



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 7010

December 8, 2006

Via U.S. mail and facsimile

Mr. David R. Ames
Chief Executive Officer
Xethanol Corporation
1185 Avenue of the Americas, 20th Floor
New York, NY 10036

**Re: Xethanol Corporation
Amendment No. 2 to Registration Statement on Form SB-2
Filed November 28, 2006
File No. 333-135121**

Dear Mr. Ames:

We have reviewed your amended filing and your response and have the following comments. 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.

Write-off on Intangible Assets and Goodwill, page 21

1. We note your response to comment 12 of our letter dated October 4, 2006. Please revise your registration statement to address the following:
 - In light of your acquisitions and subsequent write-off of various technologies in 2004 and 2005, revise the disclosures in "Business" related to each technology to address: why you acquired it; whether you intend to continue develop it; stage (percentage) of completion; and the projected costs and timeframe to complete;
 - Revise note 3 to your annual financial statements to clarify that ABTI, EETI, SSTI and XT had no operations when you acquired them and that you determined that they represent acquisitions of assets rather than businesses;

- In light of the fact that you recorded the impairments of the technologies and goodwill during the year ended December 31, 2005, revise the notes to your annual financial statements to provide all the disclosures required by paragraphs 46 and 47 of SFAS 142; and
- Revise note 13 to your interim financial statements to clarify that ABGT had no operations when you acquired it and that you determined that it represents the acquisition of assets rather than a business.

Selling Stockholders, page 62

2. We note your response to comment 19 of our letter dated October 4, 2006 and we reissue this comment. It still does not appear that the number of shares in this column matches the disclosed total, even taking into account the shares discussed in your response.
3. We note your response to comment 20 of our letter dated October 4, 2006 and we reissue this comment. In this regard, we note that the “Shares Registered in this Offering” column appears to total 8,797,826 shares.

Legal Proceedings, page 73

4. Please revise to provide all of the information required by Item 103 of Regulation S-B for each of the matters disclosed in this section. For example, your disclosure that “each of the four class action plaintiffs seeks substantial (sic) the same damages” is vague.

Consolidated Financial Statements

5. We note your response to comment 32 of our letter dated October 4, 2006. We also note your disclosures regarding the subsequent reverse acquisition between H2Diesel and Wireless Holdings on October 20, 2006. It appears to us that the acquisition of your interest in Wireless Holdings is significant and that additional historical and pro forma financial statements may be required under Item 310 of Regulation S-B. Please advise or revise.

Consolidated Statements of Cash Flows, pages F-6 and F-26

6. We note an inconsistency in your presentation of “cash received from acquisitions” in your interim statement, as cash flows from investing activities, and your annual statement, as cash flows from financing activities. Based on your representations that you did not acquire businesses, it appears that your annual presentation may be more appropriate.

Note 9 – Investment in H2Diesel, Inc, page F-33

7. We note your response to comment 28 of our letter dated October 4, 2006 and have the following additional comments:
- It remains unclear to us why you only considered the market price of the shares you issued in determining the value of the 3,250,000 shares of H2Diesel that you acquired from the Investors on April 14, 2006. We note that you essentially recorded these shares at \$1.67 per share. It is not clear to us why you did not also consider: the fact that the Investors recently purchased the shares for cash at \$.61 per share, the fact that you recorded the other 2.6 million shares you received at \$.61 per share, and the fact that the shares you issued are not registered or freely-tradable.
 - It remains unclear to us how you allocated the 2.6 million shares you received between the Put and the management fee. It is also not clear to us why the management agreement was entered into and why it was subsequently terminated.
 - It is not clear to us how you determined that the sub-license and master license agreements you recorded are recoverable and have indefinite lives.
 - It is not clear to us how you and H2Diesel determined that the license agreement they recorded is recoverable and has an indefinite life.

Please advise or revise.

Note 13 – Acquisition of Advanced Biomass Gasification Technologies, Inc., page F-37

8. We note your response to comment 30 of our letter dated October 4, 2006. Please explain to us how you determined that the intangible assets you acquired from ABGT are recoverable.

* * * *

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.

Mr. David R. Ames
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You may contact Melinda Hooker, Staff Accountant, at (202) 551-3732 or, in her absence, Anne McConnell, Senior Staff Accountant, at (202) 551-3709 if you have questions regarding comments on the financial statements and related matters. Please contact Andrew Schoeffler, Staff Attorney, at (202) 551-3748 or, in his absence, Lesli Sheppard, Senior Staff Attorney, at (202) 551-3708, with any other questions.

Sincerely,

Pamela A. Long
Assistant Director

cc: Mr. Robert F. Mechur, Esq.
Boylan, Brown, Code, Vigdor & Wilson, LLP
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