



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

DIVISION OF
CORPORATION FINANCE

July 16, 2014

Via E-mail

D. Hunt Ramsbottom, Jr.
Chief Executive Officer
Rentech, Inc.
10877 Wilshire Boulevard, 10th Floor
Los Angeles, CA 90024

**Re: Rentech, Inc.
Registration Statement on Form S-3
Filed July 8, 2014
File No. 333-197306**

Dear Mr. Ramsbottom:

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. Where 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.

Selling Shareholders, page 2

1. Please revise to indicate that the selling shareholders may be deemed underwriters.
2. Please confirm to us that none of the selling shareholders is a broker-dealer or affiliate of a broker-dealer and make corresponding revisions to your disclosure in this section. To the extent that any selling shareholder is an affiliate of a broker-dealer, please disclose, if true, that the selling shareholder purchased the securities in the ordinary course of business and at the time of the purchase of the securities to be resold, the selling shareholder had no agreements or understandings, directly or indirectly, with any person to distribute the securities.

Exhibit 5.1

3. We note that the second paragraph on page 2 of the opinion states that the shares of common stock being registered are validly issued, fully paid and nonassessable even though the Series E Convertible Preferred Stock has not been converted into shares of common stock yet. Please revise.

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 Rules 460 and 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 Ada D. Sarmiento at (202) 551-3798 or me at (202) 551-3469 with any questions.

Sincerely,

/s/ Justin Dobbie

Justin Dobbie
Legal Branch Chief

cc: Via E-mail
Anthony J. Richmond, Esq.