permitted assignee thereof (the "Holder"), is entitled to purchase from the Company, at any time in whole, or from time to time in part, during the period commencing the date of this Warrant and ending at 5:00 p.m. Eastern Daylight Savings Time on June 9, 2002 (the "Exercise Period"), up to two hundred thousand (200,000) fully paid and nonassessable shares of common stock, \$.001 par value, of the Company (the "Common Stock"), at a purchase price of \$2.00 per share; provided, however, that the number of shares of Common Stock to be issued and delivered by the Company upon any exercise of this Warrant and the purchase price to be paid for each such share shall be subject to adjustment from time to time as hereinafter provided in this Warrant. 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 "Warrants"; the shares of Common Stock issuable and issued upon exercise of the Warrants are 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 the Holder by the surrender of this Warrant (with the subscription form at the end hereof duly executed by the Holder) at the address set forth in Section 9 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, payable in New York Clearing House funds, 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 the Holder shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised. Upon any exercise and surrender of this Warrant, the Company (a) will issue and deliver to the Holder a certificate or certificates in the name of the Holder for the largest whole number of Warrant Shares to which the Holder shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which the Holder 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 (b) will deliver to the Holder such other securities and properties which the Holder 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.

## 2. Reservation of Warrant Shares.

2.1 The Company covenants and agrees that all Warrant Shares which may be acquired by the Holder under this Warrant will, when issued and upon delivery, be duly and validly authorized and issued, fully paid and nonassessable, and free from all restrictions on the sale or transfer thereof, except such restrictions as may be imposed under applicable federal and state securities laws and applicable exchange on which the Common Stock may be listed, and free and clear of all preemptive rights.

2.2 The Company covenants and agrees that it will, at all times, reserve and keep available an authorized number of shares of its Common Stock and other applicable securities sufficient to permit the exercise in full of this Warrant; and, if at the time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action at its next annual meeting of stockholders as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

## 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 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, upon the exercise of this Warrant, shall be entitled to receive the securities and property which the Holder would hold on the date of such exercise if, on the date of this 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 this 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.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (a) pay a dividend on its Common Stock in shares of Common Stock, (b) subdivide its outstanding shares of Common Stock into a greater number of shares, (c) combine its outstanding shares of Common Stock into a smaller number of shares, or (d) 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, the Holder 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 the Holder 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 the Holder would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares the Holder 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, the Holder of this Warrant thereafter surrendered for exercise 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 all holders of the Warrants 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 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 this Warrant shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which he would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had this 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 shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of the Holder of this Warrant 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. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be mailed to the Holder not less than thirty (30) 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.

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 this 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 Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company receives a written request from the Holder (whether or not the Holder theretofore shall have exercised this Warrant in whole or in part), and provided that (a) at the time of such request the Holder is the owner of, and/or has the right pursuant to this Warrant to purchase, Warrant Shares representing at least fifty percent (50%) of the total number of Warrant Shares, and (b) the Company has not theretofore included within the coverage of a Registration Statement filed by the Company with the Securities and Exchange Commission ("Commission") under the Securities Act of 1933, as amended (the "Act"), which Registration Statement has been declared effective by the Commission, at least fifty percent (50%) of the Warrant Shares, the Company shall (x) prepare promptly and file with the Commission a Registration Statement under the Act covering all of the Warrant Shares theretofore issued and which thereafter may be issuable upon the exercise of Warrants (provided, that the audited financial statements to be included in such Registration Statement shall be the year-end financial statements customarily included in the Company's Annual Report on Form 10-K under the Securities Exchange Act of 1934 (the "Exchange Act"), and provided further, that, if the request for registration is received within three (3) months prior to the commencement of a fiscal year of the Company, the Company may delay the preparation and filing of such Registration Statement for a period of not more than ninety (90) days following the commencement of such fiscal year in order to prepare and include in such Registration Statement audited financial statements for the immediately preceding fiscal year); (y) use its reasonable efforts to

cause such Registration Statement to become effective and to remain effective and current with respect to the Warrant Shares for an aggregate period of one (1) year (exclusive of any period during which the prospectus included therein shall not meet the requirements of Section 10 of the Act); and (z) take all other action necessary or appropriate to cause the prospectus included therein to be available for the sale of Warrant Shares from time to time during such period by the holders thereof in ordinary brokerage transactions in the over-the-counter market or on any national securities exchange on which the Common Stock is then listed. The right to demand the filing of a Registration Statement pursuant to this subsection 5.1 shall be exercisable on one (1) occasion only. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of such time as the Holder shall receive from counsel for the Company a written opinion of such counsel that the Holder has the right, pursuant to Rule 144 promulgated under the Act, to sell as of the date of such opinion, any portion of the Warrant Shares then held and/or purchasable upon the exercise of this Warrant by the Holder, or upon a Registration Statement being declared effective by the Commission in which the Company has included at least fifty percent (50%) of the Warrant Shares within the coverage of such Registration Statement.

5.2 Whenever the Company includes Warrant Shares in a Registration Statement, the Company shall (a) furnish the Holder of Warrant Shares included in such Registration Statement and each underwriter of such Warrant Shares with such copies of a current prospectus, including the preliminary prospectus, conforming to the requirements of Section 10 of the Act (and such other documents as each such Holder or each such underwriter may reasonably request), as such Holder(s) and underwriter(s) may reasonably require in order to effectuate the offer and sale of the Warrant Shares included in such Registration Statement; (b) use its reasonable efforts to register or qualify such Warrant Shares under the blue sky laws (to the extent applicable) of such jurisdiction or jurisdictions which the Company deems appropriate or necessary, provided, however, that the Company shall not be obligated to register or qualify any Warrant Shares under those "blue sky" securities laws which the Company deems are unduly burdensome in connection with such registration or qualification of Warrant Shares in such state; and, (c) take such other actions as may be reasonably necessary or advisable to enable such Holder(s) and such underwriters to consummate the sale or distribution in such jurisdiction or jurisdictions in which such Holder(s) shall have reasonably requested that the Warrant Shares be sold; provided, however, that the Company shall not be required to qualify as a foreign corporation or broker-dealer in any jurisdiction or to file a consent to service of process in any jurisdiction in any action other than one arising out of the offering or sale of the Warrant Shares.

5.3 The Company shall pay all expenses incurred in connection with any registration of the Warrant Shares pursuant to the provisions of this Section 5, except underwriting discounts, brokerage commissions, and applicable

insurance and transfer taxes relating to the sale of the Warrant Shares are to be paid by the Holder, and, should the Holder elect to be separately represented by counsel, the fees and disbursements payable to such counsel for the Holder shall be paid by the Holder.

5.4 In the event the Company includes any Warrant Shares in a Registration Statement filed by the Company with the Commission:

5.4.1 Except as otherwise provided in this Section 5.4, 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 supplements 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; provided, however, that the indemnity agreement contained in this Section 5.4.1 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.

5.4.2 Except as otherwise provided in this Section 5.4, 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 that



includes Warrant Shares, 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, officer, 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 supplements 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 untrue statement or 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 Registration Statement; provided, however, that the indemnity agreement contained in this section 5.4.2 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.

- 5.4.3 Upon receipt by a person entitled to indemnification pursuant to this Section 5.4 (an "Indemnified Party") 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 5.4, notify promptly in writing the indemnifying party of the commencement thereof, but the omission so to notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such claim or 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 reasonably 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 5.4 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 paid by the Indemnified Party, except that the indemnifying party shall pay such reasonable fees and expenses of such counsel only in the event that (a) the employment of such counsel has been specifically authorized in writing by the indemnifying party and the indemnifying party has agreed, in writing, to pay such fees and expenses, or (b) 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 by counsel for the indemnifying party that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept or counsel for the indemnifying party reasonably determines that there may be a conflict between the position of the indemnifying party and the Indemnified Party in conducting the defense of such action, then counsel for the Indemnified Party (at the indemnifying party's expense) shall be entitled to conduct only that part of the Indemnified Party's or parties' defense that counsel for the indemnifying party declines to, or cannot, conduct because of the foregoing reasons, 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 (1) separate firm of attorneys for all such Indemnified Party or parties.

