



DIVISION OF
CORPORATION FINANCE

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

August 11, 2010

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

**Re: OxySure Systems, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed July 15, 2009
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.

Prospectus Cover

1. Please reconcile your response to prior comment 2 with the disclosure indicating that all selling security holders are deemed underwriters of the shares of common stock which they are offering.
2. Please limit the cover page of your prospectus to one page. See Regulation S-K Item 501(b).
3. The second paragraph implies that you are registering the issuance of common shares upon conversion of preferred shares, contrary to your disclosure in Footnote 5 to the fee table and in the section beginning on page 27 that you are registering the resale of those shares. Please revise here and on page 4.
4. Please revise the fourth paragraph to disclose the net proceeds if all of the shares offered by you are purchased.

Prospectus Summary, page 1

5. We note the reference on page 2 to the forgiveness of \$30,000 in August 2008 for meeting the first year's performance targets. Tell us, with a view toward current disclosure, whether the targets in subsequent years were also achieved.

Warrants, page 3

6. Quantify the number of warrants exercisable immediately, the number held by your affiliates and promoters and the exercise prices of the warrants they hold.

Options, page 3

7. Please tell us why you continue to disclose that your advisory board holds an aggregate of 32,000 stock options. Given the date of your last amendment to this filing and disclosure on page 81 that such members earn 750 options each quarter, it is unclear why that number has not increased.

The Offering, page 4

8. Please expand your disclosure to indicate your intended use(s) of proceeds raised in your primary offering.

Summary Financial Data, page 5

9. In the paragraph preceding the table you disclose that the interim financial statements were reviewed. On page 87, you similarly disclose that the interim financial statements were reviewed by Sam Kan & Company LLC. On page F-7 through F-F-32 the header to your interim financial statements discloses that they were reviewed. While you are not required to disclose that the interim financial information is reviewed, when you do so, Rule 10-01(d) of Regulation S-X requires that you include the review report from your independent registered public accountant in the filing. In addition, please revise the Form S-1 to include the letter from your independent accountant relating to unaudited interim financial information as Exhibit 15 pursuant to Item 601 of Regulation S-K.
10. While your response to prior comment 10 states that you removed the references to unaudited and audited data, the disclosure on pages 5 – 7 continues to include the words '*Unaudited*' and '*Audited*' at the top of each column. As we noted previously, since the information is not audited and does not contain all of the disclosures required by U.S. GAAP and include an audit opinion, you should not refer to the financial information as audited. Similarly, you should remove the reference to some of the data as unaudited to avoid giving the impression that the other financial information is audited. Please remove the reference at the top of each column on pages 5 – 7 which refers to the interim data as unaudited and annual data as audited. You may disclose in the summary financial

data that the information for the fiscal years ended December 31, 2008 and 2009 was derived from your audited financial statements. Please similarly revise pages F-1 through F-6 to clarify that the relevant information was derived from your audited financial statements.

Risk Factors, page 8

11. Please expand your response to prior comment 11 to clarify when you intend to file the Exchange Act registration statement mentioned in that response.

We may face problems . . . , page 17

12. We reissue prior comment 14 given your continued disclosure here regarding problems you “may” face and similar equivocal language regarding “potential” increases in your shipping costs and limits on your revenue potential. If you actually face the problems you say you “may” face and if those “problems” have actually increased your shipping costs and limit your revenue, please revise for clarity. Also revise to describe briefly the circumstances in which a suspension of your ability to ship products would be permanent.

We are subject to regulations and limitations . . . , page 18

13. Please clarify why delays in obtaining or your inability to obtain FAA approval could increase your costs. It is unclear from your disclosure why the inability of passengers to carry your product on airplanes may increase your costs.

Use of Proceeds, page 24

14. Please highlight for investors which uses listed in the table represent payments to your affiliates.
15. Briefly explain the nature of the “investments in production,” research and development and marketing efforts you intend to make with the proceeds of this offering. Also explain whether the amount of proceeds you intend for each use is sufficient for that use.
16. Tell us how the disclosure in this section and on page 46 accounts for your payment obligations pursuant to paragraph 1 of Exhibits A and B to Exhibit 10.27.

Dilution, page 26

17. In response to prior comment 16, you responded that net tangible book value was calculated by taking total assets, minus any intangible assets, less all liabilities and divided by the total outstanding shares of common stock. However, we note on page 26 of this filing you described “Net tangible book value” as the amount that results from subtracting total liabilities from total assets. Please revise.

18. We note your response to prior comment 17. Your revisions added here do not appear to compare the information in the table regarding purchases and ownership by your affiliates with the number, percentage of shares and total consideration to be paid by investors in the direct public offering. Your revisions here also do not appear to disclose how the number of shares held and consideration paid by your affiliates and non-affiliates would change following the exercise or conversion of all outstanding warrants, options, convertible preferred stock or convertible notes. Therefore, we reissue prior comment 17.

Determination of Offering Price . . . , page 27

19. Please revise to clarify that the “selling price” that will be determined by reference to market and other factors once your common stock is publicly traded is the price at which selling shareholders who are not affiliates or promoters will offer their shares for resale, and not the price of the shares to be offered by affiliated selling shareholders, promoters, or in your direct public offering.

