



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

October 4, 2007

Mr. David Bailey
Chief Executive Officer
Staar Surgical Company
1911 Walker Avenue
Monrovia, CA 91016

**Re: Staar Surgical Company
Form 10-K for the Fiscal Year Ended December 29, 2006
Filed March 29, 2007
Form 10-Q for the Quarter Ended June 29, 2007
File No. 000-11634**

We have reviewed your filings and your response letter dated October 1, 2007 and we have the following comments. Where indicated, we think you should revise your documents 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.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your 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 numbers listed at the end of this letter.

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Form 10-K for the Fiscal Year Ended December 29, 2006

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 25

-Results of Operations, page 32

1. Please refer to prior comments 1-2 from our letter dated July 25, 2007. Please amend your filing to remove the non-GAAP disclosures as indicated in your response to these comments.

Consolidated Financial Statements, page F-1

-Consolidated Statement of Cash Flows, page F-8

2. Please refer to prior comment 5 from our letter dated July 25, 2007. Please provide to us your quantitative and qualitative analysis demonstrating that the impact of calculating the effect of exchange rates on your cash and cash equivalents within your statement of cash flows in accordance with paragraph 25 of SFAS 95 would be immaterial for each reporting period presented.

Form 10-Q for the Quarter Ended June 29, 2007

Item I. Financial Statements, page 1

Notes to Condensed Consolidated Financial Statements, page 4

Note 5. Note Payable and Warrant Obligation, page 5

3. We note that you issued a warrant to purchase 70,000 shares of common stock in connection with the issuance of a \$4 million promissory note on March 21, 2007. We further note that you determined that the warrant should be accounted for as a derivative liability and should be revalued at fair value at each reporting period. However, we note that you did not provide similar disclosures within your March 30, 2007 Form 10-Q. Please tell us how you accounted for the warrants on the date of issuance. Cite the accounting literature relied upon on the date of issuance and how you applied this literature to your situation. Within your discussion, please explain to us if the determination to record this warrant as a liability at fair value at each reporting period represented a change in your original accounting for the warrant. We may have further comments upon reviewing your response.

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4. Please revise your future filings to disclose the significant assumptions used within the Black-Scholes valuation model to value any equity instruments you carry at fair value issued in connection with your financing arrangements. In this regard, please also revise your critical accounting policy section in MD&A to disclose how you determined the significant inputs into the model utilized.

As appropriate, please amend your December 29, 2006 Form 10-K and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendments to expedite our review. Please furnish a cover letter with your amendments that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments and responses to our comments.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3604 if you have questions regarding these comments. In this regard, do not hesitate to contact Kevin Vaughn, Branch Chief, at (202) 551-3643.

Sincerely,

Kate Tillan
Assistant Chief Accountant