## 6. Investment Representation and Transferability.

- 6.1 By acceptance hereof, the Holder 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 the Holder solely for the account of such Holder, 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 of the Commission promulgated thereunder. The Holder covenants and agrees that this Warrant and the Warrant Shares will not be sold or transferred except under cover of a Registration Statement under the Act which the Commission has declared effective and the applicable state securities laws and which is current with respect to such Warrant and the Warrant Shares or pursuant to an

opinion of counsel reasonably satisfactory to the Company that registration under the Act and the applicable state securities laws 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, or any applicable state securities laws, 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 and applicable state securities laws 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 and applicable state securities laws.

6.2 The Holder agrees that the Company may refuse to permit the sale, transfer or disposition of this Warrant or any of the Warrant Shares unless there is in effect a Registration Statement under the Act and any applicable state securities law covering such transfer or the Holder furnishes an opinion of counsel, reasonably satisfactory to counsel for the Company, to the effect that such registration is not required.

6.3 The Holder understands that under the Act, this Warrant and the Warrant Shares must be held indefinitely unless they are subsequently registered under the Act or unless an exemption from such registration is available with respect to any proposed transfer or disposition of the Warrant or the Warrant Shares.

7. 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 the Holder a new Warrant of like date, tenor and denomination.

8. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon the Holder any right to vote or to consent to or receive notice as a shareholder of the Company, as such, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

9. Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (a) on the business day actually received if given by hand or by fax, (b) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (c) five (5) business days following the mailing thereof, if mailed

by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 9) to:

If to the Company: Perma-Fix Environmental  
Services, Inc.  
1940 Northwest 67th Place  
Gainesville, Florida 32606-1649  
Attention: Dr. Louis F. Centofanti  
Chief Executive Officer

Fax No.: (352) 373-0040

If to the Holder: J W Charles Financial Services, Inc.  
980 North Federal Highway, Suite 310  
Boa Radon, Florida 33432  
Attention: Mr. Joel Marks  
Vice Chairman

Fax No.: (561) 338-2827

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

11. 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.

IN WITNESS WHEREOF, this Warrant has been signed by the parties hereto effective the ninth day of June, 1997.

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By

\_\_\_\_\_  
Dr. Louis F. Centofanti  
Chief Executive Officer

(the "Company")

J W CHARLES FINANCIAL SERVICES, INC.

By

\_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

(the "Holder")

#### 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 pursuant to the terms of 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 sells, assigns and transfers unto \_\_\_\_\_ the right to purchase \_\_\_\_\_ shares of the Common Stock of PERMA-FIX ENVIRONMENTAL SERVICES, INC. by the foregoing Warrant and all rights evidenced thereby, 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 \_\_\_\_\_

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER THE 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 THE WRITTEN OPINION OF COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY TO THE EFFECT THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR TRANSFER.

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE FLORIDA SECURITIES AND INVESTOR PROTECTION ACT ("FLORIDA ACT") AND ARE BEING GRANTED AND SOLD IN RELIANCE UPON AN EXEMPTION CONTAINED IN SECTION 517.061 (11) THEREOF. THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT MAY NOT BE REOFFERED FOR SALE OR RESOLD IN THE STATE OF FLORIDA UNLESS SUCH ARE REGISTERED OR THE TRANSACTION IS EXEMPT UNDER THE FLORIDA ACT. ANY SALE MADE UNDER THIS WARRANT TO A PERSON IN FLORIDA UNDER SUCH SUBSECTION IS VOIDABLE AT THE OPTION OF SUCH PERSON WITHIN THREE (3) DAYS AFTER THE FIRST TENDER OF CONSIDERATION IS MADE BY SUCH PERSON TO THE ISSUER OR ITS AGENT, OR WITHIN THREE DAYS AFTER THE AVAILABILITY OF THIS PRIVILEGE IS COMMUNICATED TO SUCH PERSON, WHICH EVER OCCURS LATER.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

No. 6-97-2  
June 9, 1997

200,000 shares of  
Common Stock

FOR VALUE RECEIVED, PERMA-FIX ENVIRONMENTAL SERVICES, INC. (the "Company"), a Delaware corporation, hereby certifies that J W CHARLES FINANCIAL SERVICES, INC., or any permitted assignee thereof (the "Holder"), is entitled to purchase from the Company, at any time in whole, or from time to time in part, during the period commencing the date of this Warrant and ending at 5:00 p.m. Eastern Daylight Savings Time on June 9, 2002 (the "Exercise Period"), up to two hundred thousand (200,000) fully paid and nonassessable shares of common stock, \$.001 par value, of the Company (the "Common Stock"), at a purchase price of \$2.00 per share; provided, however, that the number of shares of Common Stock to be issued and delivered by the Company upon any exercise of this Warrant and the purchase price to be paid for each such share shall be subject to adjustment from time to time as hereinafter provided in this Warrant. 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 "Warrants"; the shares of Common Stock issuable and issued upon exercise of the Warrants are 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 the Holder by the surrender of this Warrant (with the subscription form at the end hereof duly executed by the Holder) at the address set forth in Section 9 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, payable in New York Clearing House funds, 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 the Holder shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised. Upon any exercise and surrender of this Warrant, the Company (a) will issue and deliver to the Holder a certificate or certificates in the name of the Holder for the largest whole number of Warrant Shares to which the Holder shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which the Holder 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 (b) will deliver to the Holder such other securities and properties which the Holder 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.

## 2. Reservation of Warrant Shares.

2.1 The Company covenants and agrees that all Warrant Shares which may be acquired by the Holder under this Warrant will, when issued and upon delivery, be duly and validly authorized and issued, fully paid and nonassessable, and free from all restrictions on the sale or transfer thereof, except such restrictions as may be imposed under applicable federal and state securities laws and applicable exchange on which the Common Stock may be listed, and free and clear of all preemptive rights.

2.2 The Company covenants and agrees that it will, at all times, reserve and keep available an authorized number of shares of its Common Stock and other applicable securities sufficient to permit the exercise in full of this Warrant; and, if at the time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action at its next annual meeting of stockholders as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

## 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 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, upon the exercise of this Warrant, shall be entitled to receive the securities and property which the Holder would hold on the date of such exercise if, on the date of this 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 this 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.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (a) pay a dividend on its Common Stock in shares of Common Stock, (b) subdivide its outstanding shares of Common Stock into a greater number of shares, (c) combine its outstanding shares of Common Stock into a smaller number of shares, or (d) 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, the Holder 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 the Holder 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 the Holder would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares the Holder 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, the Holder of this Warrant thereafter surrendered for exercise 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 all holders of the Warrants 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 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 this Warrant shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which he would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had this 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 shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of the Holder of this Warrant 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. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be mailed to the Holder not less than thirty (30) 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.

