



DIVISION OF
CORPORATION FINANCE

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

May 4, 2011

Joel A. Littman
Secretary, Chief Financial Officer and Director
CPI International, Inc.
811 Hansen Way
Palo Alto, California 94303

**Re: CPI International, Inc.
Registration Statement on Form S-4
Filed April 7, 2011
File No. 333-173372**

Dear Mr. Littman:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. You disclose on pages 24 and 94 that your subsidiaries sold medical X-ray equipment to Iran and a U.S.-origin power supply to Syria. You disclose on page 91 that you have customers in the Middle East and Africa, regions generally understood to include Iran, Syria, and Sudan. In addition, on your website you identify your office in Switzerland as covering sales of medical products to Iran. Iran, Syria, and Sudan are identified by the State Department as state sponsors of terrorism, and are subject to U.S. economic sanctions and export controls. Please describe to us the nature, duration, and extent of your past, current, and anticipated contacts with Iran, Syria, and/or Sudan, whether through subsidiaries, affiliates, third-party sellers, distributors, service centers, or other direct or indirect arrangements. Your response should describe any products, equipment, components, materials, technology, information, and services that you have provided, or

intend to provide, into Iran, Syria, and/or Sudan, directly or indirectly, and any agreements, commercial arrangements, or other contacts you have had with the governments of the referenced countries or entities controlled by those governments.

2. You state in Schedule 3.23 to Exhibit 10.1 to your Form S-4 that you disclosed to BIS the prior sale of an amplifier to Syria. Certain types of amplifiers are included in the Commerce Control List maintained by BIS. You also disclose on pages 23 and 94 of the Form S-4 that you require licenses or other authorizations from U.S. government agencies for the export of many of your products in accordance with various regulations, such as the United States Export Administration Regulations for commercial products, including “dual use” products with military applications. Please tell us whether, to the best of your knowledge, understanding, and belief, any of the products, equipment, components, materials, or technology you have provided or intend to provide, directly or indirectly, into Iran, Syria, and/or Sudan, are controlled items included in the Commerce Control List. If so, tell us whether any such item have military uses, and describe such possible uses of which you are aware. Also, advise us whether, to the best of your knowledge, understanding, and belief, any such items have been put to military uses by Iran, Syria, and/or Sudan, and discuss any such uses of which you are aware.
3. You state on pages 24 and 94 that the transactions that were the subject of your voluntary self-disclosures to OFAC and BIS were identified by your internal compliance department. You disclose in Schedule 3.23 to Exhibit 10.1 that your reports to OFAC related, primarily, to transactions that occurred between 2005 and 2010. Please tell us what triggered the review(s) of the transactions reported to OFAC and BIS. Discuss for us the reasons the transactions were not discovered and/or reviewed earlier by your internal compliance department, and any changes to your compliance program and/or procedures as a result of the review(s).
4. Please discuss for us the materiality of any contacts with Iran, Syria, and/or Sudan, you describe in response to the foregoing comments, and whether those contacts constitute a material investment risk for your security holders. You should address materiality in quantitative terms, including the approximate dollar amounts of any associated revenues, assets, and liabilities associated with each of the referenced countries since the last three fiscal years and the subsequent interim period. Also, address materiality in terms of qualitative factors that a reasonable investor would deem important in making an investment decision, including the potential impact of corporate activities upon a company’s reputation and share value. Various state and municipal governments, universities, and other investors have proposed or adopted divestment or similar initiatives regarding investment in companies that do business with U.S.-designated state sponsors of terrorism. Your materiality analysis should address the potential impact of the investor sentiment evidenced by such actions directed toward companies that have contacts with Iran, Syria, or Sudan. It also should address the role and function of your internal compliance department in identifying and prohibiting transactions with those countries that may be inappropriate.

