Mail Stop 6010

September 9, 2006

Fuad El-Hibri
Chief Executive Officer
Emergent BioSolutions Inc.
300 Professional Drive, Suite 250
Gaithersburg, Maryland 20879

Re: Emergent BioSolutions Inc.
Registration Statement on Form S-1
Filed August 14, 2006
File No. 333-136622

Dear Mr. El-Hibri:

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 S-1

General

1. Please note that we have received your request for confidential treatment for certain of your exhibits. In that regard, please be advised that comments related to your request for confidential treatment will be delivered under separate cover. We will not be in a position to consider a request for acceleration of effectiveness

of this registration statement until we resolve all issues concerning the confidential treatment request.

2. Please provide updated interim financial information in accordance with Item 3-12 of Regulation S-X.

Comments Applicable to the Entire Prospectus

3. Please provide us proofs of all graphic, visual, or photographic information you will provide in the printed prospectus prior to its use, for example in a preliminary prospectus. Please note we may have comments regarding these materials.

4. Please note that when you file a pre-effective amendment containing pricing-related information, we may have additional comments. As you are likely aware, you must file this amendment prior to circulating the prospectus.

5. Please note that when you file a pre-effective amendment that includes your price range, it must be bona fide. We interpret this to mean your range may not exceed $2 if you price below $20 and 10% if you price above $20.

Summary, page 1

6. In instances where you have stated that BioThrax is safe and effective, please revise to state that it is sufficiently safe and effective.

7. You indicate on page 1 that a study by the Institute of Medicine supported the FDA ruling that BioThrax is safe and effective for the prevention of anthrax infection by all routes of exposure, including inhalation. Please provide us a marked copy of this source to support your statement.

8. We note the statistical information you include on pages 2 and 76-77 regarding the data obtained from Frost & Sullivan. Please provide us with copies of this source in which you obtained the statistical figures. The copy should be marked to indicate the information supporting your statements.

9. If any of the data from Frost & Sullivan were derived from studies or reports that were performed on your behalf, please so indicate and file any appropriate third party consents.

Our Business, page 1

10. We note that you have completed Phase I clinical trials for your typhoid vaccine. Please tell us if the IND filed with the FDA was filed by you or another party. Additionally, tell us the product name used in the IND that was filed.

11. Are you planning to conduct clinical trials for your hepatitis B therapeutic vaccine or Group B streptococcus vaccine in the US?

Our Strategy, page 3

12. We note your summary of the primary goals for your company for the future. Please balance the discussion of your strategy in the summary with an equally prominent discussion of obstacles and risks in implementing the stated goals.

The Offering, page 5

13. Please revise to include disclosure relating to the rights which are being offered with the common stock.

Risk Factors, page 8

14. Please include a separate risk factor disclosing the possibility that the issuance of the preferred stock purchase rights might prevent a change in control in instances where some shareholders may believe the change in control may be in their best interests.

"We have derived substantially all of our revenue from sales of our . . . .," page 8

15. Please revise your risk factor header and discussion to clearly state that BioThrax is currently your only product available for commercial sale.

16. Please revise to include a separate stand alone risk factor disclosing the ongoing legal proceedings and the effects they may have on your sales to the US government.

"Our U.S. government contracts for BioThrax® require annual funding . . . .," page 9

17. This risk factor appears to be discussing three separate risks factors, the risks associated with Congressional appropriations that the funding of governmental programs are subject to; the risks permitting unilateral termination of government contracts; and the risk associated with specific procurement regulations in conducting business with the government. Please ensure that each risk factor only discusses one risk factor and move the discussion pertaining to unilateral termination by the government to the risk factor entitled "Unfavorable provisions in government contracts may harm our business . . . ." on page 10 and the discussion regarding governmental oversight as a new separate risk factor.

"The pricing under our fixed price government contracts is based on . . . .," page 10

18. If in the past your estimated costs were not accurate and therefore, you were not able to earn an adequate return on your contract, if such impact was material, please describe the incidence and further describe the impact it had on your operations.

"We have a limited operating history and may not maintain profitability . . . .," page 11

19. If there were any material factors that resulted in losses for the three months ended March 31, 2006, please explain. If these factors involved increased expenses that are likely to recur, please identify them and discuss their impact going forward.

