



DIVISION OF
CORPORATION FINANCE

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

July 5, 2012

Mr. Kevin Purcell
Chief Financial Officer
Aerosonic Corporation
1212 North Hercules Avenue
Clearwater, Florida 33765

Re: Aerosonic Corporation
Form 10-K for the year ended January 31, 2012
Filed April 30, 2012
Form 10-K for the year ended January 31, 2011
Filed May 2, 2011
File No. 001-11750

Dear Mr. Purcell:

We have reviewed your filing and your response filed on April 26, 2012, 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 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 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 filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the year ended January 31, 2012

Note 1. Description of Business, Basis of Presentation and Significant Accounting Policies
Property Held For Sale, page F-9

1. We have reviewed responses 1 through 3 of your letter dated April 26, 2012. We are unable to agree with your conclusion that the Earlysville facility has been accounted for and classified in accordance with GAAP. While we do not object to your initial decision to classify the property as held for sale as of January 31, 2008, we note that the purchaser terminated the initial purchase agreement on April 9, 2008 over concerns about the environmental contamination. In your response to prior comment 3, you state your belief that the largest impediment to attracting a buyer is the environmental condition of the property. However, actual clean-up efforts on the property have not yet begun. It is our view that the property is not available for sale in its present condition. We believe that the property should have been reclassified and accounted for as held and used no later

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than January 31, 2009 by analogy to ASC 360-10-55-42 (Example 7). As of that date, you no longer met the criteria for classification as held for sale set forth in ASC 360-10-45-9 (d). Accordingly, please revise your financial statements to comply with ASC 360-10-35-44.

2. As a related matter, in your Property, Plant and Equipment footnote, please identify the idle facility as a separately labeled line item and provide accompanying descriptive disclosures.

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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.

You may contact Kristin Shifflett at 202-551-3381 or Margery Reich at 202-551-3347 if you have questions regarding comments on the financial statements and related matters. Please contact me at 202-551-3211 with any other questions.

Sincerely,

/s/ David R. Humphrey

David R. Humphrey
Accounting Branch Chief