SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

(Exact name of registrant as specified in its charter)

DELAWARE

58-1954497

(State of Incorporation)

(I.R.S. Employer Identification No.)

1940 N.W. 67th Place, Gainesville, FL 32653

(Address of principal executive offices) (Zip Code)

PERMA-FIX ENVIRONMENTAL SERVICES, INC. 2004 STOCK OPTION PLAN

(Full Titles of Plans)

Dr. Louis F. Centofanti, Chief Executive Officer 1940 N.W. 67th Place Gainesville, Florida 32653 352-373-4200

(Name, address and telephone number of agent for service)

Copy to: Irwin H. Steinhorn, Esquire CONNER & WINTERS, LLP One Leadership Square, Suite 1700 211 North Robinson Oklahoma City, Oklahoma 73102

CALCULATION OF REGISTRATION FEE

<TABLE> <CAPTION>

PROPOSED PROPOSED AMOUNT MAXTMUM MAXTMUM AMOUNT OF OFFERING PRICE PER SHARE(2) AGGREGATE REGISTRATION TO BE TITLE OF SECURITIES AGGREGATE
OFFERING PRICE(2) REGISTERED TO BE REGISTERED FEE (2) 2,000,000 (1) \$1.44 - \$ 1.82 \$3,599,530.00 Common Stock \$423.66 </TABLE>

- (1) This amount is comprised of 2,000,000 shares representing the maximum number of shares, which are issuable pursuant to the Perma-Fix Environmental Services, Inc. 2004 Stock Option Plan ("2004 Plan"). Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers any additional shares of common stock which become issuable under the 2004Plan by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without receipt of consideration which results in an increase in the number of shares of the outstanding common stock of the Registrant.
- (2) In accordance with Rule $457\,\mathrm{(c)}$ and (h), the maximum offering price and the calculation of the registration fee are based upon the basis of the average of the high and low prices for the Common Stock on May 2, 2005, of \$ 1.82, as reported on the National Association of Securities Dealers Automated Quotation system (Nasdaq), except the maximum offering price with respect to 106,500 shares which are presently covered by outstanding options for common stock issuable under the 2004 Plan is \$1.44, determined in accordance with Rule 457(h) on the basis of the exercise price of such outstanding options.

The Section 10(a) Prospectus being delivered by Perma-Fix Environmental Services, Inc. (the "Company") to certain employees or outside directors of the Company as required by Rule 428 under the Securities Act of 1933, as amended (the "Act"), has been prepared in accordance with the requirements of Form S-8 and relates to shares of common stock, par value \$.001 per share, of the Company which have been reserved for issuance pursuant to the Company's 2004 Stock Option Plan (the "2004 Plan"). Information regarding the 2004 Plan required in the Section 10(a) Prospectus is included in the documents being maintained and delivered by the Company as required by Rule 428 under the Act. The Company will provide to the participants of the 2004 Plan a written statement advising them of the availability without charge, upon written or oral request, of documents incorporated by reference herein, as required by Item 2 of Part I of Form S-8. Upon request, the Company will furnish to the Securities and Exchange Commission or its staff a copy or copies of all the documents included in such file.

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The following documents filed by the Company with the Securities Exchange Commission are incorporated herein by reference:

- (a) The Company's annual report on Form 10-K for the fiscal year ended December 31, 2004, filed on March 31, 2005;
- (b) The Company's current reports on Form 8-K filed March 18, 2005 and March 21, 2005; and
- (c) Description of the Company's Common Stock set forth in the Registrant's Form S-1 Registration Statement, No. 33-51874, including any amendment or report filed for the purposes of updating such description.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 subsequent to the date of this Registration Statement and prior to the filing of a post-effective amendment, which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents (such documents, and the documents listed above, being hereinafter referred to as "Incorporated Documents"). Any statement contained in an Incorporated Document shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed Incorporated Document modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

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ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

The Registrant is incorporated under the laws of the State of Delaware. Section 145 of the General Corporation Law of the State of Delaware (the "DGCL") provides that a Delaware corporation may indemnify any persons who are, or are threatened to be made, parties to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was an officer, director, employee or agent of such corporation, or is or was serving at the request of such person as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his conduct was illegal. A Delaware corporation may indemnify any persons who are, or are threatened to be made, a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must

indemnify him against the expenses which such officer or director has actually and reasonably incurred. The Registrant's certificate of incorporation and bylaws provide for the indemnification of directors and officers of the Registrant to the fullest extent permitted by the DGCL.

