



DIVISION OF  
CORPORATION FINANCE

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

February 4, 2011

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

**Re: OxySure Systems, Inc.  
Amendment No. 5 to Registration Statement on Form S-1  
Filed January 13, 2010  
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.

1. We are evaluating your response to prior comment 1 and may have further comment.

Warrants, page 3

2. Please reconcile the aggregate exercise price of \$0.62 with the weighted average exercise price of \$0.51 shown on page F-27.
3. Please reconcile your response to prior comment 3 and your disclosures here and on page 83 regarding the number of warrants held by your affiliates and promoters. When you respond to this comment, please provide us with a list of all warrants currently outstanding and the holder of each warrant.

Use of Proceeds, page 24

4. Please expand your revisions added in response to prior comment 6 to clarify how much of the JTR Investments Limited Second Note will remain outstanding following the payments noted in your table. Words appear to be missing from note 3, as revised in your response.

Dilution, page 27

5. Please show us how you calculated both the *number of shares held after conversion of all convertible securities* and the *total consideration after conversion of all convertible securities* for affiliate and non-affiliate equity holders prior to the direct public offering.

Selling Security Holders, page 29

6. We note your response to prior comment 10. Please reconcile your revision to the exercise price in footnote 74 with the exercise price disclosed in Exhibits 10.16-10.16.2. Also revise your disclosure on page 3 as appropriate.

Stock-Based Compensation, page F-9

7. While you revised the disclosure on page 44 in response to prior comment 12, we continue to note that on page F-9, you disclose that you determine the risk-free interest rate used in your Black-Scholes valuations based upon the five year security treasury notes interest rates. Please revise to be consistent with your response and disclosure on page 44.

Liquidity and Capital Resources, page 47

8. Instead of just disclosing that notes payable increased because current notes payable increased by \$494,098, please explain the underlying causes for the significant increase in your notes payable. For example, we note that you entered into new note agreements such as the \$270,000 agreement with Afritex, increased some outstanding borrowings under the JTR Senior Note and significantly increased your deferred financing charges.
9. We note your revisions in responses to prior comments 14 and 15. Please tell us why your table on page 49 does not include interest expense related to your outstanding notes. Also, please reconcile:
  - The amount of expenses shown in the table with your disclosure on page 50 that you have reduced your expenses; and

- The amount outstanding related to your capital lease, as disclosed on pages 49, 50 and F-1.
10. Please tell us why you deleted disclosure from the eighth bullet regarding new products you added, including higher priced items.

Going Concern, page 49

11. On page F-36 you disclose that you entered into a bridge financing of up to \$1 million, of which you already received \$100,000 as a loan. Please tell us why you did not include this disclosure on page 49. Please revise to summarize the significant terms of the bridge financing and loan. Explain why you state that the bridge financing is up to \$1 million.
12. Please enhance your disclosure to explain what you mean by the term '*migrated to selling solutions.*' Briefly explain the nature of the solutions.
13. Please enhance your response to prior comment 19 to tell us the significant terms of your sales where you act as a reseller of products. Then explain how you analyzed each of the eleven criteria in determining that you should record revenues on a gross basis under ASC 605-45-45.

Results of Operations, page 51

14. We note your response to prior comment 21. We could not find where you included the disclosure in your filing. Please revise to explain why the sales of your products declined between the nine months ended September 30, 2009 and 2010. Further to your response, please tell us whether you have received any purchase orders from Afritex, including the initial purchase order for \$145,000 or purchase orders related to the annual minimum commitment of \$480,000, and the amount and terms of those purchase orders.
15. With a view toward disclosure, please tell us why your inventories have increased to \$224,624 as of September 30, 2010 given your declining product sales.

E-commerce site, page 66

16. We note the website listed in note 8 on page 63. Please refer to footnote 41 of Exchange Act Release No. 42728 and revise your disclosure accordingly. We note, for example, your disclosure added to note 9 on page 66.

Executive Officers and Directors, page 77

17. We reissue prior comment 23. Contrary to your response, you are required to disclose for each director, not only nominees, the specific experience, qualifications, attributes and

skills that led to the conclusion that the person should serve as a director. Also, it appears you have not yet included the disclosures required by Item 402(n)(2)(vi) and 402(r)(2)(iv) of Regulation S-K.

18. We note your added disclosure. Please clarify how Agave Resources “works with” other early and mid-stage development companies.

Executive Compensation, page 78

19. Please update the disclosure you provide pursuant to Item 402 of Regulation S-K to be as of your last-completed fiscal year – the fiscal year ended December 31, 2010.

Warrants and Options, page 87

20. Please reconcile the low end of your price range of \$.005 with your disclosure on page F-28 of warrants granted at an exercise price of \$.0005.

Interest of Named Experts and Counsel, page 90

21. Please revise so that the name of your independent registered public accounting firm agrees to their report on page F-38. The name on page F-38 does not have an LLC.

Related Party Transactions, page 91

22. We reissue prior comment 25 given that your disclosure continues to be only as of the date you provided financial information; that is, as of September 30, 2010. Please update your disclosure accordingly.

September 2008 Private Placement, page 93

23. Please reconcile where the 335,500 shares sold for cash at \$1.00 per share in 2008 and 2009 are reflected in your statements of stockholder’s equity on pages F-3 and F-4.

Foreign Currency Risk, page 95

24. Further to prior comment 22, we continue to note your disclosure here that exchange rate fluctuations may adversely affect the value, in U.S. dollar terms, of your net assets and income derived from our operations, if any, outside of the United States. Please tell us why.

Statement of Operations and Accumulated Deficit, page F-2

25. In prior comment 27, we asked how you considered the disclosures of ASC 250-10-50 due to the correction of an error you made to your financial statements to reflect a \$100,978 impairment of intangibles. We note that you have marked as restated the statement of operations for the three and nine months ended September 30, 2009 and the statement of cash flows for the nine months ended September 30, 2009. Please also revise to include all of the other disclosures required by ASC 250-10-50, including a description of the nature of the error and the effect of the correction on each financial statement line item and any per-share amounts affected for each prior period presented.

Statements of Cash Flows, page F-5

26. Please tell us whether the purchases of property and equipment of \$2,455 for the nine months ended September 30, 2010 are stated gross or net of sales of property and equipment. Based on the changes shown on page F-13, it appears that you are reflecting the amount on a net basis. Refer to ASC 230-10-45-7, 45-12 and 45-13.

Deferred Revenue and Income, page F-7

27. In response to prior comment 29, you revised the disclosure to note that you had deferred revenues as of September 30, 2009 of \$41,711. Please reconcile to your balance sheet on page F-1.

Notes Payable, page F-14

Frisco Note, page F-14

28. We note that the amount of the unamortized discount of \$66,198 is the same at September 30, 2010 as December 31, 2009 (see page F-53). Please tell us why. Explain how you are accounting for the discount.
29. We note that the table for the total current notes payable does not properly sum to the total disclosed. Please revise. Please also tell us where you disclose the terms of the \$45,000 senior convertible note issued in 2010.
30. Please show us how you calculated the future minimum payments schedules on pages F-21 and F-59.

Note 6. Stock Options and Warrants, page F-23

31. Please revise the table on page F-24 to include the appropriate headings for each column.

Note 8. License and Service Agreements, page F-30

32. We note your responses to prior comments 31 and 32 did not provide a thorough analysis of how you considered the significant terms of your agreements with Afritex under U.S. GAAP. We require a sufficiently detailed, reasoned analysis of why you recognized revenue of \$225,000 and how you considered the fact that you also issued Afritex a note payable for \$270,000 as well as warrants. We also require further explanation of your basis for establishing a long-term asset related to this transaction which you are amortizing over seven years and your basis for the treatment and valuation of the notes and warrants as explained in your response. Please provide us with your analysis of U.S GAAP for this transaction and cite the accounting literature you applied and how you applied it to your facts and circumstances.
33. Further to your response to prior comment 32, please reconcile the accounting with your disclosure on page F-30. Ensure that your disclosures are consistent with your responses.

Note 9. Commitments and Contingency, page F-30

34. Please explain the terms of your operating lease which allowed you to defer rental expense in 2010. Show us the journal entries recorded to account for the deferral of your rental expense of \$139,426. Explain whether you recorded rental expense and an accrued liability for the original rental payments which were due in the fourth quarter under the original terms of the lease.

Capital lease, page F-31

35. Please tell us how you are accounting for your original capital leases from VenCore, including the accounting for the preferred shares issued to VenCore in 2007 and 2006 valued at \$17,554 and \$60,924. Cite the accounting literature upon which you relied and how you applied it to your facts and circumstances. Please show us the journal entries you recorded.
36. Your response to prior comment 15 and your disclosure on pages 50 and F-37 indicates that you entered into a deferred cash arrangement with VenCore. Please tell us the significant terms of your agreement. Tell us how you are accounting for the agreement and why, citing the accounting literature applied. Show us how you calculated the amounts reflected in your financial statements related to this lease. Refer to ASC 840-30.

