



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4561

May 27, 2016

E. Randolph Wootton III
Chief Executive Officer
Rocket Fuel Inc.
1900 Seaport Blvd.
Redwood City, California 94063

**Re: Rocket Fuel Inc.
Registration Statement on Form S-3
Filed May 10, 2016
File No. 333-211261**

Dear Mr. Wootton:

We have limited our review of your registration statement to those issues we have addressed in our 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 by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. Based on publicly available information, it appears that the aggregate market value of your voting and non-voting common equity held by non-affiliates during the 60 days prior to the filing of the registration statement may not have exceeded \$75 million, as required by General Instruction I.B.1. of Form S-3. Please tell us the basis upon which you are eligible to register securities on Form S-3 at this time. If you are relying on General Instruction I.B.6., please refer to Instruction 7 to General Instruction I.B.6. of Form S-3 and revise accordingly.

Plan of Distribution, page S-13

2. Your disclosure of the plan of distribution of the securities covered by this prospectus supplement states that sales may be made to or through a market maker. It further states

that “Cantor may also sell our common stock by any other method permitted by law, including in privately negotiated transactions with our prior written consent.” Please tell us whether sales made to or through a market maker or sales made in privately-negotiated transactions satisfy the “at the market offering” definition under Rule 415. If any sales method does not constitute a sales method that is deemed to be an “at the market offering” as defined in Rule 415 or if any material information with respect to a particular offering has been omitted, please confirm that you will file an additional prospectus supplement at the time of such sales or tell us why such additional filing would not be necessary.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company 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.

Please refer to Rule 461 regarding requests for acceleration. 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

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Please contact Ji Shin, Attorney-Advisor, at (202) 551-3579, or me at (202) 551-3453 with any other questions.

Sincerely,

/s/ Jan Woo

Jan Woo
Branch Chief – Legal
Office of Information Technologies
and Services

cc: Steven E. Bochner, Esq.
Wilson Sonsini Goodrich & Rosati, Professional Corporation