The Registrant's Restated Certificate of Incorporation provides for the indemnification by the Registrant of its directors and officers to the full extent permitted by Section 145 of the General Corporation Law of the State of Delaware (or any similar provision or provisions of applicable law at the time in effect). This indemnification is not deemed exclusive of any other rights to which those seeking indemnification might be entitled under any bylaw, agreement, vote of shareholders or disinterested directors, or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office. This indemnification will continue as to such person who was a director or officer of the Registrant, but has ceased to be a director or officer and inure to the benefit of the heirs, executors and administrators of such person. The Registrant's bylaws also provide that the Registrant will indemnify any person who was or is a party or has threatened to be made a party to any action by reason of the fact that he or she is or was a director, officer, employee or agent of the Registrant or is or was serving at the request of the Registrant as a director, officer, employee or agent of another entity, if he or she acted in good faith and in a manner that he or she reasonably believed to be in or not opposed to the best interests of the Registrant and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

The Restated Certificate of Incorporation of the Registrant limits the liability of its directors to the corporation or its stockholders for any monetary damages for breaches of fiduciary duty as a director. Under the Registrant's Restated Certificate of Incorporation, as amended, and as permitted under the Delaware General Corporation Law, directors are not liable to the Registrant or its stockholders for monetary damages arising from a breach of their fiduciary duties as directors. Such provision, however, does not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the Registrant or its stockholders; (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) under Section 174 of the Delaware General Corporation Law (relating to liability of directors for unlawful payment of dividend or unlawful stock purchase or redemption); or (iv) for any transaction from which the director derived an improper personal benefit. The director's limitations of liability described above may not limit a director's liability for violation of, or otherwise relieve the Registrant or its directors from the necessity of complying with, federal or state securities laws or affect the availability of equitable remedies, such as injunctive relief or rescission. However, as a practical matter, equitable remedies may not be available in all situations, and there may be instances in which no effective remedy is available at all.

The foregoing summaries are necessarily subject to the complete text of the statutes, the Restated Certificate of Incorporation and bylaws referred to above, and are qualified in their entirety by reference thereto.

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ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED

Not applicable.

ITEM 8. EXHIBITS

<TABLE> <CAPTION>

| <caption> EXHIBIT</caption> | | | |
|-----------------------------|-------------------------------------------------------------------------|--|--|
| NUMBER | DESCRIPTION OF DOCUMENT | | |
| <s></s> | <c></c> | | |
| 4.1 | Restated Certificate of Incorporation, as amended, of the Registrant(1) | | |
| 4.2 | Bylaws of the Registrant(2) | | |
| 5 | Opinion of Conner & Winters, P.C. | | |
| 23.1 | Consent of Conner & Winters, P.C. (incorporated into Exhibit 5 hereto) | | |
| 23.2 | Consent of BDO Seidman, LLP | | |
| 24.1 | Power of Attorney (see page 6 of the Registration Statement) | | |
| 99.1 | | | |

 Perma-Fix Environmental Services, Inc. 2004 Stock Option Plan (3) |

- (1) Filed as Exhibit 3.1 to the Registrant's Form 10-Q for the quarter ended June 30, 2002, filed on August 14, 2002, and is incorporated herein by reference.
- (2) Filed as Exhibit 4.3 to the Registration Statement on Form S-1 (Registration No. 33-51874), filed on September 11, 1992, and is incorporated herein by reference.

(3) Filed as Exhibit A to the Registrant's Proxy Statement relating to the Registrant's 2004 Annual Meeting, filed June 21, 2004, and is incorporated herein by reference.