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 this 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 Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company receives a written request from the Holder (whether or not the Holder theretofore shall have exercised this Warrant in whole or in part), and provided that (a) at the time of such request the Holder is the owner of, and/or has the right pursuant to this Warrant to purchase, Warrant Shares representing at least fifty percent (50%) of the total number of Warrant Shares, and (b) the Company has not theretofore included within the coverage of a Registration Statement filed by the Company with the Securities and Exchange Commission ("Commission") under the Securities Act of 1933, as amended (the "Act"), which Registration Statement has been declared effective by the Commission, at least fifty percent (50%) of the Warrant Shares, the Company shall (x) prepare promptly and file with the Commission a Registration Statement under the Act covering all of the Warrant Shares theretofore issued and which thereafter may be issuable upon the exercise of Warrants (provided, that the audited financial statements to be included in such Registration Statement shall be the year-end financial statements customarily included in the Company's Annual Report on Form 10-K under the Securities Exchange Act of 1934 (the "Exchange Act"), and provided further, that, if the request for registration is received within three (3) months prior to the commencement of a fiscal year of the Company, the Company may delay the preparation and filing of such Registration Statement for a period of not more than ninety (90) days following the commencement of such fiscal year in order to prepare and include in such Registration Statement audited financial statements for the immediately preceding fiscal year); (y) use its reasonable efforts to

cause such Registration Statement to become effective and to remain effective and current with respect to the Warrant Shares for an aggregate period of one (1) year (exclusive of any period during which the prospectus included therein shall not meet the requirements of Section 10 of the Act); and (z) take all other action necessary or appropriate to cause the prospectus included therein to be available for the sale of Warrant Shares from time to time during such period by the holders thereof in ordinary brokerage transactions in the over-the-counter market or on any national securities exchange on which the Common Stock is then listed. The right to demand the filing of a Registration Statement pursuant to this subsection 5.1 shall be exercisable on one (1) occasion only. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of such time as the Holder shall receive from counsel for the Company a written opinion of such counsel that the Holder has the right, pursuant to Rule 144 promulgated under the Act, to sell as of the date of such opinion, any portion of the Warrant Shares then held and/or purchasable upon the exercise of this Warrant by the Holder, or upon a Registration Statement being declared effective by the Commission in which the Company has included at least fifty percent (50%) of the Warrant Shares within the coverage of such Registration Statement.

5.2 Whenever the Company includes Warrant Shares in a Registration Statement, the Company shall (a) furnish the Holder of Warrant Shares included in such Registration Statement and each underwriter of such Warrant Shares with such copies of a current prospectus, including the preliminary prospectus, conforming to the requirements of Section 10 of the Act (and such other documents as each such Holder or each such underwriter may reasonably request), as such Holder(s) and underwriter(s) may reasonably require in order to effectuate the offer and sale of the Warrant Shares included in such Registration Statement; (b) use its reasonable efforts to register or qualify such Warrant Shares under the blue sky laws (to the extent applicable) of such jurisdiction or jurisdictions which the Company deems appropriate or necessary, provided, however, that the Company shall not be obligated to register or qualify any Warrant Shares under those "blue sky" securities laws which the Company deems are unduly burdensome in connection with such registration or qualification of Warrant Shares in such state; and, (c) take such other actions as may be reasonably necessary or advisable to enable such Holder(s) and such underwriters to consummate the sale or distribution in such jurisdiction or jurisdictions in which such Holder(s) shall have reasonably requested that the Warrant Shares be sold; provided, however, that the Company shall not be required to qualify as a foreign corporation or broker-dealer in any jurisdiction or to file a consent to service of process in any jurisdiction in any action other than one arising out of the offering or sale of the Warrant Shares.

5.3 The Company shall pay all expenses incurred in connection with any registration of the Warrant Shares pursuant to the provisions of this Section 5, except underwriting discounts, brokerage commissions, and applicable

insurance and transfer taxes relating to the sale of the Warrant Shares are to be paid by the Holder, and, should the Holder elect to be separately represented by counsel, the fees and disbursements payable to such counsel for the Holder shall be paid by the Holder.

5.4 In the event the Company includes any Warrant Shares in a Registration Statement filed by the Company with the Commission:

5.4.1 Except as otherwise provided in this Section 5.4, 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 supplements 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; provided, however, that the indemnity agreement contained in this Section 5.4.1 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.

5.4.2 Except as otherwise provided in this Section 5.4, 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 that

includes Warrant Shares, 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, officer, 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 supplements 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 untrue statement or 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 Registration Statement; provided, however, that the indemnity agreement contained in this section 5.4.2 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.

- 5.4.3 Upon receipt by a person entitled to indemnification pursuant to this Section 5.4 (an "Indemnified Party") 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 5.4, notify promptly in writing the indemnifying party of the commencement thereof, but the omission so to notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such claim or 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 reasonably 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 5.4 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 paid by the Indemnified Party, except that the indemnifying party shall pay such reasonable fees and expenses of such counsel only in the event that (a) the employment of such counsel has been specifically authorized in writing by the indemnifying party and the indemnifying party has agreed, in writing, to pay such fees and expenses, or (b) 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 by counsel for the indemnifying party that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept or counsel for the indemnifying party reasonably determines that there may be a conflict between the position of the indemnifying party and the Indemnified Party in conducting the defense of such action, then counsel for the Indemnified Party (at the indemnifying party's expense) shall be entitled to conduct only that part of the Indemnified Party's or parties' defense that counsel for the indemnifying party declines to, or cannot, conduct because of the foregoing reasons, 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 (1) separate firm of attorneys for all such Indemnified Party or parties.

## 6. Investment Representation and Transferability.

6.1 By acceptance hereof, the Holder 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 the Holder solely for the account of such Holder, 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 of the Commission promulgated thereunder. The Holder covenants and agrees that this Warrant and the Warrant Shares will not be sold or transferred except under cover of a Registration Statement under the Act which the Commission has declared effective and the applicable state securities laws and which is current with respect to such Warrant and the Warrant Shares or pursuant to an

opinion of counsel reasonably satisfactory to the Company that registration under the Act and the applicable state securities laws 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, or any applicable state securities laws, 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 and applicable state securities laws 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 and applicable state securities laws.

6.2 The Holder agrees that the Company may refuse to permit the sale, transfer or disposition of this Warrant or any of the Warrant Shares unless there is in effect a Registration Statement under the Act and any applicable state securities law covering such transfer or the Holder furnishes an opinion of counsel, reasonably satisfactory to counsel for the Company, to the effect that such registration is not required.

6.3 The Holder understands that under the Act, this Warrant and the Warrant Shares must be held indefinitely unless they are subsequently registered under the Act or unless an exemption from such registration is available with respect to any proposed transfer or disposition of the Warrant or the Warrant Shares.

7. 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 the Holder a new Warrant of like date, tenor and denomination.

8. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon the Holder any right to vote or to consent to or receive notice as a shareholder of the Company, as such, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

9. Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (a) on the business day actually received if given by hand or by fax, (b) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (c) five (5) business days following the mailing thereof, if mailed

by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 9) to:

If to the Company: Perma-Fix Environmental  
Services, Inc.  
1940 Northwest 67th Place  
Gainesville, Florida 32606-1649  
Attention: Dr. Louis F. Centofanti  
Chief Executive Officer

Fax No.: (352) 373-0040

If to the Holder: J W Charles Financial Services, Inc.  
980 North Federal Highway, Suite 310  
Boa Radon, Florida 33432  
Attention: Mr. Joel Marks  
Vice Chairman

Fax No.: (561) 338-2827

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

11. 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.

IN WITNESS WHEREOF, this Warrant has been signed by the parties hereto effective the ninth day of June, 1997.

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By

\_\_\_\_\_  
Dr. Louis F. Centofanti  
Chief Executive Officer

(the "Company")

J W CHARLES FINANCIAL SERVICES, INC.

By

\_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

(the "Holder")

#### 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 pursuant to the terms of 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 sells, assigns and transfers unto \_\_\_\_\_ the right to purchase \_\_\_\_\_ shares of the Common Stock of PERMA-FIX ENVIRONMENTAL SERVICES, INC. by the foregoing Warrant and all rights evidenced thereby, 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 \_\_\_\_\_



THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER THE 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 THE WRITTEN OPINION OF COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY TO THE EFFECT THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR TRANSFER.

