

March 11, 2010

VIA EDGAR and FEDEX

Mr. Kevin L. Vaughn, Accounting Branch Chief
Ms. Tara Harkins, Staff Accountant
United States Securities and Exchange Commission
Division of Corporate Finance
Mail Stop 3030
450 Fifth Street, N.W.
Washington, D.C. 20549

RE: Tegal Corporation
Form 10-K for the Fiscal Year ended March 31, 2009,
Filed June 26, 2009
File No. 000-26824

Dear Mr. Vaughn and Ms. Harkins:

On behalf of Tegal Corporation (the "Company"), we are hereby providing the Company's response to the comment letter received from the Staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") dated March 1, 2010.

For ease of review, we have set forth each of the numbered comments of your letter and our responses thereto.

Form 10-K for the Fiscal Year Ended March 31, 2009

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 9

- 1. We note your disclosure here that "in 2009" [you] financed [y]our operations through net cash provided by operations." However, in light of the indication on page 16 that you had negative operating cash flows, it appears that your operations were instead financed through the use of existing cash balances. Please revise future filings to provide more clear and concise discussion of the sources and uses of cash during the period. In this regard, please revise the discussion in the sixth paragraph on this page to specifically discuss the declining cash balance.**

Response: In response to the Staff's comment, the Company will undertake to revise future filings to provide clear and concise discussion of the sources and uses of cash during the period, including a clear statement as to whether operations were financed by net cash provided by operations or by existing cash. With respect to the referenced sixth paragraph on page 9, the Company will undertake to include in future filings an analysis of any applicable declining cash balances in its analysis of the Company's financial condition.

Item 8. Financial Statements and Supplementary Data, page 11

Note 1. Description of Business and Summary of Significant Accounting Policies, page 17

- Description of Business, page 17

2. We note your disclosure here regarding the acquisition of assets from Alcatel Micro Machining Systems in September 2008. However, we do not see any additional disclosure in the filing that discusses the purchase price of the assets (including how you determined the value of the stock issued in connection with the transaction). Further, we do not see where you have provided a discussion of the nature of the assets acquired and how the assets have been recorded in your financial statements. To the extent that you have material acquisitions in future filings, please revise to provide disclosures relevant to an investor's understanding of the transaction(s) and their impact on your financial statements.

Response: In response to the Staff's comment, the Company will undertake to include in future periodic reports appropriate disclosures regarding the AMMS transaction or other future material acquisitions so that investors can understand the transaction(s) and their impact on the Company's financial statements for the periods presented in such reports.

- Identified Intangible Assets, page 18

3. We note you recorded \$492,000 of impairment charges related to your intangible assets during fiscal 2009. Please revise your future filings to address the following:
 - Provide a description of the intangible assets that you determined were impaired.
 - Explain in greater detail how you test intangible assets for impairments, including how you determine the fair value of the assets.
 - Within your critical accounting policy section in MD&A, please clearly describe the key assumptions and methodologies used in determining fair value. Discuss why the estimates used in your impairment evaluation bear the risk of change and how changes in the underlying assumptions could impact future results including, for example, possible additional impairment charges in the future.

Refer to the guidance in 350-30-50-3 of the FASB Accounting Standard Codification.

Response: In response to the Staff's comment, the Company confirms to the Staff that it tests the amortizable intangible assets whenever events or circumstances indicate an impairment exists. For the fiscal year ended March 31, 2009, the Company recorded a \$497,000 impairment charge. The net book value of the intangible asset (in that particular instance, the FDSI patent) was \$496,856 at March 31, 2009. As the expected undiscounted future cash flows for this patent were \$0, the Company wrote off the full amount of the net book value of the patent. The impairment charge was indicated separately in the Company's Statement of Cash Flows, included as a separate line item ("Intangible Assets, net") in the Company's Balance Sheet, and recorded in R&D expense on the Company's Income Statement.

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If undiscounted expected future cash flows are less than the carrying value of the assets, an impairment loss is recognized based on the excess of the carrying amount over the fair value of the assets.

The Company will undertake to include in future filings the appropriate disclosure regarding the timing of testing of intangible assets for impairment, a description of any impaired intangible asset, the net book value if the asset is written off in full, and key assumptions and methodologies and disclosures of estimates used in calculating the impairment value if the asset is not written off in full.

- Revenue Recognition, page 18

4. **We note your disclosure on page 5 that “international sales ...consist of export sales from the United States either directly to the end user or to one of [y]our foreign subsidiaries.” Based on this disclosure, it appears that you recognize revenue on sales to foreign subsidiaries. If so, please tell us and revise your disclosures here to explain why you believe it is appropriate to recognize revenues at that point. Alternatively, please clarify your disclosures on page 5 in the future filings.**

Response: In response to the Staff’s comment, the Company confirms to the Staff that it does not recognize sales to the Company’s foreign subsidiaries. All intercompany sales and profits are eliminated in the Company’s consolidated financial statements. The Company hereby undertakes to correct the referenced disclosure in future filings.

5. **We note your disclosure here that in certain instances you defer recognition of revenue until final customer acceptance. You further state that in such instances you relieve inventory and record accounts receivable and deferred revenue for the entire contract amount. Please tell us and revise future filings to clearly disclose your accounting treatment for the related costs that are relieved from inventory.**

Response: In response to the Staff’s comment, the Company confirms to the Staff that it does relieve the entire amount from inventory at the time of sale. The Company relieves the related deferred revenue, which is related to installation, upon installation. The Company hereby undertakes to include the disclosure substantially similar to the following prior to the sentence indicating the amounts of deferred revenue in future filings:

The Company relieves the entire amount from inventory at the time of sale, and the related deferred revenue liability is recognized upon installation and customer acceptance.

