

Via Facsimile and U.S. Mail  
Mail Stop 6010

August 17, 2006

Timothy J. Barberich  
Chairman and Chief Executive Officer  
Sepracor Inc.  
84 Waterford Drive  
Marlborough, Massachusetts 01752

**Re: Sepracor Inc.**  
**Form 10-K for Fiscal Year Ended December 31, 2005**  
**Filed March 16, 2006**  
**File No. 000-19410**

Dear Mr. Barberich:

We have completed our review of your Form 10-K and have no further comments at this time.

Sincerely,

Jim Atkinson  
Accounting Branch Chief