Prospectus Cover Page

5. As currently represented, the offer could be open for less than 20 full business days due to the stated expiration time of 5:00 p.m. rather than midnight on what ultimately may be the twentieth full business day following commencement of the offer. Please confirm in your response that the offer will be open at least through midnight on the twentieth business day following commencement of the offer. See Rule 14e-1(a) and Rule 14d-1(g)(3) under the Securities Exchange Act of 1934 and Question and Answer Eight in Exchange Act Release No. 16623 (March 5, 1980).

Market and Industry Data, page ii

6. Your prospectus should not include information that you do not believe is accurate or complete. Please revise your statement in this section and the second sentence of the third paragraph on page iii regarding the accuracy and completeness of your disclosure.

Our Company, page 1

7. Please provide us independent, objective support for your disclosure in your prospectus regarding your statements of leadership and market position here and in the Business section. Please also provide support for and revise to clarify the basis for your statements here and elsewhere in your document regarding the efficacy of your products and characterizing your products as “critical elements” or “mission-critical components” of high-priority U.S. and foreign military programs and platforms. Please also revise to clarify the basis for your statement that you are the sole provider of products representing 58% of your total sales from products in fiscal 2010.
8. If you elect to highlight selling prices of your products, please provide equally prominent disclosure of the income generated by such products.
9. Please revise where appropriate to clarify the portion of your sales made to the U.S. government. We note your disclosure in the last risk factor on page 19.
10. We note your disclosure on page 2 of your significant sales to the U.S. and foreign governments for end use in government and military applications. Please revise to provide equally prominent disclosure of the material risks related to these government customers and contracts.
11. Please add a brief description of the material terms of your advisory agreement with Veritas Capital.

Our Competitive Strengths, page 5

12. In the last bullet point under “Our Competitive Strengths,” we see that you prominently disclose Adjusted EBITDA without giving equal or greater prominence to the most directly comparable GAAP measure (net income). Please revise your disclosures to comply with Item 10(e)(1)(i)(A) of Regulation S-K.

Summary Description of the Exchange Offer, page 8

13. Your disclosure, such as in the first bullet point on page 11 and on page 144, appears to indicate that your affiliates may participate in this exchange offer. Please tell us how participation by your affiliates in this offering is consistent with the no-action letters on which you intend to rely. Alternatively, if no affiliates will participate in the exchange, please amend your disclosure in this section and elsewhere, as appropriate, to remove any implication to the contrary.

Summary Description of the Exchange Notes, page 13

14. Please revise your disclosure regarding the guarantees of the exchange notes to provide equally prominent disclosure of the substance of the related material risks discussed on page 31. Please also revise to clarify the “certain exceptions” you mention or provide a reference to the section describing these exceptions.

Summary Historical and Pro Forma Financial Information, page 15

15. On page 17, we see that you reconcile EBITDA to Adjusted EBITDA. Please revise to reconcile Adjusted EBITDA to the most directly comparable GAAP measure (net income). Refer to Item 10(e)(1)(i)(B) of Regulation S-K.
16. Please revise to reconcile EBITDA margin to the most directly comparable GAAP measure. Refer to Item 10(e)(1)(i)(B) of Regulation S-K.

Despite our high indebtedness level . . . , page 29

17. Please revise where appropriate to describe the “number of significant qualifications and exceptions” mentioned in the second sentence or provide a reference to the section describing these exceptions.

Capitalization, page 36

18. Please revise to remove the caption “cash and cash equivalents” from the table on page 36 since these items are not part of your capitalization.

Notes to Unaudited Pro Forma Condensed Consolidated Financial Information

Note 1. Basis of Pro Forma Presentation, page 41

19. Please revise to disclose the basis for your accounting treatment for the merger between Catalyst Acquisition and CPI International LLC, including why it is appropriate to the record the transaction as a business combination under FASB ASC 805.

Note 4. Preliminary purchase price, page 42

20. Please revise to disclose how you determined the \$19.50 per share purchase price for the common stock of Predecessor. Refer to FASB ASC 805-30-30-7.
21. Please revise to separately disclose the purchase price attributed to payments made for cancelled stock options versus restricted stock.