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE FLORIDA SECURITIES AND INVESTOR PROTECTION ACT ("FLORIDA ACT") AND ARE BEING GRANTED AND SOLD IN RELIANCE UPON AN EXEMPTION CONTAINED IN SECTION 517.061 (11) THEREOF. THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT MAY NOT BE REOFFERED FOR SALE OR RESOLD IN THE STATE OF FLORIDA UNLESS SUCH ARE REGISTERED OR THE TRANSACTION IS EXEMPT UNDER THE FLORIDA ACT. ANY SALE MADE UNDER THIS WARRANT TO A PERSON IN FLORIDA UNDER SUCH SUBSECTION IS VOIDABLE AT THE OPTION OF SUCH PERSON WITHIN THREE (3) DAYS AFTER THE FIRST TENDER OF CONSIDERATION IS MADE BY SUCH PERSON TO THE ISSUER OR ITS AGENT, OR WITHIN THREE DAYS AFTER THE AVAILABILITY OF THIS PRIVILEGE IS COMMUNICATED TO SUCH PERSON, WHICH EVER OCCURS LATER.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

No. 6-97-2  
June 9, 1997

200,000 shares of  
Common Stock

FOR VALUE RECEIVED, PERMA-FIX ENVIRONMENTAL SERVICES, INC. (the "Company"), a Delaware corporation, hereby certifies that J W CHARLES FINANCIAL SERVICES, INC., or any permitted assignee thereof (the "Holder"), is entitled to purchase from the Company, at any time in whole, or from time to time in part, during the period commencing the date of this Warrant and ending at 5:00 p.m. Eastern Daylight Savings Time on June 9, 2002 (the "Exercise Period"), up to two hundred thousand (200,000) fully paid and nonassessable shares of common stock, \$.001 par value, of the Company (the "Common Stock"), at a purchase price of \$2.00 per share; provided, however, that the number of shares of Common Stock to be issued and delivered by the Company upon any exercise of this Warrant and the purchase price to be paid for each such share shall be subject to adjustment from time to time as hereinafter provided in this Warrant. 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 "Warrants"; the shares of Common Stock issuable and issued upon exercise of the Warrants are 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 the Holder by the surrender of this Warrant (with the subscription form at the end hereof duly executed by the Holder) at the address set forth in Section 9 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, payable in New York Clearing House funds, 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 the Holder shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised. Upon any exercise and surrender of this Warrant, the Company (a) will issue and deliver to the Holder a certificate or certificates in the name of the Holder for the largest whole number of Warrant Shares to which the Holder shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which the Holder 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 (b) will deliver to the Holder such other securities and properties which the Holder 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.

## 2. Reservation of Warrant Shares.

2.1 The Company covenants and agrees that all Warrant Shares which may be acquired by the Holder under this Warrant will, when issued and upon delivery, be duly and validly authorized and issued, fully paid and nonassessable, and free from all restrictions on the sale or transfer thereof, except such restrictions as may be imposed under applicable federal and state securities laws and applicable exchange on which the Common Stock may be listed, and free and clear of all preemptive rights.

2.2 The Company covenants and agrees that it will, at all times, reserve and keep available an authorized number of shares of its Common Stock and other applicable securities sufficient to permit the exercise in full of this Warrant; and, if at the time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action at its next annual meeting of stockholders as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

## 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 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, upon the exercise of this Warrant, shall be entitled to receive the securities and property which the Holder would hold on the date of such exercise if, on the date of this 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 this 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.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (a) pay a dividend on its Common Stock in shares of Common Stock, (b) subdivide its outstanding shares of Common Stock into a greater number of shares, (c) combine its outstanding shares of Common Stock into a smaller number of shares, or (d) 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, the Holder 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 the Holder 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 the Holder would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares the Holder 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, the Holder of this Warrant thereafter surrendered for exercise 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 all holders of the Warrants 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 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 this Warrant shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which he would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had this 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 shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of the Holder of this Warrant 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. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be mailed to the Holder not less than thirty (30) 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.

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 this 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 Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company receives a written request from the Holder (whether or not the Holder theretofore shall have exercised this Warrant in whole or in part), and provided that (a) at the time of such request the Holder is the owner of, and/or has the right pursuant to this Warrant to purchase, Warrant Shares representing at least fifty percent (50%) of the total number of Warrant Shares, and (b) the Company has not theretofore included within the coverage of a Registration Statement filed by the Company with the Securities and Exchange Commission ("Commission") under the Securities Act of 1933, as amended (the "Act"), which Registration Statement has been declared effective by the Commission, at least fifty percent (50%) of the Warrant Shares, the Company shall (x) prepare promptly and file with the Commission a Registration Statement under the Act covering all of the Warrant Shares theretofore issued and which thereafter may be issuable upon the exercise of Warrants (provided, that the audited financial statements to be included in such Registration Statement shall be the year-end financial statements customarily included in the Company's Annual Report on Form 10-K under the Securities Exchange Act of 1934 (the "Exchange Act"), and provided further, that, if the request for registration is received within three (3) months prior to the commencement of a fiscal year of the Company, the Company may delay the preparation and filing of such Registration Statement for a period of not more than ninety (90) days following the commencement of such fiscal year in order to prepare and include in such Registration Statement audited financial statements for the immediately preceding fiscal year); (y) use its reasonable efforts to

cause such Registration Statement to become effective and to remain effective and current with respect to the Warrant Shares for an aggregate period of one (1) year (exclusive of any period during which the prospectus included therein shall not meet the requirements of Section 10 of the Act); and (z) take all other action necessary or appropriate to cause the prospectus included therein to be available for the sale of Warrant Shares from time to time during such period by the holders thereof in ordinary brokerage transactions in the over-the-counter market or on any national securities exchange on which the Common Stock is then listed. The right to demand the filing of a Registration Statement pursuant to this subsection 5.1 shall be exercisable on one (1) occasion only. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of such time as the Holder shall receive from counsel for the Company a written opinion of such counsel that the Holder has the right, pursuant to Rule 144 promulgated under the Act, to sell as of the date of such opinion, any portion of the Warrant Shares then held and/or purchasable upon the exercise of this Warrant by the Holder, or upon a Registration Statement being declared effective by the Commission in which the Company has included at least fifty percent (50%) of the Warrant Shares within the coverage of such Registration Statement.

5.2 Whenever the Company includes Warrant Shares in a Registration Statement, the Company shall (a) furnish the Holder of Warrant Shares included in such Registration Statement and each underwriter of such Warrant Shares with such copies of a current prospectus, including the preliminary prospectus, conforming to the requirements of Section 10 of the Act (and such other documents as each such Holder or each such underwriter may reasonably request), as such Holder(s) and underwriter(s) may reasonably require in order to effectuate the offer and sale of the Warrant Shares included in such Registration Statement; (b) use its reasonable efforts to register or qualify such Warrant Shares under the blue sky laws (to the extent applicable) of such jurisdiction or jurisdictions which the Company deems appropriate or necessary, provided, however, that the Company shall not be obligated to register or qualify any Warrant Shares under those "blue sky" securities laws which the Company deems are unduly burdensome in connection with such registration or qualification of Warrant Shares in such state; and, (c) take such other actions as may be reasonably necessary or advisable to enable such Holder(s) and such underwriters to consummate the sale or distribution in such jurisdiction or jurisdictions in which such Holder(s) shall have reasonably requested that the Warrant Shares be sold; provided, however, that the Company shall not be required to qualify as a foreign corporation or broker-dealer in any jurisdiction or to file a consent to service of process in any jurisdiction in any action other than one arising out of the offering or sale of the Warrant Shares.

5.3 The Company shall pay all expenses incurred in connection with any registration of the Warrant Shares pursuant to the provisions of this Section 5, except underwriting discounts, brokerage commissions, and applicable

insurance and transfer taxes relating to the sale of the Warrant Shares are to be paid by the Holder, and, should the Holder elect to be separately represented by counsel, the fees and disbursements payable to such counsel for the Holder shall be paid by the Holder.

