

Via Facsimile and U.S. Mail
Mail Stop 6010

August 11, 2006

Mr. David P. Southwell
Executive Vice President and Chief Financial Officer
Sepracor, Inc.
84 Waterford Drive
Marlborough, MA 01752

Re: Sepracor, Inc.
Item 4.02(a) Form 8-K filed August 10, 2006
File No. 000-19410

Dear Mr. Southwell:

We have reviewed your filing and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

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 number listed at the end of this letter.

Item 4.02 (a) Form 8-K filed August 10, 2006

1. Please tell us when you intend to file the amendments to your December 31, 2005 Form 10-K and March 31, 2006 Form 10-Q and other affected Commission filings, as applicable.
2. Please tell us whether you have reconsidered, in accordance with Item 307 of Regulation S-K, the adequacy of your previous assertions in your December 31, 2005 Form 10-K and March 31, 2006 Form 10-Q regarding your internal controls and disclosure controls and procedures.

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Please provide us the information requested within 5 business days of the date of this letter or tell us when you will provide a response prior to the expiration of the 5-day period. Detailed letters greatly facilitate our review. You should file the letter on EDGAR under the form type label CORRESP. Please understand that we may have additional comments after reviewing your response 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 they have provided 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 your letter, 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.

If you have any questions, please do not hesitate to call me at (202) 551-3657.

Sincerely,

Amy C. Bruckner
Staff Accountant