



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

December 16, 2010

Mr. Benjamin P. Cowart
Chief Executive Officer
Vertex Energy, Inc.
1331 Gemini Street; Suite 250
Houston, TX 77058

**Re: Vertex Energy, Inc.
Form 10-K for the year ended December 31, 2009
Form 10-Q for the period ended September 30, 2010
File No. 0-53619**

Dear Mr. Cowart:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2009

Cover page

1. Please tell us why you have checked the box "yes" to disclose that you are ". . . not required to file reports pursuant to Section 13 or Section 15(d) of the Act." In this regard, we note that your common stock is registered under Section 12 of the Securities Exchange Act of 1934, as amended.

Item 1. Business

Reliance on Contracts and Relationships; Low Capital Intensive Business, page 5

2. We note your disclosure about the low capital intensive nature of your business. We further note your disclosure on page 35 concerning your development stage re-refining business and that it will require significant capital. In future filings, please update the description of your business to reflect the developments in your business, including, but limited to, your need for additional capital.

Description of Capital Stock

Common Stock, page 26

3. We note disclosure that each common stockholder is entitled to one vote except for the election of directors. In future filings, please clearly describe the voting rights of common stockholders in the election of directors. Please show us what your disclosure would look like.

Item 7. Management's Discussion and Analysis

Liquidity and Capital Resources, page 34

4. Your current discussion of financial condition on page 34 appears to provide a summary of the balances as of each period end. Please show us how you will revise your future filings to provide a more comprehensive analysis of the reasons for material fluctuations in your balance sheet accounts and a discussion of the extent to which these fluctuations represent trends that are expected to continue.

Critical Accounting Policies and Use of Estimates, page 38

5. It appears from your disclosures on page F-16 that the thermal/chemical extraction technology currently licensed from a related party is material to your business. Please supplementally show us how you will revise your future filings to address the following:
 - Explain, in detail, how you evaluate the licensing agreement for impairment. Please ensure that your response describes how you consider the uncertainty associated with your future ability to use the licensing agreement in evaluating the agreement for impairment;
 - Tell us and revise to explain the current status of the default by your related party and how it has affected your ability to utilize the licensing agreement;
 - Quantify the amount of revenue generated during the year ended December 31, 2009 and through the nine months ended September 30, 2010 using the thermal/chemical extraction technology;

- Explain, with quantification where possible, how your business would be affected if you were unable to use the licensing agreement; and
- Describe the actions you are taking, if any, to find alternative sources for thermal/chemical extraction technology or mitigate losses in the event you are no longer able to use the licensing agreement.

Item 8. Financial Statements and Supplementary Data

Note 6 – Income Taxes, page F-12

6. It appears that your disclosure of the income tax expense components is incomplete. We note that your deferred tax disclosures indicate that you had no valuation allowance as of December 31, 2008 and a \$14.5 million valuation allowance as of December 31, 2009. However, your table disclosing the components of income tax expense does not reflect the income statement impact of the increase in valuation allowance. Please refer to FASB ASC 740-10-50-9 and show us how you will revise your future filings.

Item 10. Directors, Executive Officers and Corporate Governance, page 44

7. In future filings, please provide information pursuant to Item 401(e) of Regulation S-K. Also, in future filings, for Messrs. Cowart and Pimentel, please provide the period of time they have served as a director.

Item 15. Exhibits, Financial Statement Schedules, page 60

8. We note that neither Exhibit 2.1 nor Exhibit 3.2 was actually filed with the current report on 8-K filed on April 8, 2009, as you disclose in footnote (1) of the exhibit index. Please amend this Form 8-K promptly to file these exhibits.
9. We note that amendment no. 5 dated as of March 31, 2009 to the Amended and Restated Agreement and Plan of Merger is included in the exhibit index. Please tell us whether the Amended and Restated Agreement and Plan of Merger dated May 19, 2008 is filed as an exhibit to your annual report on Form 10-K. If it is not filed as an exhibit, please either tell us why you have not filed this agreement as an exhibit or include this agreement as an exhibit with your next current report or periodic report.
10. In future filings, please include the exhibit regarding your subsidiaries required by Item 601(b)(21) of Regulation S-K. In addition, please tell us what consideration you have given to filing as exhibits to your annual report on Form 10-K the operating agreement with KMTEX and other related party agreements referenced on page 5, the feedstock sale agreements and feedstock purchase agreements referenced on page 9, the voting agreements referenced on page 13 and the lock-up agreements referenced on page 28.

FORM 10-Q FOR THE PERIOD ENDED SEPTEMBER 30, 2010

Item 1. Financial Statements

Note 6 – Earnings (Loss) Per Share, page F-8

11. Please show us how you will revise your future filings to reconcile between the numerators and denominators used in computing basic and diluted EPS for each period. Please refer to FASB ASC 260-10-50-1(a).

Note 9 – Licensing Agreement, page F-10

12. We note that you capitalized \$260,000 of development costs related to the use of thermal/chemical extraction technology during the period ended September 30, 2010. Please show us how you will revise your future filings to disclose your accounting policy for the capitalization of these costs. Please refer to FASB ASC 350-30-25.

Item 2. Management's Discussion and Analysis

Liquidity and Capital Resources, page 14

13. We note your disclosure regarding your new loan agreement with Bank of America Merrill Lynch. In future filings, please expand your disclosure to describe the material terms and conditions of the agreement, including, but not limited to, its material covenants, and provide management's analysis of the state of your compliance with those covenants and any material impact on your business.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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.

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Vertex Energy, Inc.
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You may contact Lisa Etheredge, Staff Accountant at (202) 551-3424 or Jeanne Baker, Assistant Chief Accountant at (202) 551-3691 if you have questions regarding comments on the financial statements and related matters. Please contact Sherry Haywood, Staff Attorney at (202) 551-3345 or Dietrich King, Staff Attorney at (202) 551-3338 with any other questions.

Sincerely,

Rufus Decker
Accounting Branch Chief