5.4 In the event the Company includes any Warrant Shares in a Registration Statement filed by the Company with the Commission:

5.4.1 Except as otherwise provided in this Section 5.4, 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 supplements 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; provided, however, that the indemnity agreement contained in this Section 5.4.1 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.

5.4.2 Except as otherwise provided in this Section 5.4, 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 that

includes Warrant Shares, 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, officer, 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 supplements 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 untrue statement or 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 Registration Statement; provided, however, that the indemnity agreement contained in this section 5.4.2 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.

- 5.4.3 Upon receipt by a person entitled to indemnification pursuant to this Section 5.4 (an "Indemnified Party") 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 5.4, notify promptly in writing the indemnifying party of the commencement thereof, but the omission so to notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such claim or 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 reasonably 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 5.4 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 paid by the Indemnified Party, except that the indemnifying party shall pay such reasonable fees and expenses of such counsel only in the event that (a) the employment of such counsel has been specifically authorized in writing by the indemnifying party and the indemnifying party has agreed, in writing, to pay such fees and expenses, or (b) 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 by counsel for the indemnifying party that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept or counsel for the indemnifying party reasonably determines that there may be a conflict between the position of the indemnifying party and the Indemnified Party in conducting the defense of such action, then counsel for the Indemnified Party (at the indemnifying party's expense) shall be entitled to conduct only that part of the Indemnified Party's or parties' defense that counsel for the indemnifying party declines to, or cannot, conduct because of the foregoing reasons, 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 (1) separate firm of attorneys for all such Indemnified Party or parties.

## 6. Investment Representation and Transferability.

- 6.1 By acceptance hereof, the Holder 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 the Holder solely for the account of such Holder, 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 of the Commission promulgated thereunder. The Holder covenants and agrees that this Warrant and the Warrant Shares will not be sold or transferred except under cover of a Registration Statement under the Act which the Commission has declared effective and the applicable state securities laws and which is current with respect to such Warrant and the Warrant Shares or pursuant to an



opinion of counsel reasonably satisfactory to the Company that registration under the Act and the applicable state securities laws 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, or any applicable state securities laws, 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 and applicable state securities laws 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 and applicable state securities laws.

6.2 The Holder agrees that the Company may refuse to permit the sale, transfer or disposition of this Warrant or any of the Warrant Shares unless there is in effect a Registration Statement under the Act and any applicable state securities law covering such transfer or the Holder furnishes an opinion of counsel, reasonably satisfactory to counsel for the Company, to the effect that such registration is not required.

6.3 The Holder understands that under the Act, this Warrant and the Warrant Shares must be held indefinitely unless they are subsequently registered under the Act or unless an exemption from such registration is available with respect to any proposed transfer or disposition of the Warrant or the Warrant Shares.

7. 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 the Holder a new Warrant of like date, tenor and denomination.

8. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon the Holder any right to vote or to consent to or receive notice as a shareholder of the Company, as such, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

9. Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (a) on the business day actually received if given by hand or by fax, (b) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (c) five (5) business days following the mailing thereof, if mailed

by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 9) to:

If to the Company: Perma-Fix Environmental  
Services, Inc.  
1940 Northwest 67th Place  
Gainesville, Florida 32606-1649  
Attention: Dr. Louis F. Centofanti  
Chief Executive Officer

Fax No.: (352) 373-0040

If to the Holder: J W Charles Financial Services, Inc.  
980 North Federal Highway, Suite 310  
Boa Radon, Florida 33432  
Attention: Mr. Joel Marks  
Vice Chairman

Fax No.: (561) 338-2827

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

11. 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.

IN WITNESS WHEREOF, this Warrant has been signed by the parties hereto effective the ninth day of June, 1997.

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By

\_\_\_\_\_  
Dr. Louis F. Centofanti  
Chief Executive Officer

(the "Company")

J W CHARLES FINANCIAL SERVICES, INC.

By

\_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

(the "Holder")

#### 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 pursuant to the terms of 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 sells, assigns and transfers unto \_\_\_\_\_ the right to purchase \_\_\_\_\_ shares of the Common Stock of PERMA-FIX ENVIRONMENTAL SERVICES, INC. by the foregoing Warrant and all rights evidenced thereby, 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 \_\_\_\_\_

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER THE 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 THE WRITTEN OPINION OF COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY TO THE EFFECT THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR TRANSFER.

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE FLORIDA SECURITIES AND INVESTOR PROTECTION ACT ("FLORIDA ACT") AND ARE BEING GRANTED AND SOLD IN RELIANCE UPON AN EXEMPTION CONTAINED IN SECTION 517.061 (11) THEREOF. THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT MAY NOT BE REOFFERED FOR SALE OR RESOLD IN THE STATE OF FLORIDA UNLESS SUCH ARE REGISTERED OR THE TRANSACTION IS EXEMPT UNDER THE FLORIDA ACT. ANY SALE MADE UNDER THIS WARRANT TO A PERSON IN FLORIDA UNDER SUCH SUBSECTION IS VOIDABLE AT THE OPTION OF SUCH PERSON WITHIN THREE (3) DAYS AFTER THE FIRST TENDER OF CONSIDERATION IS MADE BY SUCH PERSON TO THE ISSUER OR ITS AGENT, OR WITHIN THREE DAYS AFTER THE AVAILABILITY OF THIS PRIVILEGE IS COMMUNICATED TO SUCH PERSON, WHICH EVER OCCURS LATER.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

No. 6-97-2  
June 9, 1997

200,000 shares of  
Common Stock

FOR VALUE RECEIVED, PERMA-FIX ENVIRONMENTAL SERVICES, INC. (the "Company"), a Delaware corporation, hereby certifies that J W CHARLES FINANCIAL SERVICES, INC., or any permitted assignee thereof (the "Holder"), is entitled to purchase from the Company, at any time in whole, or from time to time in part, during the period commencing the date of this Warrant and ending at 5:00 p.m. Eastern Daylight Savings Time on June 9, 2002 (the "Exercise Period"), up to two hundred thousand (200,000) fully paid and nonassessable shares of common stock, \$.001 par value, of the Company (the "Common Stock"), at a purchase price of \$2.00 per share; provided, however, that the number of shares of Common Stock to be issued and delivered by the Company upon any exercise of this Warrant and the purchase price to be paid for each such share shall be subject to adjustment from time to time as hereinafter provided in this Warrant. 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 "Warrants"; the shares of Common Stock issuable and issued upon exercise of the Warrants are 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 the Holder by the surrender of this Warrant (with the subscription form at the end hereof duly executed by the Holder) at the address set forth in Section 9 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, payable in New York Clearing House funds, 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 the Holder shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised. Upon any exercise and surrender of this Warrant, the Company (a) will issue and deliver to the Holder a certificate or certificates in the name of the Holder for the largest whole number of Warrant Shares to which the Holder shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which the Holder 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 (b) will deliver to the Holder such other securities and properties which the Holder 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.

## 2. Reservation of Warrant Shares.

2.1 The Company covenants and agrees that all Warrant Shares which may be acquired by the Holder under this Warrant will, when issued and upon delivery, be duly and validly authorized and issued, fully paid and nonassessable, and free from all restrictions on the sale or transfer thereof, except such restrictions as may be imposed under applicable federal and state securities laws and applicable exchange on which the Common Stock may be listed, and free and clear of all preemptive rights.

