



July 1, 2010

Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, D.C. 20549
Attention: John Hartz, Senior Assistant Chief Accountant

Re: *Perma-Fix Environmental Services, Inc.; Form 10-K for Fiscal Year
Ended December 31, 2009; File No. 1-11596*

Ladies and Gentlemen:

This letter is submitted by Perma-Fix Environmental Services, Inc. (the "Company") in response to the comments of the Staff of the Securities and Exchange Commission (the "SEC") with respect to the Company's Form 10-K for fiscal year ended December 31, 2009 (the "2009 Form 10-K"). The Staff comments were delivered to Ben Naccarato, Vice President and Chief Financial Officer of the Company, by letter dated June 21, 2010 (the "Comment Letter").

The Comment Letter does not specifically state that comment no. 8 may be complied with in the Company's future filings. On June 23, 2010, we discussed the Comment Letter with Hagen Ganem, staff attorney with the Division of Corporate Finance at the SEC. During our conversation with Mr. Ganem, our counsel, Conner & Winters, LLP, discussed with Mr. Ganem the possibility of the Company complying with comment no. 8 beginning with the Company's Form 10-Q for quarter ended June 30, 2010. Mr. Ganem orally advised our counsel that comment no. 8 would not require the filing of an amendment to the 2009 Form 10-K as long as such was complied with in our Form 10-Q for quarter ended June 30, 2010.

The Staff's comments and the Company's responses thereto are set forth below, numbered as such comments are numbered in the Comment Letter. Capitalized terms used herein have the meanings assigned to them in the 2009 10-K.

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.*

Response:

The Company will disclose the remaining life of the seven active patents in its future filings.

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.*

Response:

The Company will enhance and expand its disclosures regarding the principal methods of competition in the Company's industry segments in its future filings.

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.*

Response:

The Company confirms to the Staff that the Company's 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. In the Company's future filings, the Company will revise its disclosure controls and procedures under Item 9 accordingly.

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.*

Response:

In the Company's future filings, the Company will indicate that the Company's disclosure controls and procedures are designed to provide reasonable assurance of achieving their stated objectives and that the Company's principal executive officer and principal financial officer concluded that the Company's disclosure controls and procedures are effective at the reasonable assurance level on the applicable date.

Signatures, page 138

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

Response:

The Company will identify the officer signing its Form 10-K in capacity of chief accounting officer in its future filings. The undersigned, Ben Naccarato, currently serves as both the chief financial officer and chief accounting officer of the Company.

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.*

Response:

The Company will file a complete copy of the original Revolving Credit, Term Loan and Security Agreement, including all schedules and exhibits referenced therein, as an exhibit to the Company's Form 10-Q for the period ended June 30, 2010. The Company will revise its exhibit list in future filings to accurately reflect the name of such 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.*

Response:

The Company will file a complete copy of Amendment No. 5 to Revolving Credit, Term Loan and Security Agreement as an exhibit to the Company's Form 10-Q for the period ended June 30, 2010. This document was originally filed as Exhibit 4.1 to the Company's Form 8-K filed June 30, 2005.

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.*

Response:

The referenced subcontract awarded to East Tennessee Materials & Energy Corporation was filed as Exhibit 10.18 to the 2009 Form 10-K by means of incorporation by reference from Exhibit 10.1 to the Company's Form 10-Q for the quarter ended June 30, 2008, filed on August 11, 2008. For clarification, the Company will file the referenced subcontract as an exhibit to the Company's Form 10-Q for the quarter ended June 30, 2010.

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.

Response:

With respect to the exhibits identified in Comment No. 9, the Company responds as follows:

- Exhibit 4.4 is incorrectly identified as being filed as Exhibit 4.3 to the Form 10-Q for the quarter ended September 30, 2002. In fact, Exhibit 4.4 was filed as Exhibit 4.3 to the Form 10-Q for the quarter ended June 30, 2002. The Company will refile this document as an exhibit to the Company's Form 10-Q for quarter ended June 30, 2010.
- Exhibit 4.8 was originally filed as Exhibit 4.10 to the Company's Form 10-K for the year ended December 31, 2005. Exhibit 4.8 will be refiled as an exhibit to the Company's Form 10-Q for quarter ended June 30, 2010.
- Exhibit 4.15 was incorrectly identified as being filed as Exhibit 4.2 to the Form 10-Q for the quarter ended June 30, 2008. In fact, Exhibit 4.15 was filed as Exhibit 99.1 to the Form 8-K filed on August 8, 2008. The Company will correct the reference to the appropriate document in its Form 10-Q for the quarter ended June 30, 2010 and in its 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.*

Response:

The Company will file copies of Exhibits 10.2, 10.3, and 10.5 as exhibits to its Form 10-Q for the quarter ended June 30, 2010.

In connection with responding to your comments, the Company acknowledges that:

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

We appreciate your attention to this matter. If you have any questions or comments, please do not hesitate to contact our counsel, Irwin H. Steinhorn, Esquire, of the firm of Conner & Winters, LLP, 1700 One Leadership Square, 211 North Robinson Avenue, Oklahoma City, Oklahoma 73102, at (405) 272-5711, or the undersigned at (770) 587-9898, ext. 112.

Sincerely,

/s/ Ben Naccarato

Ben Naccarato
Vice President
Chief Financial Officer

cc: Dr. Louis F. Centofanti
Irwin H. Steinhorn, Esq.
John Hartz
Bret Johnson
