

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

Mail Stop 4631

September 3, 2009

Ben Naccarato Vice President and Chief Financial Officer Perma-Fix Environmental Services, Inc. 8302 Dunwoody Place, Suite 250 Atlanta, GA 30350

Re: Perma-Fix Environmental Services, Inc.

Form 10-K for Fiscal Year Ended December 31, 2008

File No. 1-11596

Dear Mr. Naccarato:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2008

Item 7. Management's Discussion and Analysis, page 29 Liquidity and Capital Resources, page 41

1. Please revise your future filings to disclose and discuss the specific terms of the most significant covenants under your credit facility, term loan and other notes. Your disclosures should include actual ratios/amounts for each period and the most restrictive required ratios/amounts. Also, please address the potential risks and consequences of not complying with such covenants. Such disclosures may help investors understand the magnitude of and trends associated with actual and

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required ratios/amounts. See Sections I.D and IV.C of Release No. 33-8350, Interpretation-Commission's Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations on our website at http://www.sec.gov/rules/interp/33-8350.htm#P180_57133.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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

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You may contact Bret Johnson at (202) 551-3753 or me at (202) 551-3768 if you have questions regarding our comments.

Sincerely,

John Cash Accounting Branch Chief