Via Facsimile and U.S. Mail Mail Stop 6010

July 1, 2008

David A. Arkowitz Chief Financial Officer and Chief Business Officer AMAG Pharmaceuticals, Inc. 125 CambridgePark Drive Cambridge, Massachusetts 02140

Re: AMAG Pharmaceuticals, Inc. Form 10-K for the Year Ended December 31, 2007 Filed February 27, 2008 File No. 000-14732

Dear Mr. Arkowitz:

We have reviewed your filing and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where it requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

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 on 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 Year Ended December 31, 2007

Item 1. Business

Raw Materials, page 11

1. We note that you rely on a sole source provider to supply some of the raw material for the manufacture of ferumoxytol and that there is no qualified alternative supplier. We also note that on page 29, your risk factor indicates that any difficulty in obtaining the raw materials for ferumoxytol would have a "material adverse impact" on the company's ability to generate additional

David A. Arkowitz AMAG Pharmaceuticals, Inc. July 1, 2008 Page 2

revenues, achieve profitability, and the future prospects of your business. As such, it appears you are materially dependent on the provider of these raw materials. Please identify the sole source provider, describe the material terms of related agreements, if any, and file any such agreement as an exhibit to your Form 10-K.

* * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provide any requested information. Detailed letters greatly facilitate our review. Please file your letter on EDGAR under the form type label CORRESP.

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 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 comment on your filing.

Please contact Bryan Pitko, Staff Attorney at (202) 551-3203, Michael Reedich, Special Counsel at (202) 551-3612 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler, Assistant Director