"We may need additional funding and may be unable to raise capital when . . . .," page 12

20. You indicate that you are committed to substantial capital expenditures in connection with the expansion of your Lansing, Michigan facility as well as for the planned build out of two buildings in Frederick, Maryland. Please quantify the approximate amount of expenditure you are committed for in connection with these expansions. Please provide similar information in the risk factor entitled "We have initiated a manufacturing facility expansion program. . . ." on page 13.

"BioThrax and our immunobiotic product candidates are difficult to . . . .," page 13

21. If your financial condition has historically been materially impacted by lot failures, product recalls or other acceptance criteria, please describe the situation and further describe the impact it had on your operations.

"Disruption at, damage to or destruction of our manufacturing facilities . . . .," page 14

22. If you have experienced any of the situations described in your bullet point list, please revise to describe the situation you experienced and the consequences. It may be necessary to include such discussion as a separate risk factor discussion.

"If third parties do not manufacture our product candidates in sufficient . . . .," page 15

23. Please identify the third parties that manufacture the supplies of your immunobiotic product candidates for your preclinical and clinical developments needs. If any of these parties have failed to meet your preclinical and development needs, please discuss the failure and the effects of the failure.

24. Please identify the third party who provides you with services related to your purification and fractionation of plasma for your anthrax immune globulin candidate.

"Our use of hazardous materials, chemicals, bacteria and viruses requires . . . .," page 16

25. If you have been in violation of the environmental laws or been the subject of any investigations for violations in the past, please revise to include this information.

26. Please state whether you currently have reasonably adequate insurance to insulate yourself from damage claims arising from your use of hazardous materials and quantify the extent of your insurance coverage.

"We will not be able to commercialize our product candidates if our . . . .," page 17

27. You indicate in the first full paragraph following the bullet points that you anticipate that the FDA will not require you to conduct a Phase II clinical trial for the botulinum toxoid vaccine before permitting you to initiate a donor stimulation program for your botulinum immune globulin candidate. Please provide the basis for your believe that the FDA will not require to conduct a Phase II clinical trial related to your botulinum immune globulin candidate.

"If we fail to achieve significant sales of BioThrax to customers in . . . .," page 19

28. Please identify the potential customers you are targeting the BioThrax product. Please also identify the type of customers who are currently purchasing your BioThrax product, other than the U.S. government.

29. Please disclose when your new Lansing facility will be completed.

"The commercial success of BioThrax and any products we develop…," page 19

30. Please explain the meaning of the term "recombinant."

31. To the extent that there have been reports of any material side effects from BioThrax or any of your products in development, please revise to include this information.

"We have a small marketing and sales group. If we are unable to expand . . . .," page 21

32. To the extent known, please disclose the projected time frame of your hiring the additional marketing personnel and the approximately how many employees you plan to hire.

33. If you have had problems attracting or retaining qualified marketing and sales employees, please revise to describe the problems you have experienced.

"We face substantial competition…," page 21

34. Much of the detail included in this discussion is more appropriate for the Business section. Please revise the discussion to include a level of detail that helps readers understand the risk and consequences. Move the detailed discussion to the Business section.

"Legislation and contractual provisions limiting or restricting liability . . . .," page 23

35. You indicate that you have applied to the Department of Homeland Security for liability protection for sales of BioThrax. Please disclose when you submitted the application and when you expect to hear from the Department of Homeland Security.

"Product liability lawsuits could cause us to incur substantial liabilities . . . .," page 24

36. You indicate that the lawsuits claim damages resulting from personal injuries allegedly suffered because of the BioThrax vaccination. Please specify what type of personal injuries the lawsuits claims arose from the use of your BioThrax vaccination. Additionally, disclose the amount of damages they are seeking.

"If we fail to attract and keep senior management and key scientific. . . .," page 27

37. If you have experienced difficulties hiring or retaining employees, please describe these difficulties. Similarly, if you have reason to expect that you may experience difficulties due to shortages of qualified people or other reasons, please discuss these expectations and the conditions that create the expectations.

"We rely on property and equipment owned by the Department of Defense . . . ., page 28

38. Please disclose the fee you currently pay to the government for use of their equipment, if such amount is material.

"If third parties on whom we rely for clinical trials do not perform as . . . .," page 33

39. Please identify the third parties on whom you "heavily" rely for the successful execution of your clinical trials. To the extent you have any agreements with such parties, please describe the agreements in your Business section and file the agreement as an exhibit. If you do not believe such agreements are material to you, please provide us with a detailed analysis explaining why you do not believe such agreements are material to you.