37. Further, in accordance with ASC 840-30-45-1 and 50-1, please disclose the gross amount of assets recorded under capital leases by major class and the related accumulated amortization. Please also disclose, in accordance with ASC 840-30-50-1, within your table of future minimum lease payments a separate deduction from the total for the amount of the imputed interest necessary to reduce the net minimum lease payments to present value as disclosed in your financial statements. Please similarly revise page F-70.

Note 10. Related Party Transactions, page F-32

38. Please disclose the nature of the related party relationship for Afritex and the other related party notes as required by ASC 850-10-50-1.

Note 11. Net Income (loss) per Share, page F-33

39. In response to prior comment 41 you told us that you calculated your weighted average shares for the six months ended June 30, 2010 based upon an annual rolling average of shares for the year from July 1, 2009 to June 30, 2010. Please explain how you applied ASC 260-10-45-10 and the definition of weighted average shares in calculating your net loss per share. In this regard, we note that you should use the weighted-average number of common shares outstanding during the period. Refer to Example 1 in ASC 260-10-55-38.

Note 12. Fair Value Measurements, page F-34

40. Please tell us why you have not included your warrants that are reflected as liabilities at fair value in the disclosures. This comment similarly applies to your disclosure on page F-73.

Report of Independent Registered Public Accounting Firm, page F-38

41. Please request your auditors to explain why they included the fourth paragraph of their opinion relating to management's assessment of the effectiveness of internal control over financial reporting, in light of the fact that management's assessment of the effectiveness of internal control over financial reporting is not included in the filing.
42. Please request your auditors to tell us how they considered paragraph .18A of AU Section 508 relating to the correction of a material misstatement in previously issued financial statements. We note no explanatory paragraph indicating that the previously issued financial statements have been restated for the correction of a misstatement and a reference to the company's disclosure in Note 17 of the correction of the misstatement.

Balance Sheets, page F-39

43. We note the following changes to the amounts previously reflected in your balance sheet for 2008:

- Notes payable current decreased from \$484,350 to \$383,204, a difference of \$(101,146). Total current liabilities and total liabilities were similarly changed.
- Additional paid-in capital increased from \$6,990,329 to \$7,091,475, an increase of \$101,146. Total stockholders' equity was similarly changed.
- Accumulated other comprehensive income was credited by \$627 and accumulated deficit was debited by \$627.

Please tell us the nature of these changes and your consideration of the disclosures required by ASC 250-10-50.

44. We note the following changes to the amounts previously reflected in your balance sheet for 2009:

- Notes payable current increased from \$310,600 to \$332,928, a difference of \$22,328. Total current liabilities and total liabilities were similarly changed.
- Additional paid-in capital decreased from \$8,317,834 to \$8,068,345, a decrease of \$249,489.
- Accumulated other comprehensive income was debited by \$82,641.
- Accumulated deficit was debited by \$22,328 and credited by \$82,641 and \$249,489 for a net total of \$309,802.

Please tell us the nature of these changes and your consideration of the disclosures required by ASC 250-10-50.

Statements of Operations and Accumulated Deficit, page F-40

45. We note the following changes to the amounts previously reflected in your statements of operations for 2010:

- Selling, general and administrative expenses decreased from \$2,597,954 to \$1,637,198, a difference of \$960,756. Loss from operations was similarly changed.
- Interest expense increased from \$48,244 to \$258,242, an increase of \$209,998.
- Net loss was decreased by \$960,756 and increased by \$209,998 for a net total of \$750,758.



Please tell us the nature of these changes and your consideration of the disclosures required by ASC 250-10-50.

46. We note your response to prior comment 44. However, we continue to note your inclusion of a line item below net loss for prior period adjustments of \$440,329 and \$627 in 2009 and 2008 in determining your accumulated deficit at the end of the period. We similarly note the inclusion of a line for prior period adjustments in your statements of shareholders' equity [\$1,118,010 in 2009 and \$627 in 2008] and statements of cash flows [\$1,117,383 in 2009 and \$627 in 2008]. Please tell us the nature of these items and how you determined the associated amounts. Cite the accounting literature you relied upon in accounting for and presenting these items and how you applied it to your facts and circumstances. Provide us with your journal entries.
47. In this regard, discuss how you considered ASC 250-10-45-23 which states that a prior period error should be reported as an error correction by restating the prior-period financial statements. The cumulative effect of the error on periods prior to those presented should be reflected in the carrying amounts of assets and liabilities as of the beginning of the first period presented with an offsetting adjustment, if any, made to the opening balance of retained earnings (or other appropriate components of equity or net assets in the statement of financial position) for that period. As such, financial statements for each individual prior period presented should be adjusted to reflect the correction of the period-specific effects of the error.
48. Please show us the significant components of your interest expense for 2009 and 2008 and the nine months ended September 30, 2010.

