

July 27, 2015

VIA EDGAR

Pamela Long
Assistant Director
U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, North East
Washington, D.C. 20549

**Re: CECO Environmental Corp.
Amendment No. 1 to Registration Statement on Form S-4
Filed July 10, 2015
File No. 333-204816
Form 10-K for the Fiscal Year Ended December 31, 2014
File March 18, 2015
File No. 1-07009**

Dear Ms. Long:

On behalf of CECO Environmental Corp. (“CECO” or the “Company”), set forth below are responses to the comments provided by the Staff of the Division of Corporation Finance (the “Staff”) of the Securities and Exchange Commission (the “Commission”) in a letter dated July 22, 2015, relating to the above-captioned Amendment No. 1 (“Amendment No. 1”) to CECO’s Registration Statement on Form S-4 (the “Registration Statement”) filed with the Commission on July 10, 2015 and CECO’s Annual Report on Form 10-K for the year ended December 31, 2014. The headings and paragraph numbers of this letter correspond to the headings and paragraph numbers contained in the letter from the Staff. For your convenience, we have set forth the Staff’s comments in bold typeface followed by our response in regular font.

With this letter, CECO is filing Amendment No. 2 (“Amendment No. 2”) to the Registration Statement. We are providing supplementally to the Staff four copies of a version of Amendment No. 2 that have been marked by the financial printer to show the changes from Amendment No. 1. All page references in the responses set forth below are to the pages of Amendment No. 2. All capitalized terms not herein defined have the meanings ascribed to them in Amendment No. 2.

Amendment No. 1 to Registration Statement on Form S-4

1. We note your supplemental response to comment 14 in our letter dated July 6, 2015 states that “Jefferies believes it did not exclude companies or transactions from its selected public companies and selected precedent transactions analyses that in its professional judgment fit its selected criteria.” Please disclose this response within your amended registration statement.

Response: In response to the Staff’s comment, the disclosure in the Registration Statement on page 102 of Amendment No. 2 has been revised.

Unaudited Pro Forma Condensed Combined Financial Statements, page 178

Notes To Unaudited Pro Forma Condensed Combined Financial Information, page 183

2. Assets Acquired and Liabilities Assumed, page 184

2. We note your response to comment 23 from our letter dated July 6, 2015. Please revise your disclosure to indicate that the book value of your non-controlling interest approximates its fair value.

Response: In response to the Staff’s comment, the disclosure in the Registration Statement on page 191 of Amendment No. 2 has been revised.

Form 10-K for the Year Ended December 31, 2014

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 32

Critical Accounting Policies and Estimates, page 48

3. We note your response to comment 26 from our letter dated July 6, 2015. In order for investors to more fully understand your assessment, please revise your disclosure to explain how you determined the key assumptions used to estimate the fair value of your reporting units where the aggregate fair value did not significantly exceed carrying value. Please also revise to provide sensitivity analyses that indicate the potential impact of changes in your assumptions. For example, your disclosures state that changes in any of the assumptions used or a failure to achieve your 2015 operating plan could potentially result in material non-cash impairment charges. However, it is unclear which assumptions and/or aspects of your 2015 operating plan are most susceptible to change and therefore could have the most significant impact on your impairment analysis. Please refer to Item 303(a)(3)(ii) of Regulation S-K and Section V of SEC Release 33-8350, which provides interpretive guidance regarding MD&A disclosures.

Response: In response to the Staff’s comment, the Company respectfully submits that it will make, in its future filings, the following additional disclosures as further explained below:

- Within the discounted cash flow model that is used to estimate the fair value of each reporting unit, the Company determined the key assumptions to be projected revenue, projected operational profit, terminal growth rates and cost of capital. Projected revenue, projected operational profit and terminal growth rates were determined to be key assumptions because they are three primary drivers

of the projected cash flows in the discounted cash flow fair value model. Cost of capital was also determined to be a key assumption as it is the discount rate used to calculate the current fair value of those projected cash flows. Additionally, the Company expects that any immaterial, negative change in any one of these assumptions could lead to the fair value of the reporting units being less than the carrying value, which would require the Company to perform step 2 of the impairment test to assess the need for additional goodwill impairment. The Company is not currently aware of any negative changes in its assumptions that could lead to the fair value of the reporting units being less than the carrying value.

The Company believes that the key assumptions most susceptible to change are projected revenue and projected operational profit as they are company-specific and within the control of the Company to a certain extent. However, terminal growth rates and cost of capital are largely affected by industry and macroeconomic factors. Two of the reporting units carried combined goodwill of \$90.9 million and the aggregate excess of fair value over their carrying value was only 3%. [Further sensitivity analysis as described below]

- Within the relief from royalty method that is used to estimate the fair value of indefinite life intangible assets at each reporting unit, the Company determined the key assumptions to be projected revenue, royalty rates, terminal growth rates and cost of capital. Projected revenue, royalty rates and terminal growth rates were determined to be key assumptions because they are three primary drivers of the projected royalty cash flows in the relief from royalty method. Cost of capital was also determined to be a key assumption as it is the discount rate used to calculate the current fair value of those projected royalty cash flows. Additionally, the Company expects that any immaterial, negative change in any one of these assumptions could lead to the fair value of indefinite life intangible assets being less than the carrying value, which would require the Company to perform step 2 of the impairment test to assess the need for additional impairment. The Company is not currently aware of any negative changes in its assumptions that could lead to the fair value of the indefinite life intangible assets being less than the carrying value.

The Company believes that the key assumption most susceptible to change is projected revenue as this assumption is company-specific and within the control of the Company to a certain extent. However, the royalty rates, terminal growth rates and cost of capital are largely subject to industry and macroeconomic factors. Three of the reporting units carried combined indefinite life intangible assets of \$10.0 million and the aggregate excess of fair value over their carrying value was only 5%. [Further sensitivity analysis as described below]

In the Company's future filings, including the Q2 2015 filing to be made no later than August 10, 2015, the Company confirms to the Staff that it will add disclosures substantially similar to the above, including quantitative sensitivity analyses with respect to the key assumptions that are most susceptible to change, which will illustrate, with all other assumptions held constant, the specific percentage decrease in each of projected revenue and projected operational profit that would require the Company to perform step 2 of the impairment test to assess the need for additional goodwill impairment.

Pamela Long
July 27, 2015

We hope that you will find our response to the comments of the Commission's Staff satisfactory. If further information regarding any aspect of this response letter is required, please contact the undersigned at (513) 361-1229.

Sincerely,

Squire Patton Boggs (US) LLP

/s/ Toby D. Merchant

Toby D. Merchant

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