40. You indicate that you expect to rely on the data from the development efforts of CDC, assuming CDC consents to such use and the study is completed. Please expand your disclosure by describing how frequent your contact with the CDC is and what information you are privy to, if any.

41. Please remove the discussion relating to your plans to expand your internal clinical development and regulatory capabilities and the risk that you may not be able to recruit appropriately trained personnel to your infrastructure to a new separate risk factor discussion.

"We may fail to protect our intellectual property rights, which would . . . .," page 33

42. To the extent you are aware that you have any intellectual property that is being infringed upon or that you have been notified of a third party's belief that you are infringing on their intellectual property, please revise to disclose the situation and potential consequences.

43. Please disclose who has the obligations to take necessary actions to protect patents under your license and collaboration agreements. If you do not have the obligation to take action, do you have the right to take necessary actions if the other party does not?

"If we infringe or are alleged to infringe intellectual property rights . . . .," page 35

44. If you or your collaborators were ever required to pay license fees or royalties, or both as a result of patent infringement claims or to avoid potential claims, please so indicate and provide a description of the circumstances.

"Fuad El-Hibri, our president, chief executive officer and chairman of . . . .," page 37

45. Please revise your risk factor heading to include the fact that Mr. El-Hibri will also control the outcome for the election of directors. We note you have provided this disclosure in your risk factor discussion.

"If you purchase shares of our common stock in this offering, you will . . . .," page 38

46. Please revise this risk factor to state that shareholders will contribute ___% of the total amount to fund BioSolutions but will own only ___% of the shares outstanding.

"A significant portion of our total outstanding shares are restricted from . . .," page 39

47. Please disclose the total number of shares that will available for immediate sale in the market. Please also disclose the percentage that the shares will represent of your total outstanding shares after the offering.

48. Please also disclose the total amount beneficially owned by Mr. El-Hibri and the percentage that his shares represent of your total outstanding after the offering. We note you have provided this information in the risk factor entitled "Fuad El-Hibri, our president, chief executive officer and chairman . . .," page 37.

49. Please indicate how many shares you plan to register with respect to shares you intend to issue under your employee benefit plans. Please also indicate when you expect to do so.

Use of Proceeds, page 42

50. Please disclose the approximate amount and timing of the proceeds you obtain from the offering for each of the purposes you list in this section, including how much you anticipate spending for each product candidate. Please also specify what type of developmental activities you intend to engage in. Please also indicate where in the development process you expect to be after the expenditure of these proceeds.

51. Please describe which "general corporate purposes" you plan to use the proceeds from this offering for. State an approximate dollar amount for each.

Management's discussion and analysis of financial condition, page 49

Critical accounting policies and estimates

Revenue recognition, page 51

52. Please disclose the amount of allowances for sales returns, rebates, special promotional programs, and discounts recorded as a reduction of gross sales for each of the years presented. Additionally, please tell us and disclose for each year presented, whether management has recorded a current year provision for sales made in the prior year.

53. We note that you recognize revenue upon FDA release of product. Please explain to us in detail the FDA review process for your product including how often it occurs and the average length of the review.

Stock-based compensation, page 53

54. We note that you have used an "independent valuation specialists" to help determine the fair value of your equity securities. It appears that these specialists are used by management as experts. As such, please name the independent valuation specialists and provide written consents, as appropriate.

Results of operations, page 59

55. Please revise the comparison of years to discuss and quantify the reasons for each significant factor that resulted in significant increases or decreases in line items on your financial statements. Refer to Financial Reporting Codification Section 501.04. Based on your existing disclosures, it appears that you could have better quantified your discussion of revenues, cost of product sales, research and development expenses, and selling, general and administrative expenses. Additionally, please tell us why your cost of product sales as a percentage of revenues has substantially decreased over the years presented.

Liquidity and Capital Resources, page 66

56. It appears your discussion of material changes in the components of cash flows is just a reiteration of your Statement of Cash Flows. Please include a discussion and analysis of the material changes in components of cash flows from operating activities. Please refer to Section IV of the Securities and Exchange Commission's Guidance Regarding Management's Discussion and Analysis of Financial Conditions and Results of Operations (Release Nos. 33-8350; 34-48960; FR-72).

