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

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

PERMA-FIX ENVIRONMENTAL SERVICES, INC. (Exact name of registrant as specified in its charter) Delaware 58-1954497 (State or other jurisdiction of incorporation) (IRS Employer Identification No.) 8302 Dunwoody Place, Suite 250, Atlanta, Georgia 30350 (Address of principal executive offices) (Zip Code) Title of each class Name of each exchange on which to be so registered each class is to be registered **Preferred Stock Purchase Rights** The NASDAQ Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box. X

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box. o

Securities Act registration statement file number to which this form relates: Not applicable.

Securities to be registered pursuant to Section 12(g) of the Act: None.

Item 1. Description of Registrant's Securities to be Registered.

The Board of Directors of Perma-Fix Environmental Services, Inc. (the "Company") adopted a Stockholder Rights Plan, as set forth in the Rights Agreement dated May 2,2008 (the "Rights Agreement"), between the Company and Continental Stock Transfer & Trust Company, as Rights Agent (the "Rights Agent"). The adoption of the Rights Agreement was previously disclosed in the Company's Form 8-K, filed with the Securities and Exchange Commission (the "Commission") on May 8, 2008, along with a copy of the Rights Agreement and Certificate of Designations of Series A Junior Participating Preferred Stock, which are respectively referenced as Exhibits 4.1 and 4.2 hereto. The Company's Form 8-K, filed May 8, 2008, and its respective exhibits are incorporated herein by reference. The following description of the terms of the Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement, which is incorporated by reference.

Expiration Date

The Rights are not exercisable until the Distribution Date. The Rights will expire on May 2, 2018 (the "Final Expiration Date"), unless the Final Expiration Date is extended or unless the Rights are earlier redeemed by the Company, in each case, as described below.

Rights Dividend

Pursuant to the terms of the Rights Agreement, on May 2, 2008, the Board of Directors of the Company declared a dividend distribution of one Right for each outstanding share of Common Stock, par value \$.001 per share (the "Common Stock"), of the Company to stockholders of record on May 12, 2008 (the "Record Date"). The Rights Agreement also contemplates the issuance of one Right for each share of Common Stock which is issued by the Company between the Record Date and the Distribution Date (or earlier redemption or termination of the Rights).

Each Right entitles the registered holder to purchase from the Company one one-hundredth of a share of Series A Junior Participating Preferred Stock, par value \$.001 per share (the "Preferred Shares"), of the Company at a purchase price of \$13.00 per one-one hundredth of a Preferred Share (the "Purchase Price"), subject to adjustment. The description of the Rights are set forth in the Rights Agreement between the Company and the Rights Agent.

Distribution Date

Until the earlier to occur of (i) 10 days following a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") have acquired beneficial ownership of 20% or more of the outstanding Common Stock (except pursuant to a Permitted Offer, as defined below, or persons excluded from being an Acquiring Person under the Rights Agreement) or (ii) 10 business days (or such later date as may be determined by action of the Board of Directors prior to such time as any person becomes an Acquiring Person) following the commencement of, or announcement of an intention (which intention to commence remains in effect for 5 business days after such announcement) to make a tender offer or exchange offer, the consummation of which would result in a person or group becoming an Acquiring Person of 20% or more of the Company's Common Stock (the earlier of such dates being called the "Distribution Date"), the Rights will be evidenced with respect to any of the Common Stock certificates outstanding and no separate Rights Certificates will be distributed.

Excluded from being an Acquiring Person under the Rights Agreement are the following (collectively, the "Excluded Persons"):

- the Company;
- any subsidiary of the Company;
- any employee benefit plan of the Company or its subsidiaries;
- any entity holding Common Stock for or pursuant to the employee benefit plan of the Company or its subsidiary;
- any Person who becomes the beneficial owner of 20% or more of the Common Stock solely as a result of the acquisition of Common Stock by the Company, unless such Person shall, after such share purchases by the Company, become the beneficial owner of additional shares of Common Stock constituting 1% or more of the then outstanding shares of Common Stock; and
- any person whom the Board of Directors of the Company determines in good-faith has acquired 20% or more of the Common Stock inadvertently and such person divests, within 10 business days after such determination, a sufficient number of shares of Common Stock to no longer beneficially own 20% of the Common Stock.

