



DIVISION OF
CORPORATION FINANCE

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

VIA FACSIMILE AND U.S. MAIL

September 2, 2009

Dennis W. Blazer
Chief Financial Officer
CECO Environmental Corp.
3120 Forrer Street
Cincinnati, Ohio 45209

**RE: CECO Environmental Corp.
Form 10-K for Fiscal Year Ended December 31, 2008
Forms 10-Q for Fiscal Quarters Ended March 31, 2009 and
June 30, 2009
File No. 0-7099**

Dear Mr. Blazer:

We have reviewed your filings and have the following comments. If you disagree with a comment, 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 or may not 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 on 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

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. With the exception of the comment below that will require an amendment to your Form 10-K, these revisions should be included in your future filings.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 35

Liquidity and Capital Resources, page 40

Overview of Cash Flows and Liquidity, page 41

2. We note that you identify the components that resulted in a significant increase in your cash flows from operations. Please expand this disclosure to discuss the underlying reasons for changes in these components, with specific discussions for accounts receivable, inventory, accounts payable and deferred revenue.

Debt Covenants, page 42

3. You indicate that you were in compliance with all debt covenants at December 31, 2008. Please also disclose here or elsewhere in the filing the specific terms of any material debt covenants in your debt agreements. For any material debt covenants for which it is reasonably likely that you will not be able to meet such covenants, please disclose the required amounts/ratios as well as the actual amounts/ratios as of each reporting date. This will allow readers to understand how much cushion there is between the required amounts/ratios and the actual amounts/ratios. Please consider showing the specific computations used to arrive at the actual amounts/ratios with corresponding reconciliations to US GAAP amounts, if necessary. See Sections I.D and IV.C of the SEC Interpretive Release No. 33-8350 and Question 10 of our FAQ Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003. Please also disclose if there are any stated events of default which would permit the lenders to accelerate the debt if not cured within applicable grace periods or any cross default provisions in your debt agreements.

Critical Accounting Policies and Estimates, page 43

Impairment of Long-Lived Assets, including Goodwill, page 44

4. In the interest of providing readers with a better insight into management's judgments in accounting for impairment of long-lived assets, including goodwill, please consider disclosing the following in future filings:
 - Please disclose how you determine when property, plant and equipment should be tested for impairment, including what types of events and circumstances indicate impairment, and how frequently you evaluate for these types of events and circumstances;
 - How you group long-lived assets for impairment and your basis for that determination;
 - The reporting unit level at which you test goodwill for impairment and your basis for that determination;

- Sufficient information to enable a reader to understand how you determined the appropriate multiple of pre-tax EBITDA to use and how you apply the multiple in estimating the fair value of your reporting units and why management selected this method as being the most meaningful in preparing your goodwill impairment analyses;
- How you determine the appropriate discount rates to apply in your impairment analysis;
- Please expand your discussion of the significant estimates and assumptions used to determine future undiscounted cash flows and fair value. You should discuss how sensitive the fair value estimates are to each of these significant estimates and assumptions and whether certain estimates and assumptions are more subjective than others;
- If applicable, how the assumptions and methodologies used for valuing goodwill and other intangibles and property, plant and equipment in the current year have changed since the prior year, highlighting the impact of any changes; and
- For any asset groups for which the carrying value was close to the fair value, please disclose the carrying value of the asset groups.

We caution you that, to the extent you gather and analyze information regarding the risks of recoverability of your assets, such information may be required to be disclosed if it would be material and useful to investors. We believe that it is important to provide investors with information to help them evaluate the current assumptions underlying your impairment assessment relative to your current market conditions and your peers to enable them to attempt to assess the likelihood of potential future impairments. We believe that detailed rather than general disclosures regarding these risks and exposures would provide investors with the appropriate information to make this evaluation. In this regard, we urge you to consider what additional quantitative disclosures can be provided to convey the risk that additional impairment or restructuring charges may be recorded.