2.2 The Company covenants and agrees that it will, at all times, reserve and keep available an authorized number of shares of its Common Stock and other applicable securities sufficient to permit the exercise in full of this Warrant; and, if at the time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action at its next annual meeting of stockholders as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

## 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 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, upon the exercise of this Warrant, shall be entitled to receive the securities and property which the Holder would hold on the date of such exercise if, on the date of this 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 this 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.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (a) pay a dividend on its Common Stock in shares of Common Stock, (b) subdivide its outstanding shares of Common Stock into a greater number of shares, (c) combine its outstanding shares of Common Stock into a smaller number of shares, or (d) 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, the Holder 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 the Holder 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 the Holder would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares the Holder 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, the Holder of this Warrant thereafter surrendered for exercise 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 all holders of the Warrants 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 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 this Warrant shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which he would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had this 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 shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of the Holder of this Warrant 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. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be mailed to the Holder not less than thirty (30) 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.

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 this 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 Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company receives a written request from the Holder (whether or not the Holder theretofore shall have exercised this Warrant in whole or in part), and provided that (a) at the time of such request the Holder is the owner of, and/or has the right pursuant to this Warrant to purchase, Warrant Shares representing at least fifty percent (50%) of the total number of Warrant Shares, and (b) the Company has not theretofore included within the coverage of a Registration Statement filed by the Company with the Securities and Exchange Commission ("Commission") under the Securities Act of 1933, as amended (the "Act"), which Registration Statement has been declared effective by the Commission, at least fifty percent (50%) of the Warrant Shares, the Company shall (x) prepare promptly and file with the Commission a Registration Statement under the Act covering all of the Warrant Shares theretofore issued and which thereafter may be issuable upon the exercise of Warrants (provided, that the audited financial statements to be included in such Registration Statement shall be the year-end financial statements customarily included in the Company's Annual Report on Form 10-K under the Securities Exchange Act of 1934 (the "Exchange Act"), and provided further, that, if the request for registration is received within three (3) months prior to the commencement of a fiscal year of the Company, the Company may delay the preparation and filing of such Registration Statement for a period of not more than ninety (90) days following the commencement of such fiscal year in order to prepare and include in such Registration Statement audited financial statements for the immediately preceding fiscal year); (y) use its reasonable efforts to

cause such Registration Statement to become effective and to remain effective and current with respect to the Warrant Shares for an aggregate period of one (1) year (exclusive of any period during which the prospectus included therein shall not meet the requirements of Section 10 of the Act); and (z) take all other action necessary or appropriate to cause the prospectus included therein to be available for the sale of Warrant Shares from time to time during such period by the holders thereof in ordinary brokerage transactions in the over-the-counter market or on any national securities exchange on which the Common Stock is then listed. The right to demand the filing of a Registration Statement pursuant to this subsection 5.1 shall be exercisable on one (1) occasion only. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of such time as the Holder shall receive from counsel for the Company a written opinion of such counsel that the Holder has the right, pursuant to Rule 144 promulgated under the Act, to sell as of the date of such opinion, any portion of the Warrant Shares then held and/or purchasable upon the exercise of this Warrant by the Holder, or upon a Registration Statement being declared effective by the Commission in which the Company has included at least fifty percent (50%) of the Warrant Shares within the coverage of such Registration Statement.

5.2 Whenever the Company includes Warrant Shares in a Registration Statement, the Company shall (a) furnish the Holder of Warrant Shares included in such Registration Statement and each underwriter of such Warrant Shares with such copies of a current prospectus, including the preliminary prospectus, conforming to the requirements of Section 10 of the Act (and such other documents as each such Holder or each such underwriter may reasonably request), as such Holder(s) and underwriter(s) may reasonably require in order to effectuate the offer and sale of the Warrant Shares included in such Registration Statement; (b) use its reasonable efforts to register or qualify such Warrant Shares under the blue sky laws (to the extent applicable) of such jurisdiction or jurisdictions which the Company deems appropriate or necessary, provided, however, that the Company shall not be obligated to register or qualify any Warrant Shares under those "blue sky" securities laws which the Company deems are unduly burdensome in connection with such registration or qualification of Warrant Shares in such state; and, (c) take such other actions as may be reasonably necessary or advisable to enable such Holder(s) and such underwriters to consummate the sale or distribution in such jurisdiction or jurisdictions in which such Holder(s) shall have reasonably requested that the Warrant Shares be sold; provided, however, that the Company shall not be required to qualify as a foreign corporation or broker-dealer in any jurisdiction or to file a consent to service of process in any jurisdiction in any action other than one arising out of the offering or sale of the Warrant Shares.

5.3 The Company shall pay all expenses incurred in connection with any registration of the Warrant Shares pursuant to the provisions of this Section 5, except underwriting discounts, brokerage commissions, and applicable



insurance and transfer taxes relating to the sale of the Warrant Shares are to be paid by the Holder, and, should the Holder elect to be separately represented by counsel, the fees and disbursements payable to such counsel for the Holder shall be paid by the Holder.

5.4 In the event the Company includes any Warrant Shares in a Registration Statement filed by the Company with the Commission:

5.4.1 Except as otherwise provided in this Section 5.4, 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 supplements 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; provided, however, that the indemnity agreement contained in this Section 5.4.1 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.

5.4.2 Except as otherwise provided in this Section 5.4, 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 that

includes Warrant Shares, 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, officer, 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 supplements 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 untrue statement or 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 Registration Statement; provided, however, that the indemnity agreement contained in this section 5.4.2 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.

- 5.4.3 Upon receipt by a person entitled to indemnification pursuant to this Section 5.4 (an "Indemnified Party") 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 5.4, notify promptly in writing the indemnifying party of the commencement thereof, but the omission so to notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such claim or 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 reasonably 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 5.4 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 paid by the Indemnified Party, except that the indemnifying party shall pay such reasonable fees and expenses of such counsel only in the event that (a) the employment of such counsel has been specifically authorized in writing by the indemnifying party and the indemnifying party has agreed, in writing, to pay such fees and expenses, or (b) 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 by counsel for the indemnifying party that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept or counsel for the indemnifying party reasonably determines that there may be a conflict between the position of the indemnifying party and the Indemnified Party in conducting the defense of such action, then counsel for the Indemnified Party (at the indemnifying party's expense) shall be entitled to conduct only that part of the Indemnified Party's or parties' defense that counsel for the indemnifying party declines to, or cannot, conduct because of the foregoing reasons, 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 (1) separate firm of attorneys for all such Indemnified Party or parties.

## 6. Investment Representation and Transferability.

6.1 By acceptance hereof, the Holder 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 the Holder solely for the account of such Holder, 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 of the Commission promulgated thereunder. The Holder covenants and agrees that this Warrant and the Warrant Shares will not be sold or transferred except under cover of a Registration Statement under the Act which the Commission has declared effective and the applicable state securities laws and which is current with respect to such Warrant and the Warrant Shares or pursuant to an

opinion of counsel reasonably satisfactory to the Company that registration under the Act and the applicable state securities laws 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, or any applicable state securities laws, 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 and applicable state securities laws 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 and applicable state securities laws.

6.2 The Holder agrees that the Company may refuse to permit the sale, transfer or disposition of this Warrant or any of the Warrant Shares unless there is in effect a Registration Statement under the Act and any applicable state securities law covering such transfer or the Holder furnishes an opinion of counsel, reasonably satisfactory to counsel for the Company, to the effect that such registration is not required.

6.3 The Holder understands that under the Act, this Warrant and the Warrant Shares must be held indefinitely unless they are subsequently registered under the Act or unless an exemption from such registration is available with respect to any proposed transfer or disposition of the Warrant or the Warrant Shares.

7. 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 the Holder a new Warrant of like date, tenor and denomination.

8. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon the Holder any right to vote or to consent to or receive notice as a shareholder of the Company, as such, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

9. Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (a) on the business day actually received if given by hand or by fax, (b) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (c) five (5) business days following the mailing thereof, if mailed

by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 9) to:

If to the Company: Perma-Fix Environmental  
Services, Inc.  
1940 Northwest 67th Place  
Gainesville, Florida 32606-1649  
Attention: Dr. Louis F. Centofanti  
Chief Executive Officer

Fax No.: (352) 373-0040

If to the Holder: J W Charles Financial Services, Inc.  
980 North Federal Highway, Suite 310  
Boa Radon, Florida 33432  
Attention: Mr. Joel Marks  
Vice Chairman

Fax No.: (561) 338-2827

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

11. 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.

IN WITNESS WHEREOF, this Warrant has been signed by the parties hereto effective the ninth day of June, 1997.

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By

\_\_\_\_\_  
Dr. Louis F. Centofanti  
Chief Executive Officer

(the "Company")

J W CHARLES FINANCIAL SERVICES, INC.

By

\_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

(the "Holder")

#### 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 pursuant to the terms of 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 sells, assigns and transfers unto \_\_\_\_\_ the right to purchase \_\_\_\_\_ shares of the Common Stock of PERMA-FIX ENVIRONMENTAL SERVICES, INC. by the foregoing Warrant and all rights evidenced thereby, 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 \_\_\_\_\_

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND MAY NOT BE SOLD OR TRANSFERRED EXCEPT (i) UNDER COVER OF A REGISTRATION STATEMENT UNDER THE 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 THE WRITTEN OPINION OF COUNSEL REASONABLY ACCEPTABLE TO THE COMPANY TO THE EFFECT THAT REGISTRATION UNDER SUCH ACT IS NOT REQUIRED WITH RESPECT TO SUCH SALE OR TRANSFER.

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE FLORIDA SECURITIES AND INVESTOR PROTECTION ACT ("FLORIDA ACT") AND ARE BEING GRANTED AND SOLD IN RELIANCE UPON AN EXEMPTION CONTAINED IN SECTION 517.061 (11) THEREOF. THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT MAY NOT BE REOFFERED FOR SALE OR RESOLD IN THE STATE OF FLORIDA UNLESS SUCH ARE REGISTERED OR THE TRANSACTION IS EXEMPT UNDER THE FLORIDA ACT. ANY SALE MADE UNDER THIS WARRANT TO A PERSON IN FLORIDA UNDER SUCH SUBSECTION IS VOIDABLE AT THE OPTION OF SUCH PERSON WITHIN THREE (3) DAYS AFTER THE FIRST TENDER OF CONSIDERATION IS MADE BY SUCH PERSON TO THE ISSUER OR ITS AGENT, OR WITHIN THREE DAYS AFTER THE AVAILABILITY OF THIS PRIVILEGE IS COMMUNICATED TO SUCH PERSON, WHICH EVER OCCURS LATER.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Warrant for the Purchase of Shares of Common Stock

No. 6-97-2  
June 9, 1997

200,000 shares of  
Common Stock

FOR VALUE RECEIVED, PERMA-FIX ENVIRONMENTAL SERVICES, INC. (the "Company"), a Delaware corporation, hereby certifies that J W CHARLES FINANCIAL SERVICES, INC., or any permitted assignee thereof (the "Holder"), is entitled to purchase from the Company, at any time in whole, or from time to time in part, during the period commencing the date of this Warrant and ending at 5:00 p.m. Eastern Daylight Savings Time on June 9, 2002 (the "Exercise Period"), up to two hundred thousand (200,000) fully paid and nonassessable shares of common stock, \$.001 par value, of the Company (the "Common Stock"), at a purchase price of \$2.00 per share; provided, however, that the number of shares of Common Stock to be issued and delivered by the Company upon any exercise of this Warrant and the purchase price to be paid for each such share shall be subject to adjustment from time to time as hereinafter provided in this Warrant. 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 "Warrants"; the shares of Common Stock issuable and issued upon exercise of the Warrants are 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 the Holder by the surrender of this Warrant (with the subscription form at the end hereof duly executed by the Holder) at the address set forth in Section 9 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, payable in New York Clearing House funds, 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 the Holder shall be entitled to receive a new Warrant covering the number of Warrant Shares in respect of which this Warrant has not been exercised. Upon any exercise and surrender of this Warrant, the Company (a) will issue and deliver to the Holder a certificate or certificates in the name of the Holder for the largest whole number of Warrant Shares to which the Holder shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which the Holder 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 (b) will deliver to the Holder such other securities and properties which the Holder 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.

## 2. Reservation of Warrant Shares.

2.1 The Company covenants and agrees that all Warrant Shares which may be acquired by the Holder under this Warrant will, when issued and upon delivery, be duly and validly authorized and issued, fully paid and nonassessable, and free from all restrictions on the sale or transfer thereof, except such restrictions as may be imposed under applicable federal and state securities laws and applicable exchange on which the Common Stock may be listed, and free and clear of all preemptive rights.

2.2 The Company covenants and agrees that it will, at all times, reserve and keep available an authorized number of shares of its Common Stock and other applicable securities sufficient to permit the exercise in full of this Warrant; and, if at the time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action at its next annual meeting of stockholders as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in reasonable efforts to obtain the requisite stockholder approval of any necessary amendment to its Certificate of Incorporation.

## 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 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, upon the exercise of this Warrant, shall be entitled to receive the securities and property which the Holder would hold on the date of such exercise if, on the date of this 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 this 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.

3.2 If, at any time or from time to time after the date of this Warrant, the Company shall (a) pay a dividend on its Common Stock in shares of Common Stock, (b) subdivide its outstanding shares of Common Stock into a greater number of shares, (c) combine its outstanding shares of Common Stock into a smaller number of shares, or (d) 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, the Holder 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 the Holder 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 the Holder would have had to pay for such Warrant Shares immediately prior to such event divided by the number of Warrant Shares the Holder 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, the Holder of this Warrant thereafter surrendered for exercise 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 all holders of the Warrants 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 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 this Warrant shall have the right thereafter, upon exercise of this Warrant, to receive the kind and amount of securities, cash or other property which he would have owned or been entitled to receive immediately after such consolidation, merger, sale or conveyance had this 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 shall be made in the application thereafter of the provisions of this Section 3 with respect to the rights and interests of the Holder of this Warrant 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. Notice of any such consolidation, merger, sale or conveyance, and of said provisions so proposed to be made, shall be mailed to the Holder not less than thirty (30) 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.

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 this 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 Securities Act of 1933.

5.1 Subject to the terms of this Section 5, if, at any time during the Exercise Period, the Company receives a written request from the Holder (whether or not the Holder theretofore shall have exercised this Warrant in whole or in part), and provided that (a) at the time of such request the Holder is the owner of, and/or has the right pursuant to this Warrant to purchase, Warrant Shares representing at least fifty percent (50%) of the total number of Warrant Shares, and (b) the Company has not theretofore included within the coverage of a Registration Statement filed by the Company with the Securities and Exchange Commission ("Commission") under the Securities Act of 1933, as amended (the "Act"), which Registration Statement has been declared effective by the Commission, at least fifty percent (50%) of the Warrant Shares, the Company shall (x) prepare promptly and file with the Commission a Registration Statement under the Act covering all of the Warrant Shares theretofore issued and which thereafter may be issuable upon the exercise of Warrants (provided, that the audited financial statements to be included in such Registration Statement shall be the year-end financial statements customarily included in the Company's Annual Report on Form 10-K under the Securities Exchange Act of 1934 (the "Exchange Act"), and provided further, that, if the request for registration is received within three (3) months prior to the commencement of a fiscal year of the Company, the Company may delay the preparation and filing of such Registration Statement for a period of not more than ninety (90) days following the commencement of such fiscal year in order to prepare and include in such Registration Statement audited financial statements for the immediately preceding fiscal year); (y) use its reasonable efforts to

cause such Registration Statement to become effective and to remain effective and current with respect to the Warrant Shares for an aggregate period of one (1) year (exclusive of any period during which the prospectus included therein shall not meet the requirements of Section 10 of the Act); and (z) take all other action necessary or appropriate to cause the prospectus included therein to be available for the sale of Warrant Shares from time to time during such period by the holders thereof in ordinary brokerage transactions in the over-the-counter market or on any national securities exchange on which the Common Stock is then listed. The right to demand the filing of a Registration Statement pursuant to this subsection 5.1 shall be exercisable on one (1) occasion only. The Holder's rights under this Section 5.1 shall expire and terminate at the earlier of such time as the Holder shall receive from counsel for the Company a written opinion of such counsel that the Holder has the right, pursuant to Rule 144 promulgated under the Act, to sell as of the date of such opinion, any portion of the Warrant Shares then held and/or purchasable upon the exercise of this Warrant by the Holder, or upon a Registration Statement being declared effective by the Commission in which the Company has included at least fifty percent (50%) of the Warrant Shares within the coverage of such Registration Statement.

