



DIVISION OF
CORPORATION FINANCE

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

February 17, 2012

Via E-mail

Richard Rutkowski
Chief Executive Officer
ClearSign Combustion Corporation
12870 Interurban Avenue South
Seattle, Washington 98168

**Re: ClearSign Combustion Corporation
Amendment No. 2 to Registration Statement on Form S-1
Filed February 7, 2012
File No. 333-177946**

Dear Mr. Rutkowski:

We have reviewed your registration statement 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 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.

Prospectus Cover Page

1. We note your response to prior comment 1 that once the price or price range is determined you will file a prospectus supplement that provides this information and that you do not have any price ranges included at this time. Please note that paragraph 16 of Schedule A of the Securities Act and Regulation S-K Item 501(b)(3) require that you disclose the price at which the securities will be sold. Please revise the underwritten offering prospectus to include a price range and all non-Rule 430A information prior to circulating any preliminary prospectus. With respect to the selling shareholder prospectus, given the lack of an established market for your securities, please note that a statement that selling shareholders will sell "at market prices" is insufficient to satisfy your disclosure obligation. Therefore, please disclose the fixed price at which the securities will be sold. We will not object if you also elect to disclose that the selling shareholders will sell at the fixed price until your shares are quoted on the OTC Bulletin Board and thereafter at prevailing market prices or privately negotiated prices.

Research and Development Plan, page 25

2. We note you revised the disclosure on page 25 in response to prior comment 5. Please revise to clarify the costs associated with completing each step in the development plan rather than only the portion of the offering proceeds that will be applied to each step.

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.

Richard Rutkowski
ClearSign Combustion Corporation
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You may contact Praveen Kartholy at 202-551-3778 or Brian Cascio, Accounting Branch Chief, at 202-551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Jay Mumford at 202-551-3637 or Mary Beth Breslin at 202-551-3625 with any other questions.

Sincerely,

/s/ Mary Beth Breslin for

Amanda Ravitz
Assistant Director

cc (via e-mail): Kevin Friedmann