Statements of Cash Flows, page F-43

49. Please reconcile the amounts shown for issuance of common stock warrants in connection with convertible loans with your statement of shareholders' equity on pages F-41 to F-42 and with your disclosures in Note 5.
50. Please also reconcile the amount shown for prior period adjustment for 2009 with your statement of shareholders' equity on page F-42.
51. Please explain the nature of the decrease in deferred rent of \$185,272 and why this is shown as an adjustment to reconcile net income to net cash used in operating activities. Discuss how this transaction impacted your statements of operations. Please show us the journal entries.
52. Please similarly explain why the issuance of common stock warrants in connection with your convertible loans and changes in the deferred financing charges are shown as adjustments to reconcile net income to net cash used in operating activities. Discuss how

these transactions impacted your statements of operations. Please show us the journal entries.

53. Please tell us where the decrease in fair value of your warrant liabilities is included in your statements of operations.

Deferred Revenue and Income, page F-45

54. It appears that there was an error in editing this text. Please correct. See the language added on page F-7.

Note 4. Notes Payable, page F-53

55. We note that the revised disclosure provided in response to prior comment 34 should include a discussion of how you accounted for each of the warrants issued with the notes as either equity or liability. If accounted for as a liability, you should disclose, or cross-reference to where you disclose, the terms of the warrants which caused you to account for the warrants as liabilities. Please revise.
56. Contrary to your response to prior comments 35 and 36, we did not receive any supplemental schedules showing your calculations. Please provide us with those schedules. Please note that the calculations in the schedules should reconcile to your financial statements and the disclosures of how you are accounting and valuing the instruments and be consistent with your treatment of the warrants as either equity or liabilities. Please include journal entries to show us how you are accounting for these instruments.

Agave/JTR Subordinated Notes, page F-53

57. There appears to be some wording missing from the first sentence of the first paragraph describing the financing. Please refer to page F-15. Please revise.

JTR Senior Note, page F-54

58. Please reconcile your disclosure that the JTR senior note had a balance of \$331,050 as of December 31, 2008 with the table on page F-59 showing \$422,850.

Sinacola Subordinated Convertible Notes, page F-56

59. With respect to your response to prior comment 45 and the disclosures with respect to the Sinacola Convertible notes, please respond to the following:

- Tell us the amount you owed to Sinacola prior to entering into the agreement. Show us the journal entries you recorded related to this agreement.
  - Tell us the significant terms related to the potential redemption of the warrants for cash and other variable terms that caused you to account for the warrants as liabilities at fair value. Tell us why you have not summarized the terms in your notes. Cite the accounting literature you applied.
  - Tell us why you record any changes in the fair value of the warrants as adjustments to additional paid in capital and current notes payable. Tell us why changes are not reflected as an increase or decrease to the warrant liability and included in other income or expense in your statements of operations. Refer to ASC 815-10-35-2. Reconcile with your disclosure on page F-47 that changes are recorded as a component of other income or expense.
  - Explain how you accounted for and valued the modified warrants.
60. Please reconcile your total short-term notes payable to your balance sheet on page F-39. Tell us how you are accounting for the deferred financing charges and why. Explain why those charges went from \$(101,146) as of December 31, 2008 to \$22,328 as of December 31, 2009 and \$134,792 as of September 30, 2010 (per page F-21).

Note 5. Shareholders' Equity, page F-60

61. Please reconcile the transaction in 2008 whereby Series A preferred stock was returned and subsequently re-issued and converted into common stock and your disclosure on page II-5 in notes (q) and (r).
62. Further with respect to that transaction, please provide us with the journal entries for each of the transactions: the receipt of the returned shares, the subsequent sale of the shares, and the conversion of a portion of the shares into common stock. Explain how these transactions are reflected in your statements of stockholders' equity on page F-41. For example, tell us where you credited common stock for the shares issued upon conversion. Reconcile your response with your disclosure on page F-71 that you paid \$75,000 to the service provider in exchange for the return of the preferred shares.