5.2 Whenever the Company includes Warrant Shares in a Registration Statement, the Company shall (a) furnish the Holder of Warrant Shares included in such Registration Statement and each underwriter of such Warrant Shares with such copies of a current prospectus, including the preliminary prospectus, conforming to the requirements of Section 10 of the Act (and such other documents as each such Holder or each such underwriter may reasonably request), as such Holder(s) and underwriter(s) may reasonably require in order to effectuate the offer and sale of the Warrant Shares included in such Registration Statement; (b) use its reasonable efforts to register or qualify such Warrant Shares under the blue sky laws (to the extent applicable) of such jurisdiction or jurisdictions which the Company deems appropriate or necessary, provided, however, that the Company shall not be obligated to register or qualify any Warrant Shares under those "blue sky" securities laws which the Company deems are unduly burdensome in connection with such registration or qualification of Warrant Shares in such state; and, (c) take such other actions as may be reasonably necessary or advisable to enable such Holder(s) and such underwriters to consummate the sale or distribution in such jurisdiction or jurisdictions in which such Holder(s) shall have reasonably requested that the Warrant Shares be sold; provided, however, that the Company shall not be required to qualify as a foreign corporation or broker-dealer in any jurisdiction or to file a consent to service of process in any jurisdiction in any action other than one arising out of the offering or sale of the Warrant Shares.

5.3 The Company shall pay all expenses incurred in connection with any registration of the Warrant Shares pursuant to the provisions of this Section 5, except underwriting discounts, brokerage commissions, and applicable

insurance and transfer taxes relating to the sale of the Warrant Shares are to be paid by the Holder, and, should the Holder elect to be separately represented by counsel, the fees and disbursements payable to such counsel for the Holder shall be paid by the Holder.

5.4 In the event the Company includes any Warrant Shares in a Registration Statement filed by the Company with the Commission:

5.4.1 Except as otherwise provided in this Section 5.4, 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 supplements 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; provided, however, that the indemnity agreement contained in this Section 5.4.1 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.

5.4.2 Except as otherwise provided in this Section 5.4, 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 that

includes Warrant Shares, 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, officer, 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 supplements 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 untrue statement or 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 Registration Statement; provided, however, that the indemnity agreement contained in this section 5.4.2 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.

- 5.4.3 Upon receipt by a person entitled to indemnification pursuant to this Section 5.4 (an "Indemnified Party") 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 5.4, notify promptly in writing the indemnifying party of the commencement thereof, but the omission so to notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to the Indemnified Party otherwise than under this Section. In case any such claim or 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 reasonably 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 5.4 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 paid by the Indemnified Party, except that the indemnifying party shall pay such reasonable fees and expenses of such counsel only in the event that (a) the employment of such counsel has been specifically authorized in writing by the indemnifying party and the indemnifying party has agreed, in writing, to pay such fees and expenses, or (b) 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 by counsel for the indemnifying party that there are defenses available to it or them that the indemnifying party or its counsel refuses to accept or counsel for the indemnifying party reasonably determines that there may be a conflict between the position of the indemnifying party and the Indemnified Party in conducting the defense of such action, then counsel for the Indemnified Party (at the indemnifying party's expense) shall be entitled to conduct only that part of the Indemnified Party's or parties' defense that counsel for the indemnifying party declines to, or cannot, conduct because of the foregoing reasons, 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 (1) separate firm of attorneys for all such Indemnified Party or parties.

## 6. Investment Representation and Transferability.

- 6.1 By acceptance hereof, the Holder 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 the Holder solely for the account of such Holder, 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 of the Commission promulgated thereunder. The Holder covenants and agrees that this Warrant and the Warrant Shares will not be sold or transferred except under cover of a Registration Statement under the Act which the Commission has declared effective and the applicable state securities laws and which is current with respect to such Warrant and the Warrant Shares or pursuant to an

opinion of counsel reasonably satisfactory to the Company that registration under the Act and the applicable state securities laws 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, or any applicable state securities laws, 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 and applicable state securities laws 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 and applicable state securities laws.

6.2 The Holder agrees that the Company may refuse to permit the sale, transfer or disposition of this Warrant or any of the Warrant Shares unless there is in effect a Registration Statement under the Act and any applicable state securities law covering such transfer or the Holder furnishes an opinion of counsel, reasonably satisfactory to counsel for the Company, to the effect that such registration is not required.

6.3 The Holder understands that under the Act, this Warrant and the Warrant Shares must be held indefinitely unless they are subsequently registered under the Act or unless an exemption from such registration is available with respect to any proposed transfer or disposition of the Warrant or the Warrant Shares.

7. 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 the Holder a new Warrant of like date, tenor and denomination.

8. Warrant Holder Not Shareholder. This Warrant shall not be deemed to confer upon the Holder any right to vote or to consent to or receive notice as a shareholder of the Company, as such, in respect of any matters whatsoever, or any other rights or liabilities as a shareholder, prior to the exercise hereof.

9. Notices. Except as otherwise specified herein to the contrary, all notices, requests, demands and other communications required or desired to be given hereunder shall only be effective if given in writing, by hand or fax, by certified or registered mail, return receipt requested, postage prepaid, or by U. S. Express Mail service, or by private overnight mail service (e.g., Federal Express). Any such notice shall be deemed to have been given (a) on the business day actually received if given by hand or by fax, (b) on the business day immediately subsequent to mailing, if sent by U.S. Express Mail service or private overnight mail service, or (c) five (5) business days following the mailing thereof, if mailed

by certified or registered mail, postage prepaid, return receipt requested, and all such notices shall be sent to the following addresses (or to such other address or addresses as a party may have advised the other in the manner provided in this Section 9) to:

If to the Company: Perma-Fix Environmental  
Services, Inc.  
1940 Northwest 67th Place  
Gainesville, Florida 32606-1649  
Attention: Dr. Louis F. Centofanti  
Chief Executive Officer

Fax No.: (352) 373-0040

If to the Holder: J W Charles Financial Services, Inc.  
980 North Federal Highway, Suite 310  
Boa Radon, Florida 33432  
Attention: Mr. Joel Marks  
Vice Chairman

Fax No.: (561) 338-2827

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

11. 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.

IN WITNESS WHEREOF, this Warrant has been signed by the parties hereto effective the ninth day of June, 1997.

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By

\_\_\_\_\_  
Dr. Louis F. Centofanti  
Chief Executive Officer

(the "Company")

J W CHARLES FINANCIAL SERVICES, INC.

By

\_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

(the "Holder")

#### 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 pursuant to the terms of 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 sells, assigns and transfers unto \_\_\_\_\_ the right to purchase \_\_\_\_\_ shares of the Common Stock of PERMA-FIX ENVIRONMENTAL SERVICES, INC. by the foregoing Warrant and all rights evidenced thereby, 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 \_\_\_\_\_