

Via Facsimile and U.S. Mail
Mail Stop 6010

November 9, 2006

Mr. Gary Coy
Vice President and Chief Financial Officer
Amarillo Biosciences, Inc.
4134 Business Park Drive
Amarillo, TX 79110

**Re: Amarillo Biosciences, Inc.
Form 10-KSB for the Fiscal Year Ended December 31, 2005
Form 10-QSB for the Quarterly Period Ended March 31, 2006
Form 10-QSB for the Quarterly Period Ended June 30, 2006
File No. 000-20791**

Dear Mr. Coy:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise your documents 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.

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 filings. 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-KSB for the Fiscal Year Ended December 31, 2005

Item 8A. Controls and Procedures, page 17

1. As you disclosed that management has assessed the Company's internal controls and as the Company's accounting firm has issued an attestation report on that

assessment, please provide all of the disclosures required by Items 308(a) and (b) of Regulation S-B.

Consolidated Financial Statements, page F-1

Report of Independent Registered Public Accounting Firm, page F-1

2. Please provide a report, revised by your auditors, that complies with AU Section 341.12, by stating that the recurring losses and need to raise additional funds raise “substantial” doubt about the Company’s ability to continue as a going concern.

Notes to Consolidated Financial Statements, page F-6

1. Organization and Summary of Significant Accounting Policies, page F-6

Revenue Recognition, page F-8

Federal Research Grant, page F-8

3. Please tell us why it is appropriate to recognize these funds when received and to expense them when payment is made to the sub-contractors. In so doing, please revise your disclosures to clarify when the services are performed and how that timing is consistent with when you recognize the revenue and expense.

Stock Options, page F-9

4. Page 14 indicates that you issued shares to consultants for services and page F-14 indicates that the Director Plan allows options to be granted to outside scientific advisors. Please disclose your policy to account for the issuance of equity instruments to non-employees, the amount of expense recognized for these instruments in each period presented and the method and assumptions used determining the amount of that expense.

12. Related Party Transactions, page F-15

5. Please provide the disclosures required by paragraphs 2(c) of SFAS 57 about the formulations supplied to the Company by its largest shareholder, HBL.

Exhibit 31-1 – Rule 13a-14(a)/15d-14(a) Certification

6. Please amend your Form 10-KSB and your Forms 10-QSB for March 31 and June 30, 2006 to provide certifications in the form required by Item 601(b)(31) of Regulation S-B.

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

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include 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 filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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 filings or in response to our comments on your filings.

You may contact Tabatha Akins, Staff Accountant, at (202) 551-3658, or Oscar Young, Senior Staff Accountant, at (202) 551-3622, if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant