



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

Mail Stop 4631

June 21, 2010

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, 2009
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 FISCAL YEAR ENDED DECEMBER 31, 2009

Item 1. Business, page 1

Importance of Patents, Trademarks and Proprietary Technology, page 4

1. We note your disclosure that your research and development efforts have produced seven active patents. In future filings, please disclose the remaining life of these patents. See Item 101(c)(1)(iv) of Regulation S-K.

Competitive Conditions, page 7

2. In future filings, please disclose the principal methods of competition in your industry segments. See Item 101(c)(1)(x) of Regulation S-K.

Item 9A. Controls and Procedures, page 108

3. We note that your management's conclusion regarding the effectiveness of your disclosure controls and procedures appears to be based on the definition in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. As stated, however, your description does not fully conform to the definition set forth in those rules. In this regard, we note that your description does not clearly indicate that your disclosure controls and procedures are designed to ensure that information is accumulated and communicated to management, including the principal executive and financial officers, as appropriate to allow timely decisions regarding required disclosure. Please confirm this to us and revise accordingly in future filings. Alternatively, you may simply state in future filings that your certifying officers concluded that your disclosure controls and procedures were effective on the applicable dates.
4. We note the qualification that your "management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives...." Accordingly, please indicate in future filings that your disclosure controls and procedures are designed to provide reasonable assurance of achieving their stated objectives and that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures are effective at the reasonable assurance level. Alternatively, please remove language from your filings that qualify the design, operation, and effectiveness of your disclosure controls and procedures.

Signatures, page 138

5. In future filings, please indicate who signed your Form 10-K in the capacity of chief accounting officer. See General Instruction D(2)(a) to Form 10-K.

Exhibit Index, page 140

6. It appears that Exhibit 4.2 incorporates by reference the original, unamended Revolving Credit, Term Loan and Security Agreement; however, it does not contain all of the schedules and exhibits referenced therein. Please file with your next periodic or current report, a complete copy of this credit agreement, including all schedules and exhibits referenced therein. See Item 601(b)(10) of Regulation S-K. In addition, please revise your exhibit list in future filings to accurately reflect the name of this agreement.

7. Please file with your next periodic or current report, a complete copy of Amendment No. 5 to the Revolving Credit, Term Loan and Security Agreement. See Item 601(b)(10) of Regulation S-K.
8. Please file as a material contract the subcontract awarded to East Tennessee Materials & Energy Corporation by CH Plateau Remediation Company, which you first discuss on page 3. We note that this contract accounted for 44.9% of your total revenues during 2009. See Item 601(b)(10) of Regulation S-K.
9. We note the following:
 - Incorporated Exhibit 4.4 does not appear to be filed as Exhibit 4.3 to the Form 10-Q for the quarter ended September 30, 2002.
 - Exhibit 4.8 is not filed with your Form 10-K for the fiscal year ended December 31, 2009, and is not otherwise incorporated by reference to another filing.
 - Incorporated Exhibit 4.15 does not appear to be filed as Exhibit 4.2 to the Form 10-Q for the quarter ended June 30, 2008.Please advise us or revise accordingly in future filings.
10. Please be advised that no document on file with the Commission for more than five years may be incorporated by reference, subject to certain limited exceptions. See Item 10(d) of Regulation S-K. We note that the documents you incorporate by reference in Exhibits 10.2, 10.3, and 10.5 have been on file with the Commission for more than five years and do not appear to satisfy any of the exceptions listed in Item 10(d). Please advise or revise accordingly in future filings.

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:

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- 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.

You may contact Bret Johnson, Staff Accountant, at (202) 551-3753 or John Cash, Accounting Branch Chief, at (202) 551-3768 if you have questions regarding our comments on the financial statements and related items. Please contact Hagen Ganem, Staff Attorney, at (202) 551-3330 or Jay Ingram, Legal Branch Chief, at (202) 551-3397 with any other questions.

Sincerely,

John Hartz
Senior Assistant Chief
Accountant