The Rights Agreement provides that, until the Distribution Date (or earlier redemption or expiration of the Rights):

- the Rights will be transferred with and only with the Common Stock of the Company;
- new Common Stock certificates issued after the Record Date, upon transfer or new issuance of Common Stock by the Company will contain a notation incorporating the Rights Agreement by reference; and
- the surrender for transfer of any certificates for Common Stock, even without such notation (or a copy of this Summary of Rights) being attached thereto, will also constitute the transfer of Rights associated with the Common Stock represented by such certificate.

As soon as practicable following the Distribution Date, separate certificates evidencing the Rights ("Right Certificates") will be mailed to the holders of record of the Common Stock as of the close of business on the Distribution Date and such separate Right Certificates alone will evidence the Rights.

Distribution and Rights

In the event that any person becomes an Acquiring Person (except pursuant to a tender or exchange offer which is for all outstanding shares of Common Stock at a price and on terms which a majority of certain members of the Board of Directors determines to be adequate and in the best interests of the Company, its stockholders and other relevant constituencies, other than the Acquiring Person, its affiliates and associates (a "Permitted Offer")), each holder of a Right (except Rights which have been voided as set forth below) will thereafter have the right (the "Flip-In Rights") to receive upon exercise the number of shares of Common Stock or of one-one hundredths of a share of Preferred Shares (or, in certain circumstances, other securities of the Company) having a value (on the date such person became an Acquiring Person) equal to two times the Purchase Price of the Right.

In the event that at any time (i) the Company is acquired in a merger or other business combination transaction in which the Company is not the survivor, (ii) a merger or other business combination with the Company in which the Company is the survivor and, in connection with such transaction, all or part of the shares of Common Stock shall be changed for stock or other securities of any other person (or the Company) or (iii) more than 50% of the Company's assets or earning power is sold or transferred, then each holder of a Right (except Rights which have been voided as set forth below) shall thereafter have the right (the "Flip-Over Right") to receive, upon exercise, common stock of the acquiring company having a value equal to two times the Purchase Price of the Right. The Flip-Over Right is not applicable to transactions described in (i) and (ii) of this paragraph if (a) such transaction is consummated with a person who acquired Common Stock pursuant to a Permitted Offer; (b) the price per share of Common Stock offered in such transaction is not less than the price per share of Common Stock paid to all holders of Common Stock purchased pursuant to the Permitted Offer, and (c) the form of consideration offered in such transaction is the same as the form of consideration paid pursuant to the Permitted Offer.

Until a Right is exercised, the holder thereof, as such, will have no rights as a stockholder of the Company, including, without limitation, the right to vote or to receive dividends.

Any Rights that are beneficially owned by (i) any Acquiring Person (or any affiliate or associate of such Acquiring Person), (ii) a transferee of an Acquiring Person (or any affiliate or associate thereof) who becomes a transferee after the Acquiring Person becomes such, or (iii) under certain conditions, a transferee of any Acquiring Person (or any affiliate or associate thereof) who becomes a transferee prior to or concurrently with the Acquiring Person becoming such, shall be null and void and no holder of such Rights shall thereafter have rights to exercise such Rights.

Exchange Feature

At any time after a person becomes an Acquiring Person and prior to the acquisition by such Person (or affiliate or associate of an Acquiring Person) of 50% or more of the outstanding Common Stock, the Board of Directors of the Company may exchange the Rights (other than Rights owned by such Acquiring Person which have become void), in whole or in part, at an exchange ratio of one share of Common Stock, or one-one hundredth of a Preferred Share (or of a share of a class or series of the Company's preferred stock having equivalent rights, preferences and privileges), per Right (subject to adjustment). Upon the Board of Directors of the Company ordering the exchange, the right to exercise the Right shall terminate and the only right thereafter shall be to receive the shares in accordance with the exchange.

