

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

June 4, 2009

By facsimile to (405) 232-2695 and U.S. Mail

Dr. Louis F. Centofanti Chairman, President, and Chief Executive Officer Perma-Fix Environmental Services, Inc. 8302 Dunwoody Place, #250 Atlanta, GA 30350

Re: Perma-Fix Environmental Services, Inc.

Pre-effective Amendments 1 and 2 to Registration Statement on Form S-3

Filed May 22 and 26, 2009

File No. 333-158472

Dear Dr. Centofanti:

We reviewed the filings and have the comments below.

General

1. We note the Form D filed on May 21, 2009, which indicates that you commenced an exempt offering under Rule 506 on May 8, 2009. Please address the impact of the public offering of the securities covered by this registration statement, which began when the Form S-3 was filed, on the issuance of securities in the Rule 506 offering. If you do not believe that the public offering constitutes general solicitation or general advertising with regard to the issuance of the securities offered in the Rule 506 offering, please explain.

Rights Attaching to Our Common Stock, page 14

- 2. We note these statements in the first and last paragraphs:
 - "Because the following is a summary, the description below of the Rights and the Rights Agreement necessarily omits certain terms, exceptions, or qualifications to the statements made therein."

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• "This summary description of the Rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement."

Please advise us of your basis for including such qualifying language, citing appropriate authority as necessary.

Closing

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us marked courtesy copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after review of your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosures in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information that investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosures, they are responsible for the adequacy and accuracy of the disclosures that they have made.

Notwithstanding our comments, when the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter at the time of the request, acknowledging that:

- Should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing.
- The action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing.
- The company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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Also, please be advised that the Division of Enforcement has access to all information that you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statements. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may direct questions on comments and disclosure issues to Edward M. Kelly, Senior Counsel, at (202) 551-3728 or me, at (202) 551-3397.

Very truly yours,

Jay E. Ingram Legal Branch Chief

cc: Irwin H. Steinhorn, Esq. Conner & Winters, LLP 1 Leadership Square, Suite 1700 211 North Robinson Oklahoma City, OK 73102