

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

September 4, 2014

Via E-mail
Derek Peterson
President and Chief Executive Officer
Terra Tech Corp.
18101 Von Karman, Third Floor
Irvine, California 92612

Re: Terra Tech Corp.
Registration Statement on Form S-1
Filed August 8, 2014
File No. 333-198010

Dear Mr. Peterson:

We have limited our review of your registration statement to those issues we have addressed in our comment. In our comment, 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 comment applies 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 this comment, we may have additional comments.

1. Please revise to include updated financial statements and related disclosures in your filing as required by Rule 3-12 of Regulation S-X.

MediFarm, MediFarm I, and MediFarm II, page 7

- 2. Please expand your disclosure regarding this line of business so that investors can understand the extent and scope of this new line of business. For example, please disclose your reasons for forming three subsidiaries in this manner and describe why you used these ownership structures and identify the co-investors. Also, please describe how you intend to allocate new business opportunities among these three subsidiaries.
- 3. Your summary disclosure should be a balanced description of your business including describing any material risks associated with your businesses. Please revise accordingly.

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The Debt Placement, Page 7

4. Please expand your disclosure to explain in more detail the role of and payments by and to Aegis Capital Corp in the debt placement. For example, please explain the "right to co-invest" in more detail. Please explain what it means that the "Aegis Designees have economic rights to the underlying shares," but not voting or dispositive power and the reason why the transaction was structured in this manner.

Use of Proceeds, page 8

5. Please expand your disclosure regarding your use of proceeds to describe in more detail your plans for "commercial development of GrowOp Technologies, Edible Garden, MediFarm, MediFarm I, and MediFarm II." This disclosure should quantify how much money it will cost to commercially develop each of these operations and if there will not be enough money to complete such development, how you intend to pay for such development.

Signatures

6. It appears that the directors who have signed this registration statement have not signed your most recent Form 10-K. Please revise or advise.

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.

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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.

Please contact Jay Mumford at 202-551-3637 or me at 202-551-3800 with any questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz Assistant Director

cc (via-email): Thomas E. Puzzo, Esq.