- Stock Based Compensation, page 18

6. **We note your disclosure on page 22 that you utilize the Black Scholes Option pricing model to determine the fair value of your options and warrants issued. Please revise future filings to explain how you determined the assumptions utilized in this model including volatility, risk free interest rate, expected life, etc. Refer to the guidance in paragraph 718-10-50-2 of the FASB Accounting Standard Codification.**

Response: In response to the Staff’s comment, the Company hereby undertakes to include disclosure in future filings to explain how the Company determines the assumptions utilized in the Black Scholes Option Pricing model, including volatility, risk free interest rate, expected life and other applicable factors, if any.

Item 9A. Control and Procedures, page, 24

7. We note the disclosure that your assessment of internal control over financial reporting was conducted using the criteria in *Internal Control over Financial Reporting – Guidance for Smaller Public Companies* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Please tell us specifically what control framework you applied in performing your assessment of internal control over financial reporting. In that regard, please tell us how the framework you used is an acceptable framework as discussed in SEC Release No. 33-8810: *Commission Guidance Regarding Management’s Report on Internal Control over Financial Reporting under Section 13(a) or 15(d) of the Securities Exchange Act of 1934*. Alternatively, to the extent that you utilized the referenced guidance in connection with your evaluation of your internal controls over financial reporting based on the framework established by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework*, please confirm that fact to us and revise your disclosure in future filings to clearly indicate that your evaluation was based on that framework rather than the supplemental guidance that you reference in the current disclosure.

Response: In response to the Staff’s comment, the Company confirms to the Staff that it used a top-down, risk-based evaluation of the Company’s internal control over financial reporting. The framework used was the Internal Control – Integrated Framework created by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). The Company undertakes to include in future filings the following disclosure in Item 9A. Control and Procedures:

“Evaluation of disclosure controls and procedures. As of _____, management performed, with the participation of our Chief Executive Officer and Chief Financial Officer, an evaluation of the effectiveness of our disclosure controls and procedures as defined in Rule 13a-15(e) and 15d-15(e) of the Exchange Act. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the report we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures. Based on the evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of _____, such disclosure controls and procedures were effective.

Management’s Annual Report on Internal Control Over Financial Reporting. *Management is responsible for establishing and maintaining an adequate system of internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP.*

Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect our transactions and dispositions of our assets;*
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles (“GAAP”), and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and*

- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Also, projection of any evaluation of effectiveness to future periods is subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has conducted, with the participation of our Chief Executive Officer and our Chief Financial Officer, an assessment, including testing of the effectiveness of our internal control over financial reporting as of _____ . Management's assessment of internal control over financial reporting was based on the framework in Internal Control-Integrated Framework (1992) created by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this evaluation, Management concluded that our system of internal control over financial reporting was effective as of _____ ."

Exhibits 31.1 & 31.2

- 8. We note that you have omitted the language "internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f))" from paragraph 4 of your certification. The required certifications must be in the exact form prescribed. Please amend your filing to include revised certifications that conform to the exact wording required by Item 601(b)(31) of Regulation S-K. Please note this comment also applies to your Forms 10-Q for the quarters ended June 30, 2009 and September 30, 2009.**

Response: In response to the Staff's comment, the Company confirms that it will file an abbreviated amended Form 10-K/A for the fiscal year ending March 31, 2009, which will include the Form 10-K face page, an explanatory paragraph in response to the Staff's comment, and the corrected Exhibits. The explanatory paragraph will read substantially similar to the following :

"In response to comments received from the Division of Corporate Finance of the Securities and Exchange Commission regarding the Company's Annual Report on Form 10-K for the fiscal year ended March 31, 2009, the Company is filing this amended report on Form 10-K/A to include corrected versions of Exhibits 31.1 and 31.2. The corrections include language that was inadvertently omitted from those Exhibits. This filing does not reflect any changes or gaps in internal controls over financial reporting."

In addition, the Company will ensure that future filings include the exact wording required by Item 601(b)(31) of Regulation S-K.

The Company will also file amended complete Forms 10-Q for the quarters ended June 30, 2009 and September 30, 2009 with the corrected Exhibits 31.1 and 31.2. Additionally, the amended complete Forms 10-Q will also include the complete citation "...as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)" in Item 4. Controls and Procedures. All future filings of Forms 10-Q will correctly include the complete citation "...as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)" in Item 4. Controls and Procedures as well.

The Company intends to file these amended periodic reports by March 31, 2010.

Form 10-Q for the Quarter Ended September 30, 2009

Exhibits 32

9. We note here and within your June 30, 2009 Form 10-Q that your certifications furnished pursuant to Rule 13a-14(b) of the Exchange Act refers to the Form 10-Q for the quarter ending *December 31, 2008* rather than the appropriate Forms 10-Q. Please amend each of your June 30 and September 30, 2009 Forms 10-Q to include the entire filing together with a currently signed and dated certification that references the appropriate quarterly report.

Response: In response to the Staff's comment, the Company confirms that it will file amended complete Forms 10-Q for the quarters ended June 30, 2009 and September 30, 2009 to include a revised Exhibit 32 using the correct quarter ending dates of June 30, 2009 and September 30, 2009, respectively. The Company intends to file these amended quarterly reports by March 31, 2010.

* * *

The Company hereby acknowledges that:

- The Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- Staff comments or changes to the 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.

I hope the foregoing answers are responsive to your comments. Please do not hesitate to contact me by telephone at (707) 765-5616 or by fax at (707) 765-9311 with any questions or comments regarding this correspondence.

/s/ Christine Hergenrother
Chief Financial Officer
March 11, 2010