

December 20, 2007

Via Edgar and Facsimile

Mr. Rufus Decker
Accounting Branch Chief
Securities and Exchange Commission – Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-7010

Re: CECO Environmental Form 10-K for the fiscal year ended December 31, 2006
CECO Environmental Form 10-Q for the quarter ended June 30, 2007
CECO Environmental Form 10-Q for the quarter ended September 30, 2007
File No. 0-07099

Dear Mr. Decker:

CECO Environmental Corp. (“we” or the “Company”) has received your letter dated December 7, 2007. We appreciate that your review was intended to assist us in our compliance with applicable disclosure requirements and to enhance the overall disclosure in our filings.

The following reflects our review of the comments of the staff (the “Staff”) of the Securities and Exchange Commission (the “Commission”) you provided (keyed to your letter dated December 7, 2007):

Form 10-K for the year ended December 31, 2006

Management’s Discussion and Analysis of Financial Condition and Results of Operations Results of Operations, page 33

- 1. Comment: We note your response to comment 2 and your future filing revisions included within your Form 10-Q for the period ended September 30, 2007. While we understand that as a result of your internal structure, it may not reasonably possible to accurately quantify external sales by a particular company, division or group. However, it seems that in the process of evaluating the success of your business, you likely have some mechanism for identifying drivers of revenue growth so that you are able to allocate resources towards products and services that will benefit the company. Please tell us how management develops its annual sales budgets and why this same process could not be used to identify and quantify the reasons for fluctuations in consolidated sales from period to period to financial statement users.*

Response: Management develops its annual sales budget using a detailed bottom up analytical process. Each of the CECO division managers prepares a comprehensive financial projection that is developed by reviewing their current backlog, work-in-process reports and production schedules. This analysis provides a base forecast which is then supplemented by adding projected new revenues that are determined by reviewing current quoting activity, bookings success rates and recently identified sales opportunities. Additionally, an estimate of future new business opportunities is made by

considering specific growth drivers such as fundamental strength in industrial sectors, new pollution control and energy legislation, increasingly strict EPA mandated industry Maximum Achievable Control Technology standards ("MACT") and OSHA established Threshold Limit Values ("TLV"). The final step in the revenue projection process is to estimate the amount of external sales generated by one division that can be performed internally by another CECO division.

Once the projected revenue process is completed, management is able to determine the individual division's activity level, including inter-divisional orders, and establish the appropriate levels of fixed and variable overhead necessary to support the projected volume at the division level as well as the CECO corporate level. This same process will be used in a similar fashion to identify and quantify the reasons for fluctuations in consolidated sales from period to period.

Future filings will include disclosures similar to the following:

Consolidated sales in 2006 were \$135.4 million, an increase of \$53.8 million or 66% compared to 2005. This increase was primarily due to increased demand for our products and services created by the fundamental strength of many industrial sectors including ethanol production, steel production and automotive related sectors. This increase also included \$12 million in new contracting sales revenues attributed to the addition of H.M. White, Inc. in 2006. Additional demand for our products and services was created by increasingly strict EPA mandated industry Maximum Achievable Control Technology standards ("MACT") and OSHA established Threshold Limit Values ("TLV"), as well as existing pollution control and energy legislation.

Note 12 – Pension and Employee Benefit Plans, page F-24

2. *Comment: We note your response to comment 9, however, your proposed future filing disclosures pertaining to this 2006 reporting error do not appear correct. It seems from your disclosures on page F-24 that the amount of your adjustment to accumulated other comprehensive income upon adoption of SFAS 158 was \$226,000. This adjustment should be reported as a component of the ending balance of accumulated other comprehensive income but should not be reported as a component of total comprehensive income. It also appears you have an additional adjustment to your pension/postretirement liability of \$266,000, representing the additional plan net loss which arose during the year. This additional liability should not be recorded in the same way as the SFAS 158 adoption adjustment but rather, should be recorded as a component of total comprehensive income (net of tax) and therefore should also be recorded as a component of accumulated other comprehensive income. Please provide us with your revised statement of shareholders equity for the period ended December 31, 2006 that you will include in future filings.*

Response: The following will be included in our Annual Report on Form 10-K for the fiscal year ended 2007:

For the year ended December 31, 2006, the Company incorrectly recorded its transition adjustment related to the adoption of SFAS No. 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans – an Amendment of FASB Statements No. 87, 88, 106 and 132(R). The Company reported its transition adjustment of \$226,000 as a component of 2006 other comprehensive income (loss), rather than as a direct adjustment to the ending balance of accumulated other comprehensive loss.