57. Please revise to describe any material intended uses and sources of funds. For example, you have disclosed that you are in the process of building a new facility and expanding two other facilities. Your discussion should discuss the anticipated costs of these projects and how you expect to finance them.

Contractual Obligations, page 68

58. We note that you did not include future royalties and milestone payments in your contractual obligations table. Please disclose, to the extent material, the amount and timing of milestone commitments that are reasonably likely to be paid and the events that would require payment. Additionally, please consider enhancing your discussion

of these potential milestone payments within Liquidity and Capital Resources. Please refer to Financial Reporting Release 72, section IV.

59. We note that you have included scheduled interest payments, net of capitalization. Please revise table to include scheduled interest payment gross or tell us why you believe that the net presentation is appropriate. It would appear that you are obligated to make the scheduled payments regardless of whether you capitalize or expense them.

60. Please reconcile the $13.8 million of short and long-term debt disclosed in the contractual obligation table to the $19.5 million in debt you disclose as debt outstanding as of July 31, 2006.

Debt financing, page 68

61. We note you have received approximately $7.0 million and $8.5 million under debt facilities. Please identify the interest rate, maturity date, and any other material terms for each facility. We note you have provided for some of the terms of these agreements on page 69. We also note you have filed each of these agreements as exhibits to your registration statement.

62. Are you currently in compliance with all debt covenants?

Business, page 72

Products, page 79

63. Your agreements with HPA are not sufficiently described. Please revise to disclose all the material terms, including amounts paid or received to date, potential milestone payments to be made or received, the existence of royalty rights, expiration and termination provisions, and any other material terms.

64. Please include a discussion of the material terms of your funding agreement with Wellcome Trust and file the agreement as an exhibit.

Botulinum immune globulin, page 86

65. We note you plan to do a proof-of-concept trial for your botulinum immune globulin candidate as stated on page 87. Please explain what a proof-concept trial is and how it fits into the typical three-phase clinical trial process.

66. In the fourth full paragraph on page 87 you state that you expect to rely on the safety and immunogenicity data from the pentavalent botulinum toxoid vaccine previously manufactured by the State of Michigan in the development of bivalent botulinum toxoid vaccine. Please indicate when the study was completed and why you believe the FDA will accept the State of Michigan's data to replace a Phase II clinical trial by you.

Typhoid vaccine, page 88
Hepatitis B therapeutic vaccine, page 90
Group B streptococcus vaccine, page 92
Chlamydia vaccine, page 93
Meningitis B vaccine, page 94

67. We note the statistical and other figures you cite to in each of the above referenced sections relating to market opportunity. Please provide us with copies of the reports you cite to in that section. The copies should be marked to indicate the information supporting your statements.

68. We note your disclosure in the above referenced sections where you provide the results of your clinical trials. Please revise your discussions to include appropriate caveats indicating that the results do not provide enough evidence regarding efficacy or safety to support an application with the FDA, that additional tests will be conducted and that subsequent results often do not corroborate earlier results.

69. Please also indicate whether the results of your initial clinical tests done on the vaccine candidates referenced in the each of the above referenced sections have been subject to any type of statistical analysis and, if so, whether the results of trial were statistically significant. In addition, the degree of statistical significance or the P value should be disclosed and explained.

Government Contracts, page 104

70. When do you expect to complete delivery of the additional five million doses of BioThrax to HHS?

Litigation, page 116

71. Please revise to disclose the amounts sought in each lawsuit.

Management, page 121

72. It does not appear the business description for Mr. Ronald Richard contains dates of employment or other business related activities for the last five years. Please revise your business description for Mr. Richard to include this information.

Summary Compensation Table, page 125

73. You indicate in footnote 1 that bonus amounts for the 2005 have not yet been determined. Please indicate when you expect to know your 2005 bonus amounts.

Selling Shareholders, page 147

74. Please tell us whether any of the selling stockholders is a broker-dealer or an affiliate of a broker-dealer. If any of the selling shareholders are broker-dealers or affiliates of a broker-dealer, tell us supplementally whether any of the selling shareholders received these shares as underwriting compensation. We may have further comments.

