

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

AMENDMENT NO. 1  
ON  
FORM 8-A/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**

(State or other jurisdiction of incorporation)

**58-1954497**

(IRS Employer Identification No.)

**8302 Dunwoody Place, Suite 250, Atlanta, Georgia**

(Address of principal executive offices)

**30350**

(Zip Code)

Title of each class  
to be so registered

Name of each exchange on which  
each class is to be registered

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:

**Preferred Stock Purchase Rights**

(Title of Class)

## EXPLANATORY NOTE

This Form 8-A/A amends the Registration Statement on Form 8-A, dated May 13, 2008 (the “Form 8-A”) filed by Perma-Fix Environmental Services, Inc. (the “Company”) with respect to the rights to purchase Series A Junior Participating Preferred Stock (the “Rights”), issued pursuant to the Rights Agreement, dated May 2, 2008, between the Company and Continental Stock Transfer & Trust Company (“Continental”), as Rights Agent (the “Rights Agreement”). On September 29, 2008, the Rights Agreement was amended by a certain Letter Agreement between the Company and Continental in order to correct the numbering of certain subparagraphs which were inadvertently misnumbered in the Rights Agreement. The Letter Agreement is attached as Exhibit 4.3 to this Registration Statement and is incorporated herein by reference.

### Item 2. Exhibits.

<u>Exhibit</u>	<u>Description</u>
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.
4.3	Letter Agreement, dated September 29, 2008, between the Company and Continental Stock Transfer & Trust Company, as Rights Agent.

### 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: October 1, 2008

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By: /s/ Steven T. Baughman

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Steven T. Baughman  
Vice President and  
Chief Financial Officer



September 29, 2008

VIA FACSIMILE TO (212) 616-7608

AND FEDERAL EXPRESS

Continental Stock Transfer & Trust Company

17 Battery Place, 8<sup>th</sup> Floor

New York, New York 10004

Attn: Ms. Alexandra Albrecht

Re: Perma-Fix Environmental Services, Inc.; Rights Agreement;  
Our File No. 7034-002

Ladies and Gentlemen:

Certain subparagraphs of the Rights Agreement, dated May 2, 2008 (the "Rights Agreement"), by and between Perma-Fix Environmental Services, Inc. (the "Company") and Continental Stock Transfer & Trust Company (the "Rights Agent") were inadvertently numbered incorrectly. This letter agreement changes the Rights Agreement to correct such numbering system pursuant to the authority granted to the Company and the Rights Agent in Section 27 of the Rights Agreement. Effective upon the execution of this letter by the Company and the Rights Agent, the following subparagraph numbers of the Rights Agreement are changed as indicated:

1. Subparagraphs 13(e) and (f) are hereby renumbered 13(a) and (b), respectfully;
2. Subparagraphs 14(e), (f) and (g) are hereby renumbered 14(a), (b) and (c), respectfully;
3. Subparagraphs 16(e), (f), (g) and (h) are hereby renumbered 16(a), (b), (c) and (d), respectfully;
4. Subparagraphs 20(e), (f), (g), (h), (i), (j), (k), (l) and (m) are hereby renumbered 20(a), (b), (c), (d), (e), (f), (g), (h) and (i), respectfully;
5. Subparagraphs 23(e), (f) and (g) are hereby renumbered 23(a), (b) and (c), respectfully;
6. Subparagraphs 24(e), (f), (g) and (h) are hereby numbered 24(a), (b), (c) and (d), respectfully; and
7. Subparagraphs 25(e) and (f) are hereby renumbered 25(a) and (b), respectfully.

Compliance Department  
Continental Stock Transfer & Trust Company  
September 29, 2008  
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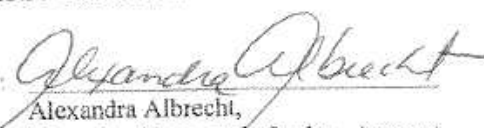
Except as expressly set forth above, the Rights Agreement remains effective without modification. This letter agreement may be signed in two counterparts, which together will constitute a single agreement. Please indicate acceptance of the foregoing by signing where indicated below.

PERMA-FIX ENVIRONMENTAL  
SERVICES, INC.

By:   
Steven T. Baughman,  
Chief Financial Officer

Dated: September 29, 2008

CONTINENTAL STOCK TRANSFER &  
TRUST COMPANY

By:   
Alexandra Albrecht,  
Vice President and Senior Account  
Manager

Dated: September 29, 2008

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