Note 6. Stock Options and Warrants, page F-62

63. Please reconcile your disclosure that you recognized stock-based compensation expense of \$1,041,102 and \$922,284 in 2009 and 2008 with your statement of stockholders' equity on pages F-41 to F-42 and your statements of cash flows on page F-43. Please also reconcile with your disclosure on page F-48 that stock-based compensation expense was \$556,863 and \$933,473 in 2009 and 2008.
64. In response 66 in your letter dated November 12, 2010, you told us that you use an estimated forfeiture rate of 20%. Your current response to comment 43 shows that in

2007, 2008, and 2010 you have had forfeitures of 153,000, 86,500, 90,000, and zero. Please show us the entries you recorded, if any, in each period to account for the difference between the estimated and actual forfeitures.

65. With respect to any warrants that you account for as liabilities, please summarize the significant terms that caused you to account for them as liabilities. Identify which of the outstanding warrants are treated as equity and which are treated as liabilities. Disclose where the warrant liabilities are reflected in the financial statements and the amount of the liability as of each balance sheet date. Similarly revise your interim financial statements.
66. We note from your rollforward table that you granted warrants for 1,956,998 common shares in 2009. Please reconcile these grants to your disclosures on pages II-6 – II-7 where you only discuss issuances related to 1,113,579, a difference of 843,419.
67. Further to your response to prior comment 47, please also tell us the underlying fair value of your common stock used in the Black-Scholes calculation and how you determined the amount.
68. Further to your response to prior comment 49, please show us how you calculated the revised amount to record for the modification consistent with ASC 718-20-35-3.
69. In response to prior comment 28, you provided us with information about the prepaid warrants. Please respond to the following:
  - Please tell us the significant terms of the warrants including their exercise price, the number of shares underlying the warrants, and any other significant terms such as those that may cause you to account for the warrants as liabilities. Explain the terms of exercise for these warrants. Tell us why you have not summarized these terms in the notes to your financial statements.
  - Please tell us how you are accounting for the warrants and why. It appears that you have classified them as equity.
  - We note that you estimated the fair value of the warrants using the Black-Scholes method. Please tell us the estimated the fair value of the warrants at the date of issuance and whether that value was different than the proceeds received for the warrant issuance. Discuss how you treated any difference and why. Cite the accounting literature you relied upon.
  - Please reconcile where these warrants are reflected in your table on page F-68.
70. Please provide us with a schedule identifying for each of the 25 warrants listed on page F-68 the nature of the issuance of the warrant (i.e, Sinacola warrant, JTR Senior Note warrant, etc.) to help us understand your accounting treatment as listed in the last column. Please also tell us where each amount expensed was included in your statements of

operations. For any related parties, please explain why you have not identified the warrant as part of your related party disclosures.

Note 9. Commitments and Contingency, page F-69

71. Please tell us how you calculated your rental expense of \$207,912 and \$57,635 in 2009 and 2008. Explain how you are accounting for the escalating rental payments over the term of the lease. Refer to ASC 840-20-25-2. Also explain how you accounted for the leasehold allowance (include journal entries) and the method you are using to amortize the deferred rent related to the leasehold allowance.

Note 17. Correction of Error to Prior Period Financial Statements, page F-76

72. We note your response to prior comment 42. Please revise to include the effect of the correction on each financial statements line item and any per-share amounts affected as required by ASC 250-10-50-7(a) and describe the nature of each error.

Item 15. Recent Sales . . . , page II-2

73. We note your response to prior comment 52; however, it continues to be unclear how the valuation in paragraph aa) is consistent with your disclosure on page F-4. Also, your disclosure on page F-4 continues to refer to options and warrants, contrary to your disclosure in paragraph cc), and it is unclear how your revised disclosures in paragraphs ff) and gg) are consistent with your disclosures on page F-4.

Signatures

74. Please revise to include the second paragraph of text required on the signatures page of Form S-1. Also include below that paragraph the signatures of the individuals identified in Instruction 1 to the signatures page of that form.

Exhibit 23.2

75. Please request your auditors to amend their consent for the following:
- The consent is dated January 13, 2010, not 2011. The consent should be currently dated.
  - The consent refers to an audit report dated January 5, 2011. The consent should refer to the audit report included in the Form S-1 which is dated November 11, 2010.

Julian T. Ross  
OxySure Systems, Inc.  
February 4, 2011  
Page 14

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.

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,

Amanda Ravitz  
Assistant Director

cc (by fax): Arrin Langdon, Esq. — Oswald & Yap LLP