



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-3628

Mail Stop 3628

February 12, 2009

Via Facsimile 503-226-0079 U.S. Mail

Gregory E. Struxness, Esq.
Ater Wynne LLP
1331 NW Lovejoy, Suite 900
Portland, Oregon 97208

**Re: Cascade Microtech, Inc.
Schedule TO-I
Filed January 29, 2009
File No. 5-80457**

Dear Mr. Struxness:

We have reviewed the above-captioned filing and have the following comments. Where indicated, we think you should revise the document in response to these comments. If you disagree, 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 raise additional comments.

The purpose of our review process is to assist you in the compliance with the applicable disclosure requirements and to enhance the overall disclosure in the filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone number listed at the end of this letter. All defined terms used here have the same meaning as in the Offer to Exchange filed as Exhibit 99.(A)(1)(A) to the Schedule TO-I.

Offer to Exchange
General

1. We note that you are limiting participation in this tender offer to U.S. employees who hold Eligible Options. Please furnish a legal analysis explaining why you believe limiting offer participation in this way is consistent with the requirement of Rule 13e-4(f)(8)(i) that the offer be open to all security holders of the class that is subject to the offer. While the Commission's March 21, 2001 Global Exemptive Order provides some relief from the requirement to make a tender

offer available to all target security holders, you must establish that your eligibility criteria excluding certain holders of target securities are compensation-related. Please provide your legal analysis as to why the exclusion of certain otherwise-eligible option holders is appropriate here.

2. See our last comment above. As indicated, you state on the cover page of the Offer to Exchange that the offer is limited to “all persons employed by us in the United States,” thereby excluding foreign employee option holders. However, the disclosure later in the offer materials (see the second full paragraph on page 21) appears to be inconsistent. There, you state that “you may exclude employees located outside of the United States from the Offer if local law or administrative considerations would make their participation infeasible or impractical.” Please revise your offer materials to clarify whether all foreign employees are excluded from this offer, or only those in select jurisdictions. If the latter, we note that the all-holders provision in Exchange Act Rule 13e-4(f)(8) applies equally to U.S. as well as non-U.S. target holders. Refer to the interpretive guidance in Section II.G.1. of SEC Release 33-8957. As noted in the last comment above, the Global Exemptive Order modifies this requirement only to extent you can demonstrate a compensation-related reason for exclusion. Excluding foreign option holders due to administrative or other expense is not covered under the Order. Please revise or advise.
3. Paragraph 5 of the Restricted Stock Unit Agreement states that Restricted Stock Units will be paid to Employees “as soon as practicable following the date of vesting,” However, this appears to be inconsistent with the disclosure in the Offer to Exchange, which states that (i) the restricted units will be issued to participating option holders immediately after expiration; and (ii) the common shares underlying those restricted units will be issued only upon vesting, which will occur annually over a period of four years. If the restricted units themselves, rather than the underlying shares, were to be delayed, we would have concerns under the prompt payment requirement in Rule 14e-1(c). Please revise or advise.

Summary Term Sheet and Questions and Answers, page 1
What is the Offer? page 2

4. Here and throughout your offering document, you state that the New Awards will be granted “shortly after” the Expiration Time. Revise to comply with the requirement of Rule 14e-4(f)(5) that the New Awards be granted “promptly” after the Expiration Time.

Are employees who tender their Eligible Options and are on a leave of absence on the date the New Awards are granted eligible to participate? page 5

5. Rule 14e-4(f)(5) requires you to pay promptly after the termination of the Offer. You disclose here that if a tendering option holder is on leave that is not protected by statute on the date New Awards are granted, then the restricted stock units will be issued on the date, if any, that the employee returns to regular employment. Provide your legal analysis as to how this complies with the prompt payment requirement in our rules, or revise.

The Offer
Conditions of the Offer, page 15

6. In our view, you may condition a tender offer on any number of conditions, as long as they are described with reasonable specificity, capable of some measure of objective verification, and outside of your control. Please expand or revise the final bullet point in this section, which currently conditions the offer on any change or changes to your business, which appears to include all changes, positive or negative, that may be material to you.

Financial Information, page 22

7. Please revise Schedule B to the Offer to Exchange to include all of the summary information required by Item 1010(c). You do not appear to have included the information required by Item 1010(c)(4) and (5).

Closing Comments

As appropriate, please amend your filing in response to these comments. You may wish to provide us with marked copies of the amended filing to expedite our review. Please furnish a cover letter with your amended filing that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amended filing and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all material information to investors. Since the Company and its management are in possession of all facts relating to the 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:

Gregory E. Struxness, Esq.
Ater Wynne LLP
February 12, 2009
Page 4

- the Company is responsible for the adequacy and accuracy of the disclosure in the 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 filings; 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 filings or in response to our comments on your filings.

Please direct any questions to me at (202) 551-3267. You may also contact us via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

Julia E. Griffith
Special Counsel
Office of Mergers & Acquisitions