



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

October 22, 2010

via U.S. mail and facsimile

Roman Gordon, Chief Executive Officer
Cavitation Technologies, Inc.
10019 Canoga Avenue
Chatsworth, CA 91311

**Re: Cavitation Technologies, Inc.
Form 10-K for Fiscal Year Ended June 30, 2009
Form 10-K for Fiscal Year Ended June 30, 2010
Filed September 28, 2009
File No. 0-29901**

Dear Mr. Gordon:

We have reviewed your supplemental response submitted August 11, 2010 regarding the Form 10-K for fiscal year ended June 30, 2009 and we have examined the Form 10-K for fiscal year ended June 30, 2010 and we 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 within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies 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 filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended June 30, 2009

1. We note the disclosure provided in response to comment one from our letter dated August 24, 2010. Please provide the disclosure required by Item 101(h)(4)(vii) of Regulation S-K regarding patents. Disclose the patents and their durations.
2. We note the disclosure provided in response to comment one from our letter dated August 24, 2010. Please remove the reference to "increased profitability for refiners" as there is no guarantee this systems will increase profitability. Also, remove the statement that "not only does yield improve by costs are reduced as well." In

addition, provide clear disclosure when discussing the intent of your product to reduce operating costs and improve yield that there is no guarantee that the actual final product developed will actually achieve these results.

3. Please disclose the total number of employees and the number of full time employees, as required by Item 101(h)(4)(xii) of Regulation S-K.
4. We reissue comment five from our letter dated August 24, 2010. For each transaction discussed in this section, provide the disclosure required by Item 701(d) of Regulation S-K. For each separate transaction, please indicate the section of the Securities Act or the rule of the Commission under which each exemption from registration was claimed and state briefly the facts relied upon to make the exemption available. In addition, name the persons or identify the class of persons to whom the securities were sold. See Item 701(b) of Regulation S-K. We are unable to locate such disclosure for each separate transaction discussed.
5. We reissue comment six from our letter dated August 24, 2010. Please confirm that you will include in the amended Form 10-K disclosure required by Item 406 of Regulation S-K under the heading Code of Ethics.”

Form 10-K for Fiscal Year Ended June 30, 2010

6. Please check the box on the cover page to indicate that you are a smaller reporting company.
7. Please ensure that the Form 10-K for the fiscal year ended June 30, 2010 is amended to fully comply with all comments previously issued regarding your Form 10-K for the fiscal year ended June 30, 2009, as applicable.
8. Please disclose the material terms of the agreement with Desmet Ballestra Group and the current status of this licensing and distribution agreement.
9. Disclose the material terms of the arrangement with the South Carolina refining plant.
10. We note the memorandum of understanding with the refining plant in Minnesota. Please disclose the material terms and file the agreement as an exhibit.
11. Please repeat in the business section the disclosure in the disclosure under “Royalty Agreements” on page 16.
12. The disclosure in footnotes three, four and five to the summary compensation table are inconsistent with the representation in footnote two that the stock awards are

determined in accordance with ASC 718. Please revise to provide the amount in the summary compensation table that reflects the aggregate grant date fair value.

Exhibits

13. Please ensure that you file as exhibits, or incorporate by reference, as appropriate, in your amended Form 10-K filings the following: the bylaws, revolving line of credit; the convertible notes payable; the warrant purchase agreement; the Company's stock option plan; the warrants issued; the one-year variable rate loan that replaced the line of credit on August 1, 2009; short-term loans you have referenced on page 30; the Series A and Series B Preferred Stock; the August 1, 2010 amendment to variable rate loan; the patent assignment agreements, employment agreements, and the extended lease agreement regarding your headquarters.

Consolidated Statements of Operations, page 20

14. We note your deemed dividends to preferred stockholders of \$6,000 and \$118,946, for the years ended June 30, 2009 and 2010, respectively, and your cumulative deemed dividends of \$172,825 for the period from January 29, 2007 (inception) through June 30, 2010. We further note that the consolidated statements of operations in your Form 10-K for the year ended June 30, 2009, and for the cumulative period from January 29, 2007 (inception) through June 30, 2009 do not include deemed dividends. Please further explain to us what the deemed dividends represent, tell us how you determined the amounts recorded as deemed dividends, and cite the accounting guidance you followed.
15. We note the year ended June 30, 2009 net loss available to common shareholders per share of \$(0.10) reported in your 2009 Form 10-K differs from the year ended June 30, 2009 net loss available to common shareholders per share of \$(0.03) reported in your 2010 Form 10-K due to the deemed dividends you have now recorded. Please tell us how you considered FASB ASC 250-10 in determining whether an accounting change or error correction has occurred. Also tell us how you considered the reporting requirements of Item 4.02 of Form 8-K for this difference.

Item 9A(T). Controls and Procedures, page 37

Changes in Internal Control over Financial Reporting, page 38

16. We note that you concluded your ICFR was ineffective for the period ending June 30, 2009, and effective for the period ending June 30, 2010. Please tell us how you considered the Item 308T(b) of Regulation S-K requirement to disclose any change in your ICFR identified in connection with the evaluation required by paragraph (d) of Rule 240.13a-15 or Rule 240.15d-15 of the Exchange Act that has materially affected, or is reasonably likely to materially affect, your ICFR. In that regard, it

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appears to us that this change in your ICFR conclusion would have resulted from a material change in your ICFR.

You may contact John Archfield (202) 551-3315 or Ryan Milne at (202) 551-3688 if you have questions regarding comments on the financial statements and related matters. Please contact Susann Reilly at (202) 551-3236 or Pam Howell at (202) 551-3357 with other questions.

Sincerely,

John Reynolds
Assistant Director
Office of Beverages, Apparel and
Health Care Services

cc: Roman Gordon, Chief Executive Officer;
Via facsimile to (818) 718-1176