ITEM 9. UNDERTAKINGS.

The Registrant hereby undertakes:

- (a) To file, during any period in which offers or sales are being made of the securities registered hereby, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933 (the "Securities Act");
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

provided, however, that the undertakings set forth in paragraphs (a)(i) and (a)(ii) above do not apply if the Registration Statement is on Form S-3 or Form S-8 and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") that are incorporated by reference in this Registration Statement.

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

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- (c) To remove from registration by means of a post-effective amendment any of the securities being registered remaining unsold at the termination of the offering.
- (d) That, for purpose of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in this Registration Statement shall be deemed to be a new Registration Statement relating to the Securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- Insofar as indemnification for liabilities rising under the (e) Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions of the Restated Certificate of Incorporation or Bylaws of the Registrant and the provisions of the laws of the State of Delaware described in Item 6, above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expense incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

of the requirements for filing on Form S-8 and has duly caused this Form S-8 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Gainesville, State of Florida, on the 5th day of May 2005.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By /s/ Richard T. Kelecy
-----Richard T. Kelecy
Vice President and
Chief Financial Officer

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POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints DR. LOUIS F. CENTOFANTI and RICHARD T. KELECY, and each or either of them, his or her attorney-in-fact, with the full power of substitution and resubstitution, for him or her in any and all capacities, to sign any amendments (including post-effective amendments) to this Registration Statement on Form S-8 and to file the same, with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact, and each of them, full power and authority to do and perform each and every act necessary to be done in connection therewith, as fully to all interests and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, or any of them, or their or his or her substitutes, may lawfully or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933 this report has been signed below by the following persons on behalf of the registrant and in capacities and on the dates indicated.

| <table> <caption> SIGNATURE</caption></table> | TITLE | DATE |
|-----------------------------------------------|----------------------------------------------------------------------------------|-------------|
| | < <c></c> | |
| /s/ Louis F. Centofanti | Chairman of the Board of Directors, President, and Chief Executive Officer | May 4, 2005 |
| Dr. Louis F. Centofanti | (Principal Executive Officer) | |
| /s/ Richard T. KelecyRichard T. Kelecy | Chief Financial Officer (Principal Financial and Accounting Officer) | May 4, 2005 |
| /s/ Mark A. Zwecker Mark A. Zwecker | Director | May 4, 2005 |
| /s/ Jon Colin Jon Colin | Director | May 4, 2005 |
| /s/ Alfred C. Warrington, IV | Director | May 4, 2005 |
| /s/ Jack Lahav Jack Lahav | Director | May 4, 2005 |
| /s/ Joe R. Reeder Joe R. Reeder | | |

 Director | May 4, 2005 |

CONNER &WINTERS

OKIAHOMA CITY ATTORNEYS & COUNSELORS AT LAW

<TABLE> <S> Irwin H. Steinhorn John W. Funk Jared D. Giddens Kiran A. Phansalkar Mitchell D. Blackburn Mark H. Bennett Bryan J. Wells Laura McCasland Holbrook Bruce W. Freeman John E. Gatliff II J. Dillon Curran

L. Belynn Whatley Peter B. Bradford Shelia M. Darling

William M. Lewis

TIII.SA

Henry G. Will Joseph J. McCain, Jr. Lynnwood R. Moore, Jr. Robert A. Curry Steven W. McGrath D. Richard Funk Randolph L. Jones, Jr. Robert D. James J. Ronald Petrikin Larry B. Lipe

<C> James E. Green, Jr. Martin R. Wing John W. Ingraham Andrew R. Turner Gentra Abbey Sorem R. Kevin Redwine Tony W. Haynie David R. Cordell John N. Hove C. Raymond Patton, Jr. Paul E. Braden - Robert J. Melgaard P. Scott Hathaway

Lawrence A. Hall Timothy T. Trump Mark E. Dreyer Nancy E. Vaughn Gregory D. Renberg Mark D. Berman Katherine G. Covle Beverly K. Smith Melodie Freeman-Burney R. Richard Love III Stephen R. Ward