Note 5. Pro forma financial statement adjustments

Note (C), page 44

22. Please revise to disclose how you determined the preliminary estimated fair values of the acquired assets and liabilities, including each of the intangible assets.
23. Tell us the basis for the 30 year useful life attributed to the Technology intangible asset.

Note (L), page 45

24. We reference the pro forma adjustment for the equity contribution from the Veritas Fund attributable to the Parent. However, on page F-4, the disclosure states that the contribution was made to the Holding LLC. Please tell us to what entity Vertias Fund made the equity contribution. If the contribution was made to Holding LLC, please tell us why it is appropriate to record the equity contribution to the Parent rather than as an amount due to the Holding LLC.

Management's Discussion and Analysis . . . , page 52

25. We note your statement in the first paragraph that you disclosure "does not reflect the significant impact that the Transactions will have on [you], including significantly increased leverage." Please revise where appropriate to discuss the significant impact of the merger and related transactions.

Results of Operations, page 56

26. Please tell us why you do not present a discussion of Results of Operations for the successor, CPI International Holding Corp.

Critical Accounting Policies and Estimates, page 74

Revenue Recognition, page 75

27. Please update this section to include a discussion of how ASU 2009-13 for multiple deliverable revenue arrangements impacted your revenue recognition policy. We note that the new guidance was effective for the predecessor's December 31, 2010 interim financial statements.

Manufacturing, page 93

28. We note your disclosure here and in the last risk factor on page 26 that you obtain certain raw materials and key components "from a limited group of, or occasionally sole, suppliers." Please revise where appropriate to clarify the nature of your relationship with material suppliers, such as whether you have purchase arrangements or long-term supply agreements. Please also provide similar disclosure with respect to your relationships with your distributors, such as Richardson Electronics which you identify on page 91 as a significant distributor.

Advisory Agreement, page 133

29. Please revise to clarify the name of each related person, the basis upon which each person is a related person, and the amount of the related persons' interest in the transaction.

Conditions to the Exchange Offer, page 141

30. We note your reservation of the right to amend the terms of the offer. Please revise where appropriate to indicate that, in the event of a material change in the offer, including the waiver of a material condition, you will extend the offer period if necessary so that at least five business days remain in the offer following notice of the material change.

Consolidated Financial Statements

31. Please update your financial statements as required by Rule 3-12 of Regulation S-X.

Audited Consolidated Balance Sheet of CPI International Holding Corp., page F-3

32. Please tell us why you have not included an audited statement of operations, stockholder's equity and cash flows for the period from inception (January 18, 2011) to January 31, 2011. We reference Rules 3-02 and 3-04 of Regulation S-X.

Note 1. Organization, page F-4

33. Please revise to clarify the fiscal year end of CPI International Holding Corp.

Exhibits, page II-5

34. Please ensure that your exhibits include all attachments. In this regard, we note that your Letter of Transmittal filed as Exhibit 99.1 does not appear to include the "Beneficial Owner Instructions to Registered Holder" form mentioned in Section 3 on page 16.

Exhibit 5.1

35. Please file a revised opinion that does not include the assumption in the penultimate sentence in the second paragraph on page 3 or tell us why the assumption is appropriate.
36. Please remove the reference to laws "normally applicable to transactions of the type governed or contemplated by the Exchange Offer, the Indenture and the Exchange Notes." Counsel must include all applicable state laws in its opinion and should not require investors to accept the risk that certain laws are not covered.

Exhibits 23.2 and 23.3

37. Please include currently dated and signed consents from your independent auditors with your next amendment.

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

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- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Kristin Lochhead at (202) 551-3664 or Brian Cascio, Accounting Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Aslynn Hogue at (202) 551-3841 or Mary Beth Breslin, Senior Attorney, at (202) 551-3625 with any other questions.

Sincerely,

Amanda Ravitz
Assistant Director

CC (by facsimile): Jennifer A. Bensch Esq.
Skadden, Arps, Slate, Meagher & Flom LLP