The Company's revised statement of shareholders equity for the period ended December 31, 2006 that will be included in future filings will reflect the following:

| | Accumulated Other Comprehensive (Loss) | Total Comprehensive (Loss) Income |
|---|---|--|
| Balance, December 31, 2005 | \$ (791) | \$ 466 |
| Net Income for the year ended December 31, 2006 | | \$ 3,094 |
| Other comprehensive income (loss): | | |
| Adjustment for minimum pension/ post retirement liability, net of tax \$(178) | (266) | (266) |
| Translation gain | 3 | 3 |
| Total Comprehensive income | | \$ 2,831 |
| Adjustment for SFAS 158 transition, net of tax \$(150) | (226) | |
| Balance, December 31, 2006 | \$ 1,280 | |

FORM 10-Q FOR THE PERIOD ENDED SEPTEMBER 30, 2007

Condensed Consolidated Financial Statements

Note 14 – Subsequent event, page 11

3. *Comment: Please tell us how you intend to account for the asset purchase agreement and goodwill purchase agreement entered into on October 31, 2007. Your response should provide a condensed balance sheet disclosing the amount assigned to each major asset and liability at the acquisition date and a brief discussion of how you determined the amount to be allocated to each item. Please also tell us what consideration was given to allocating the purchase price to intangible assets separate from goodwill and the useful life assigned to each identified intangible asset. See paragraph 39 of SFAS 141.*

Response: As disclosed in our Current Report on Form 8-K filed with the SEC on November 2, 2007 and in our Quarterly Report on 10-Q for the quarter ended September 30, 2007, on October 31, 2007, the Company, GMD Acquisition Corp. ("Acquisition"), an indirectly owned subsidiary of the Company, and GMD Environmental Technologies, Inc., GMD Properties, Inc. and GMD Services, Inc. (collectively, "GMD") entered into an Asset Purchase Agreement ("APA"), pursuant to which Acquisition acquired, for a purchase price of \$1,400,000, substantially all of the assets of GMD (the

“Asset Purchase”), which relate to the business currently conducted by GMD, including the design, manufacture, and sale of its air pollution control systems and the furnishing of installation services to customers. The Asset Purchase was completed on October 31, 2007.

Additionally, on October 31, 2007, the Company and Acquisition also entered into a Goodwill Purchase Agreement (“GPA”) with Gerald J. Reier and Lynda Reier (the “Sellers”), pursuant to which Acquisition acquired, for a purchase price of \$1,600,000, all of the Sellers’ goodwill in the business of GMD (the “Goodwill Purchase”). The Sellers are also entitled to an earn-out payment up to \$1,000,000, payable approximately 39 months following closing, subject to the Company meeting certain financial thresholds. The closing for the Goodwill Purchase was completed on October 31, 2007. The cash used by the Company to pay the purchase price for the Asset Purchase and Goodwill Purchase was obtained from the Company’s existing revolving credit facility.

The acquisition did not meet the requirements of a “significant subsidiary” and an 8-K filing with financial statements and pro forma financial information will not be required.

The asset purchase agreement and the goodwill purchase agreement will initially be accounted for as follows:

| | | |
|---------------------------------|-------------|---------------------------|
| Total Sales Price | | |
| Base purchase price | | \$3,000,000 |
| Liabilities assumed | | |
| Accounts payable | \$ 39,726 | |
| Accrued expenses | 43,226 | |
| Billings in excess of cost | 12,127 | |
| | | <u>95,079</u> |
| Total Sales Price | | <u>\$3,095,079</u> |
| Assets Transferred | | |
| Accounts receivable | \$1,222,630 | |
| Inventory | 126,099 | |
| Other assets | | |
| Prepaid expenses | 22,154 | |
| Property & Equipment | 45,261 | |
| Purchased intangibles | 1,678,935 | |
| Total Assets Transferred | | <u>\$3,095,079</u> |

The values for accounts receivable, inventory, prepaid expenses and property and equipment were established during a review by an independent accounting firm and reflect the fair value of the acquired assets and liabilities. Inventories were fair valued based on the results of a physical inventory, obsolescence review and price testing. Other items were reviewed by management and it was determined that book values represented fair values.

A subsequent analysis of the purchased intangibles will be performed by the Company with the assistance of an independent, third party valuation expert to determine the specific components of definite and indefinite useful life intangibles separate from goodwill. This analysis will give specific consideration to the requirements of Statement of Financial Accounting Standards No. 141— Appendix A.

Should the Staff have any additional questions or comments after reviewing this response letter we would appreciate the opportunity to discuss these comments or questions with the Staff prior to the distribution of another comment letter. In addition, if we may be of assistance during the Staff's review of this letter, please call me directly at (513) 458-2600.

We look forward to your response.

Very Truly Yours,
CECO Environmental Corp.

/s/ Dennis W. Blazer

Dennis W. Blazer
Vice President and Chief Financial Officer

cc: Lisa Haynes, Staff Accountant, Securities and Exchange Commission