

Mail Stop 3561

June 21, 2007

Ernest A. Bates, M.D.
Chief Executive Officer
American Shared Hospital Services
Four Embarcadero Center, Suite 3700
San Francisco, CA 94111-4107

**Re: American Shared Hospital Services
Form 10-K for the Fiscal Year Ended December 31, 2006
Filed April 2, 2007
File No. 001-08789**

Dear Dr. Bates:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your 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.

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.

Form 10-K for the Fiscal Year Ended December 31, 2006

Table of Contractual Obligations, page 27

1. We note that your disclosures regarding contractual obligations relating to long-term debt and capital leases appear to exclude the interest payments relating to these obligations. Please revise your disclosures accordingly.

Financial Statements

2. Please revise to disclose your accounting treatment for the \$2 million investment in Still River Systems, Inc. We note that in prior Exchange Act filings, this investment was described as a minority equity interest in convertible preferred stock, and you stated that the investment would be classified as a long-term held-to-maturity investment. Since the investment is an equity investment in a privately-held company without a readily determinable fair value, it would appear that SFAS 115 is not applicable. Please tell us how you evaluated the guidance in FIN 46(R) to determine whether the investee is a variable interest entity, and if so, which investor would be considered the primary beneficiary and required to consolidate the entity. If you believe that you are not required to consolidate the entity under FIN 46(R), please revise your disclosure to state the material terms of the investment, including the percentage of equity ownership, whether the investment is accounted for under the cost method or the equity method, and how you are evaluating the investment for impairment. We may have additional comments after reviewing your response.
3. Please clarify how the investment is classified in the statement of cash flows. Revise your disclosures to separately state the investment, or tell us why you believe that no revisions are required.
4. Please revise your disclosure to include the selected quarterly financial data required by Item 302(a) of Regulation S-K. We note that your common stock is registered pursuant to Section 12(b) of the Exchange Act.

Cash Flow Statement, page 5

5. We note the caption "capital lease financing" in the financing activities section of the cash flow statement. As discussed in paragraph 32 of SFAS 95, non-cash investing and financing activities (including the acquisition of assets by entering into a capital lease) should be separately disclosed, rather than being reported as cash inflows and outflows in the statement of cash flows, since no cash was exchanged. Please revise the financial statements and related disclosures in MD&A accordingly, or tell us why you believe that no revisions are required.

Item 8A. Controls and Procedures, page 28

6. We note that your disclosures do not comply with Item 307 of Regulation S-K in the following respects:

- We note that a partial definition of disclosure controls and procedures was provided. The disclosure should be revised either to remove the partial definition, or to provide the entire definition, along with a clear conclusion regarding effectiveness with respect to each component.
- Please revise to state clearly whether your disclosure controls and procedures were determined to be effective or ineffective, rather than adequate as indicated in your disclosure. For further guidance please refer to the Commission's interpretation release No. 33-8238: *Management's Reports on Internal Control over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports*, which may be found on the Commission's website at <http://www.sec.gov/rules/final/33-8238.htm>.

Please revise your disclosures accordingly.

As appropriate, please amend your filing 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 amendment to expedite our review. Please furnish a cover letter with your amendment 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 amendment and responses to our comments.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a 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.

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 filing or in response to our comments on your filing.

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You may contact Blaise Rhodes at (202) 551-3774 or Carlton Tartar at (202) 551-3387 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Tia Jenkins
Senior Assistant Chief Accountant
Office of Emerging Growth Companies