



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

January 10, 2007

Mail Stop 7010

Via U.S. mail and facsimile

Mr. Arnold Klann, Chairman,
Chief Executive Officer and President
Bluefire Ethanol Fuels, Inc.
31 Musick
Irvine, California 92618

Re: Bluefire Ethanol Fuels, Inc.
Form 10-SB
Filed on December 13, 2006
File No. 0-52361

Dear Mr. Klann:

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.

Please note that your filing will go effective by lapse of time 60 days after the original filing date pursuant to Section 12(g)(1) of the Exchange Act. If our comments are not addressed within this 60-day period, you should consider withdrawing your Form 10-SB prior to effectiveness and re-filing a new Form 10-SB that includes changes responsive to our comments. If you do not to withdraw, you will be subject to the reporting requirements under Section 13(a) of the Exchange Act.

Based on the automatic effective date of your registration statement, please provide updated financial statements and disclosures as required by Rule 3-12 of Regulation S-X.

Item 1. Description of Business

Business of Issuer, page 3

1. Provide prominent disclosure regarding your current operations, including a description of any plants you plan on building, owning or operating, their location and the current stage of development and operations of your company and its business plan.
2. Please file the Arkenol license agreement and the ARK agreement as exhibits pursuant to Item 601(b)(10) of Regulation S-B.
3. Disclose the future consideration due under the ARK agreement. Describe briefly the ethanol project opportunities and the plant related rights you received under the ARK agreement, including the location of the plants.
4. Describe in more detail your research and development activities at the pilot plants. Disclose who owns and operates the pilot plants. Describe your "coordination" with JGC Corp. and summarize and file any agreements you have with them. Describe the patent protections and the product markets researched. Discuss in more detail the plants in the early stages of development, including who owns and operates them and your operational plans at them.
5. Provide us with supplemental support for the statement "the Company is positioned to become a leader in the development, ownership and operation of cellulose to ethanol biorefineries". We note that you have not begun construction on any biorefineries at this point.

Arkenol Technology, page 3

6. The disclosure in this section assumes that the reader has a good understanding of your industry and the related terminology. In many instances, the disclosure uses terms that are specific to your industry for which no definition is provided. Please review this section and revise with a view towards clearly explaining your business and the related industry terms to a reader who is not familiar with your industry. This comment also applies to your reference to wet and dry milling at

page 5. Make clear how your intended process compares to the processes that are already in common use by others.

Competition, page 5

7. Explain how you intend to compete against much larger businesses that are already well-established and well-financed.

Industry Overview, page 6

8. Provide the basis for the statement “We believe there are no economically feasible substitutes for MTBE other than ethanol.”

Cellulose to Ethanol Production, page 7

9. Please provide support from independent sources supporting each of the claims that you list as “advantages” of biomass-to-ethanol over corn-based production. If you have no support for these claims, you should not include them in your document. For example, support your claim that “biomass is more energy efficient than its gas counterpart” (page 8).

Sources and availability of raw materials and the names of principal suppliers, page 8

10. Disclose in detail any arrangement, agreement or understanding between the Company and any North American landfill, and file all material contracts as exhibits.

Effect of Existing or Probable Governmental Regulations on the Business, page 9

11. Update your disclosure in the amended Form 10-SB to discuss the status of the “short list” you mention at page 10, the construction you mention at page 12, and your plans to hire a Chief Financial Officer at page 12. Also explain the reference in the second paragraph at page 12 to future sales of “their” common stock.

Risk Factors, page 12

12. Revise this section to discuss the risks more directly. For example, at page 14 in the factor “Because we are smaller and currently have fewer financial resources” you talk about your “competitive position” and your supposed advantages due to your location and cheaper materials. But these advantages do not belong in the Risk Factors section. Each risk factor should state the risk without discussing positive factors.

Directors, Executive Officers, Promoters, page 19

13. Revise the description of your officers and consultants to make clear when they worked at the other companies you mention. For example, if Mr. Klann still has ties to ARK Energy and Arkenol, please disclose this. For Mr. Larsen, you should also name the more recent employers.

Certain Relationships and Related Transactions, page 22

14. You disclose that the companies ARK Energy and Arkenol are “separate and apart from the Company.” In each case, discuss any common stockholders, officers or directors. Also explain who decided that your opportunities are worth \$16,000,000, as disclosed on page 12. We may have additional comments.

General

15. If applicable, please provide updated financial statements and related disclosures as required by Item 310(g) of Regulation S-B.

Management’s Discussion and Plan of Operation, page 11

16. Please expand your discussion to more clearly explain your plan of operation for the 12 month period following your latest balance sheet date, including a reasonably detailed explanation of your expected cash inflows and outflows, with a focus on commitments, trends, and uncertainties. For example, we read on page 12 that you anticipate beginning construction of a plant within the next six months, and we note your reference on page 8 to the first scheduled plant in Southern California, yet it is not clear how far along you are in this process as of the date of your filing. Please better explain the expected timing of any milestones in your building plan and any potential difficulties that might postpone your plan or prevent the plant from being built altogether. See Item 303(a) of Regulation S-B and FRC 607.02.
17. Please also provide appropriate risk factor disclosure discussing your ability to reach these milestones and their potential difficulties.

Report of Independent Registered Public Accounting Firm, page F-2

18. It is unclear to us why your auditors’ report does not include a conformed signature, the date, and the city and state of issuance as required by Rule 2-02(a) of Regulation S-X. Please revise.

General

As appropriate, please amend your filing 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 amendment to expedite our review. Please furnish a cover letter that is filed on EDGAR 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 Exchange Act 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 writing, 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.

You may contact Bret Johnson, Staff Accountant, at (202) 551-3753 or, in his absence, Jennifer Thompson, Staff Accountant, at (202) 551-3737 if you have questions

Mr. Arnold Klann
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regarding comments on the financial statements and related matters. Please contact Errol Sanderson, Financial Analyst, at (202) 551-3746 or, in his absence, Jennifer Hardy, Branch Chief Legal, at (202) 551-3767 with any other questions.

Sincerely,

Jennifer R. Hardy
Branch Chief Legal