



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

October 19, 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
Filed March 12, 2010
File No. 001-11596**

Dear Mr. Naccarato:

We have reviewed your filing and have the following additional comments.

Item 11. Executive Compensation, page 116

Compensation Discussion and Analysis, page 116

1. The summary compensation table on page 126 reflects that Mr. Schreiber earned a \$69,130 bonus in 2009 yet we cannot locate any disclosure in the Compensation Discussion and Analysis relating to the award. Please provide the information required by Item 402(b) of Regulation S-K with respect to Mr. Schreiber's bonus award, including the reasons the compensation committee chose to pay the bonus, how it fits into your overall compensation objectives, and the method the compensation committee used to determine the bonus amount.

The Compensation Committee's Processes, page 119

2. We note that your compensation committee bases its executive compensation programs, in part, on each named executive officer's contribution to company performance and other leadership achievements. In future filings, please describe in more detail the elements of individual performance that your compensation committee takes into account when designing compensation programs and determining the payouts to be made to each named executive officer. To the extent that considerations vary significantly among the named executive officers, describe the elements of individual performance separately with respect to each.

3. We note that in making compensation decisions, your compensation committee compares compensation you pay your named executive officers against amounts paid by your peer companies to their executives. Please provide us with a detailed explanation of how your compensation committee uses comparative compensation information and how this comparison affects its compensation decisions. For example, if the committee uses specific benchmarks, please disclose them and discuss where your named executive officers' actual compensation levels fell relative to those benchmarks. To the extent amounts fall significantly above or below those targeted amounts, please discuss the reasons for such variance. See Item 402(b)(2)(xiv) of Regulation S-K.

Executive Management Incentive Plan, page 121

4. We note that performance compensation for 2009 was based on pre-established company goals. Item 402(b) of Regulation S-K requires that you disclose all previously established goals and discuss how the incentive compensation actually awarded reflects those goals. If you believe that disclosure of such information would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed analysis supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary short of disclosing information that poses a reasonable risk of competitive harm. Refer generally to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations.
5. We note your disclosure that your chief executive and chief financial officers achieved above the minimum level of performance but below the maximum level of performance under your management incentive plan. However, it is unclear how such actual performance translated into the payouts ultimately made to these named executive officers under this compensation program. In future filings, please provide appropriate analytical disclosure clearly explaining the correlation between actual performance and the compensation amounts earned under each program.

Mr. Ben Naccarato
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Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters, page 131

Equity Compensation Plans, page 134

6. In future filings, please ensure that the tabular disclosure concerning your equity compensation plans is current as of the most recently completed fiscal year. See Item 201(d) of Regulation S-K.

Item 13. Certain Relationships and Related Transactions, and Director Independence, page 135

7. In future filings, please provide the disclosure required by Item 404(b) of Regulation S-K with respect to your policies and procedures for review, approval, or ratification of related person transactions.

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

Please contact Hagen Ganem, Staff Attorney, at (202) 551-3330 or me at (202) 551-3397 if you have any questions.

Sincerely,

Jay Ingram
Legal Branch Chief