Adjustments

The Purchase Price payable, and the number of Preferred Shares, Common Stock or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to prevent dilution:

- in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Preferred Shares;
- upon the grant to holders of the Preferred Shares of certain rights or warrants to subscribed for or purchase Preferred Shares at a price, or securities convertible into Preferred Shares with a conversion price, less than the then current market price of the Preferred Shares; or
- upon the distribution to holders of the Preferred Shares of evidences of indebtedness or assets (excluding regular periodic cash dividends paid out of earnings or retained earnings or dividends payable in Preferred Shares) or of subscription rights or warrants (other than those referred to above).

The number of outstanding Rights and the number of one one-hundredths of a Preferred Share issuable upon exercise of each Right are also subject to adjustment in the event of a stock split of the Common Stock or a stock dividend on the Common Stock payable in Common Stock or subdivisions, consolidations or combinations of the Common Stock occurring, in any such case, prior to the Distribution Date.

With certain exceptions, no adjustment in the Purchase Price will be required until cumulative adjustments require an adjustment of at least 1% in such Purchase Price. No fractional Preferred Shares will be issued (other than fractions which are integral multiples of one one-hundredth of a Preferred Share, which may, at the election of the Company, be evidenced by depositary receipts) and in lieu thereof, an adjustment in cash will be made based on the market price of the Preferred Shares on the last trading day prior to the date of exercise.

Redemption

At any time prior to the earlier of the Distribution Date or Final Expiration Date, the Board of Directors of the Company may redeem the Rights in whole, but not in part, at a price of \$0.001 per Right (the "Redemption Price"), adjusted to reflect any stock split, stock dividend or similar transaction, and payable, at the option of the Company, either in cash, shares of common stock, or any other form of consideration deemed appropriate by the Board of the Company. The redemption of the rights may be made effective at such time, on such basis and with such conditions as the Board of Directors in its sole discretion may establish. Immediately upon any redemption of the Rights, the right to exercise the Rights will terminate and the only right of the holder of Rights will be to receive the Redemption Price.

Amendment

The terms of the Rights Agreement and the Rights may be amended by the Company without the consent of the holders of the Rights, in order to cure any ambiguity, to correct or supplement any provision contained therein which may be defective or inconsistent with any other provisions contained therein, or to make any other changes or amendments to the provisions contained therein which the Company may deem necessary or desirable, except that from and after such time as any person becomes an Acquiring Person no such amendment may adversely affect the interests of the holders of the Rights (other than the Acquiring Person or any affiliate or associate of the Acquiring Person). No amendment to the Rights Agreement or the Rights shall be made which changes the redemption price or the number of Preferred Shares or shares of Common Stock for which a Right is exercisable or exchangeable.

Miscellaneous

The certificate of designations establishing the Preferred Shares and the form of Rights Certificate are attached as Exhibits A and B, respectively, to the Rights Agreement (which is incorporated by reference into this Form 8-A). The foregoing description of the Rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement which is incorporated herein by reference.

Item 2. Exhibits.

Exhibit	Description
4.1	Rights Agreement, dated May 2, 2008, between the Company and Continental Stock Transfer & Trust Company, as Rights Agent, which is incorporated by reference from Exhibit 4.1 to the Company's Form 8-K, filed May 8, 2008.
4.2	Certificate of Designations of Series A Junior Participating Preferred Stock, which is incorporated by reference from Exhibit 4.2 to the Company's Form 8-K, filed May 8, 2008.
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Signatures

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

Dated: May 13, 2008

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By: <u>/s/ Steven T. Baughman</u>

Steven T. Baughman Vice President and Chief Financial Officer