Controls and Procedures, page 50

(b) Management's Annual Report on Internal Control over Financial Reporting, page 50

5. Please revise your management's report in an amendment to your Form 10-K to address the following:
 - Specifically state your conclusion about the effectiveness of your internal controls over financial reporting. Your statement should indicate whether or not your internal control over financial reporting is effective; and
 - A statement that the registered public accounting firm that audited the financial statements included in the annual report has issued an attestation report on management's assessment of internal controls over financial reporting.

Refer to Item 308(a) of Regulation S-K.

Financial Statements

1. Nature of Business and Summary of Significant Accounting Policies, page F-10

General

6. Please disclose your accounting policy related to pre-contract costs. In doing so, please disclose whether or not pre-contract costs related to unsuccessful contract bids are written off in the period you are informed you did not get the specific contract. If not, please disclose why not and discuss when they are expensed and your basis for that alternative treatment.

Claims, page F-12

7. Please disclose whether the unapproved change order/claim amounts included in your determination of revenue include a profit component. If so, please disclose how this component amount is determined and why you believe the inclusion of the profit component is appropriate under the circumstances.

Earnings per Share, page F-13

8. On page F-23, you indicated that you recorded an expense for restricted stock awards. Please disclose how you treated your restricted stock awards for purposes of computing earnings (loss) per share in accordance with SFAS 128. Please separately disclose your treatment of vested and unvested restricted stock.

19. Quarterly Financial Data (unaudited), page F-32

9. Please revise your quarterly financial data to include gross profit for each period presented as required by Item 302 of Regulation S-K.

Exhibits 31.1 and 31.2

10. You have replaced the word "report" with "annual report" in paragraphs 2, 3, and 4 of your certifications. Please revise your certifications to use the word "report" instead of the description of the corresponding report. Your certifications should be in the exact form as required in Item 601(b)(31) of Regulation S-K.

FORM 10-Q FOR THE FISCAL QUARTER ENDED JUNE 30, 2009

General

11. Please address the comments above in your interim filings as well.

7. Earnings Per Share, page 11

12. Please clearly disclose the terms of the dividend rights associated with the restricted stock, including whether they participate on a one-for-one basis with holders of common stock. Please provide us with your computations of EPS using the two-class method pursuant to FSP EITF 03-6-1, EITF 03-6, and paragraphs 60 and 61 of SFAS 128 for the periods presented.

15. Acquisitions, page 16

13. You indicate that the purchase price allocation is preliminary and subject to further refinement based upon completion of asset valuation. Please confirm that your purchase price for your February 29, 2008 acquisition is final. Otherwise, please tell us and disclose why your purchase price allocation remains preliminary as of June 30, 2009.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 18

Financial Condition, Liquidity and Capital Resources, page 20

14. You indicate that your principal sources of liquidity are cash flow from operations and available borrowings under your revolving credit facility. We note that your revenues decreased by 29.7% or \$31.0 million from the six months ended June 30, 2008 to the six months ended June 30, 2009. In addition, on page 20, you indicate that at June 30, 2009, you had available borrowings of \$1.6 million under your revolving line of credit. It appears that you had \$8.1 million available as of December 31, 2008. Given the information above, please discuss the significant changes in these sources of cash from period to period and the impact of these changes on your liquidity and capital resources. Please specifically address the impact on your availability under the revolving credit facility due to changes in the borrowing base formula. Please disclose if you believe that these sources will be sufficient to meet your liquidity needs over the next twelve months. If so, please further advise how you determined that these sources will be sufficient to meet your needs over the next twelve months. Please disclose if you expect any alternative sources of funding to be available in the future.

* * * *

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 response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

Mr. Dennis W. Blazer

September 2, 2009

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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 their filings;
- 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 Ernest Greene, Staff Accountant, at (202) 551-3733, or in his absence, Nudrat Salik, Staff Accountant, at (202) 551-3692, if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Rufus Decker
Accounting Branch Chief