Financial Statements

Consolidated statements of operations, page F-4

75. Please tell us why management determined that classification of the "settlement of State of Michigan obligation" and the "litigation settlement" are properly classified as credits to operating expenses as opposed to other income (expense). Please cite authoritative literature management relied upon.

Notes to consolidated financial statements

1. Nature of the business and organization

76. Please tell us, and disclose how you have accounted for the reorganization in June 2004. It would appear that the transaction should have been accounted for as a reverse acquisition. Additionally, please disclose whether Emergent Biosolutions had any operations prior to June 2004 and, if so, whose historical financial information is being presented.

2. Summary of significant accounting policies

Revenue recognition, page F-10

77. Please provide to us, in disclosure type format, the following information regarding your application of the SEC Interpretation *Commission Guidance Regarding Accounting for Sales of Vaccines and BioTerror Countermeasures to the Federal Government for Placement in the Pediatric Vaccine Stockpile or the Strategic Nation Stockpile* or tell us why this information should not be disclosed:
    a) Material terms and conditions of contracts, including all fees received, description of each enumerated vaccine product that you sell to the vaccine stockpiles, and any continuing involvement with the stockpiles;
    b) Market value of inventory available to be rotated out of vaccine stockpiles and of sales to third parties that were filled from vaccine stockpiles; and
    c) Product quantities and related product sales revenue for enumerated vaccines actually delivered from stockpiles.

78. Please note that you have determined that the acquisition of Microscience Limited was an asset purchase under SFAS 141. Please provide to us whether Microscience meets the definition of a business as defined in section 11-01(d) of Regulation S-X. If so, please tell us why you have not included financial statements in compliance with Rule 3-05 of Regulation S-X.

9. Long-term debt and related party notes payable, page F-19

79. You disclose on page F-19 that your obligations under the Term Loan dated October 2004 are guaranteed by all of the subsidiaries of the company. Please explain to us your consideration of Rule 3-10 of Regulation S-X to include one of the following in your annual report:

    a. financial statements of the subsidiary guarantors;
    b. condensed consolidating financial information in the notes to the financial statements; or,
    c. the disclosures specified in the Notes to Rule 3-10(f) of Regulation S-X including the narrative disclosures required by Rule 3-10(i)(9) and (10) of Regulation S-X.

10. Stockholders' equity, page F-20

80. In order for us to fully understand the equity fair market valuations reflected in your financial statements, please provide an itemized chronological schedule covering all equity instruments issued since January 1, 2005 through the date of your response. Please provide the following information separately for each equity issuance:

    a. The date of the transaction;
    b. The number of shares/options issued/granted;
    c. The exercise price or per share amount paid;
    d. Management's fair market value per share estimate and how the estimate was made;
    e. An explanation of how the fair value of the convertible preferred stock and common stock relate, given the one for one conversion ratio;
    f. The identity of the recipient, indicating if the recipient was a related party;
    g. Nature and terms of concurrent transactions; and,
    h. The amount of any compensation or interest expense element.

    Progressively bridge management's fair market value determinations to the current estimated IPO price range. Please reconcile and explain the differences between the mid-point of your estimated offering price range and the fair values included in your analysis.

13. Commitments an dsettlement gains, page F-26

81. As your noncancelable operating lease contains a 3% annual escalation, please disclose the amount of deferred rent as of each reporting date.

14. Related party transactions

82. We note that you have terminated some of the arrangements disclosed. Please tell us and disclose specifically which arrangements remain in effect as of the latest reporting period.

17. Subsequent events, page F-29

83. Please explain to us what is meant by "The Company paid $1,250 in cash and financed the balance with cash and with a bank loan in the amount of $8,500."

84. Please disclose when you will recognize revenue associated with the upfront fee received from Sanofi Pasteur relating to the development and commercialization of its meningitis B vaccine candidate.

* * *

As appropriate, please amend your registration statement in response to these comments. 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 Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and

- the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Kevin Woody at (202) 551-3665 or Kevin Woody at (202) 551-3629 if you have questions regarding comments on the financial statements and related matters. Please contact Song Brandon at (202) 551-3621, Suzanne Hayes, Legal Branch Chief at (202) 551-3675, or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: David Redlick
Wilmer Cutler Hale and Dorr LLP
1875 Pennsylvania Ave., NW
Washington, DC 20006