Jeffrey R. Schoborg

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<C> Anne B. Sublett J. Ryan Sacra Jason S. Tavlor Katy Day Inhofe

Stephan A. Wangsgard Julia Forrester-Sellers Melinda L. Kirk P. Bradlev Bendure Kathryn J. Kindell Amy M. Santee Cara M. Hair Alissa A. Hurley Heather Holt Bilderback Debra R. Stockton

Shelley L. Carter Jed W. Isbell ---- JACKSON. WYOMING William G. von Glahn Bob F. McCoy John E. Barry

James R. Ryan Russell H. Harbaugh, Jr. David O. Cordell

NORTHWEST ARKANSAS John R. Elrod* Greg S. Scharlau Terri Dill Chadick Vicki Bronson* Todd P. Lewis* P. Joshua Wisley

Charles E. Scharlau*

WASHINGTON, D.C.

G. Daniel Miller* Henry Rose* Erica L. Summers*

HOUSTON, TEXAS

Pamela H. Stabler*

Randolph L. Jones, Jr.

SANTA FE, NEW MEXICO

Douglas M. Rather

Benjamin C. Conner

1879-1963 John M. Winters, Jr. 1901-1989

*Not Admitted in Oklahoma

</TABLE>

May 5, 2005

Perma-Fix Environmental Services, Inc. 1940 Northwest 67th Place Gainesville, Florida 32606

> Re: Perma-Fix Environmental Services, Inc.; Form S-8 Registration Statement; 2004 Stock Option Plan; Our File No. 07034.0001

Gentlemen:

We are delivering this opinion to you in connection with the preparation and filing with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act"), of the Registration Statement on Form S-8 (the "Registration Statement") of Perma-Fix Environmental Services, Inc., a Delaware corporation (the "Company"), for the registration of 2,000,000 shares of the Company's Common Stock, \$.001 par value (the "Common Stock"), issuable by the Company pursuant to the Company's 2004 Stock Option Plan (the "Plan").

In connection with this opinion, the undersigned has examined and relied upon such corporate records, certificates, other documents and questions of law, as we have considered necessary or appropriate for the purposes of this opinion, including, but not limited to, the following:

- the Company's Restated Certificate of Incorporation, as amended;
- the Company's Bylaws;
- the Plan; and
- (f) the Registration Statement.

Perma-Fix Environmental Services, Inc. May 5, 2005 Page 2

In our examination, we have assumed the genuineness of all signatures, the legal capacity of all persons, the authenticity of all documents submitted as originals, the conformity with the original documents of all documents submitted as certified or photostatic copies, and the authenticity of the originals of such copies. We have further assumed that each recipient of shares of the Company's Common Stock under the Plan is eligible to participate in the Plan and that any shares of the Company's Common Stock to be issued pursuant to the Plan will have been registered in accordance with the Act, absent the application of an exemption from registration, prior to the issuance of such shares.

In reliance upon, and based on, such examination and review, we are of the opinion that the 2,000,000 shares of Common Stock issuable pursuant to the Plan will constitute, when issued pursuant to the terms of the Plan, duly authorized, validly issued, fully paid and nonassessable shares of Common Stock of the

Company.

We hereby consent to the filing of this opinion as Exhibit 5 to the Registration Statement.

Very truly yours, CONNER & WINTERS, LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Perma-Fix Environmental Services, Inc. Gainesville, Florida

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our reports dated March 28, 2005, relating to the consolidated financial statements and schedule, and the effectiveness of internal control over financial reporting, of Perma-Fix Environmental Services, Inc. appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2004. Our report dated March 28, 2005 on management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting as of December 31, 2004, expresses our opinion that the Company did not maintain effective internal control over financial reporting as of December 31, 2004 because of the effect of material weaknesses on the achievement of the objectives of the control criteria.

/s/ BDO Seidman, LLP West Palm Beach, Florida

May 4, 2005