



DIVISION OF  
CORPORATION FINANCE

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

August 4, 2011

Julian T. Ross  
OxySure Systems, Inc.  
10880 John W. Elliott Drive, Suite 600  
Frisco, Texas 75034

**Re: OxySure Systems, Inc.**  
**Amendment No. 9 to Registration Statement on Form S-1**  
**Filed July 25, 2011**  
**File No. 333-159402**

Dear Mr. Ross:

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.

Background, page 54

1. With a view toward disclosure, please tell us the basis for the beliefs you added in the last sentence of the first paragraph and on page 2. For example, has your product demonstrated in a clinical setting its ability to treat wounds and skin? Also, with a view toward balanced disclosure in your summary, tell us whether you have sold any product for use in the market segments you mention.

Government Regulation, page 54

2. Please tell us why this section does not discuss the applicable South African regulatory approvals mentioned in your response to prior comment 15, including the nature of and reasons for the "delays" you reference.

Distributor Network, page 65

3. The last paragraph of your response to prior comment 16 implies that your Brazilian and South African distributors are not complying with their annual purchase commitments. If that is correct, please revise to state so directly.

Security Ownership . . . , page 83

4. We note you deleted note 8 below the table. Therefore, it is now unclear what natural persons have or share voting and/or dispositive powers with respect to the shares held by Agave Resources. Please revise to identify those persons.

Note 8. License and Service Agreements, page F-34

5. We note your response to prior comment 16 but do not see where you revised the filing to disclose the remedies available to you if Afritex and your Brazilian distributor do not meet their distribution commitments to maintain exclusivity. Please revise the filing accordingly or tell us where you have included the disclosure.

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.

Julian T. Ross  
OxySure Systems, Inc.  
August 4, 2011  
Page 3

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.

You may contact Andri Boerman at (202) 551-3645 or Kaitlin Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Geoffrey Kruczek at (202) 551-3641 or Mary Beth Breslin, Senior Attorney, at (202) 551-3625 with any other questions.

Sincerely,

/s/ Mary Beth Breslin for

Russell Mancuso  
Branch Chief

cc (by e-mail): Arrin Langdon, Esq. — Oswald & Yap LLP