Selling Security Holders, page 29

20. Your disclosure on page 29 lists several persons and entities that you say are selling security holders, including two that you say are “underwriters.” Please tell us where in the table each of those persons and entities are listed.
21. Regarding your response to prior comment 7 and the first bullet of prior comment 18:
- You indicate that you issued 125,000 shares of common stock to IR Services upon cancellation of your agreement with it. Exhibit 10.9.2 indicates that you issued 125,000 penny warrants to IR Services. Please reconcile. Also revise your disclosure on page 90 as appropriate;
 - It appears that pursuant to Exhibit 10.5 to your original filing, IR Services was to receive 250,000 warrants upon filing this registration statement, not the 125,000 warrants you now say it “earned” upon filing. Generally, it is inconsistent with Section 5 of the Securities Act to renegotiate the terms of a private transaction after the related securities are the subject of a resale registration statement. Please provide us your analysis of how the cancellation agreement and related issuance is consistent with Section 5; and
 - It also appears that IR Services did not receive the securities you issued and it had not completed the services it was to provide when you filed this registration statement. Therefore, we reissue the first bullet of prior comment 18.

22. Your responses to the second bullet of prior comment 18 and prior comment 23 imply that shares underlying warrants held by non-affiliates are registered for resale. If so, tell us where in the fee table and this section you have registered the resale of those shares.
23. We note your response to prior comment 20. It continues to appear that the notes to your table do not correspond with the information in your table. For example, note 14 refers to Dr. B. Soo Lee as the beneficial owner of the shares offered by Jeff L. Brady and note 31 indicates that Zack Johnson is the beneficial owner of the shares offered by Robert Jennings IFO Zack Jennings. In addition, the number of securities mentioned in note 14 is inconsistent with the number of securities in the table. Therefore, we reissue the second bullet of prior comment 20.
24. We reissue prior comment 21 because note 11 continues to identify only who “controls” Aulds Family L.P., rather than who exercises sole or shared voting and/or dispositive powers, and your response only indicates who holds voting power. In addition, please also identify the natural person who exercises sole or shared voting and/or dispositive powers with respect to the shares offered by IR Services.
25. Please tell us how your document addresses the first part of prior comment 23 with respect to the penny warrants you issued to IR Services, as evidenced by Exhibit 10.9.2, and the penny warrants mentioned in note 47.
26. We note the deletions in response to prior comment 24. Please expand to disclose the transactions in which the selling security holders acquired the offered shares. Include the dates of the transactions and the amount of consideration received.
27. Please tell us the reasons for the changes to the first numerical column for Tim Hutton, Robert Jennings IFO Zack Jennings, Phong Le, Jim & Shelley Nelms and Pacific Cattle Corporation. We note that the numbers in such column are less than were previously disclosed.

Shares Eligible For Future Sale, page 36

28. Regarding your response to prior comment 27:
 - You indicate that only “some” of the selling security holders are subject to the lock-up agreement. Your disclosure here and on page 37 indicates that all selling security holders are subject to the lock-up agreement. Please reconcile;
 - It continues to be unclear what material purpose is to be served by registering the resale now in light of the lock-up agreements. Therefore, we reissue that portion of prior comment 27; and

- Your disclosure regarding the release of shares in tranches appears to be inconsistent with the agreements governing the lock-ups, such as Exhibits 10.12 and 10.13. Specifically, those agreements provide that there will be no trading until you successfully implement your business plan. In this regard, we note that you have now deleted the disclosure regarding that trading restriction. Please revise or advise.

29. Given the number of shares you say are outstanding and the number included in your fee table, please show us how you calculated the number of shares outstanding after this offering you disclose here.

Lock-Up Agreements and Registration, page 37

30. Your response to prior comment 28 states that the securities held by IR Services are not subject to the lock-up agreement. Your disclosure here indicates that IR Services is subject to the lock-up agreement. Please reconcile.

Management's Discussion and Analysis . . . , page 42

Critical Accounting Policies, Estimates and Assumptions, page 42

Stock-Based Compensation, page 43

31. We note that you are referring to SFAS 109 and SFAS 123(R) herein. Please revise to refer to the FASB codified standards.

Liquidity and Capital Resources, page 46

32. Please confirm that your response to prior comment 29 means that you are no longer seeking the acquisition of a suitable, existing business. If that is not true, please disclose that fact and the status of, and reasons for, your search for an acquisition candidate.

33. Please expand your response to prior comment 30 to tell us how your document addresses the matters noted in the first bullet of that comment. In this regard, note your obligations under Regulation S-K Item 303 to provide disclosure regarding all known, material trends that are at least reasonably likely to impact your financial condition, liquidity and results of operations.

34. We note the amounts you say you raised in 2008 and 2009. Show us how those amounts are consistent with your disclosures on pages F-36, F-37 and in Part II under Item 15.

35. Please ensure your disclosure clearly identifies and discusses all known, material commitments and demands that are reasonably likely to impact your liquidity and identifies and describes your internal and external sources of liquidity. We note, for

example, that your disclosure here does not address the numerous notes currently outstanding, like those described on pages 88-90 and F-15 and F-16. Please revise. Also include in your revised disclosure a discussion of any material changes in your financial condition. We note, for example, the changed amounts of notes payable as of March 31, 2009 as compared to March 31, 2010.

36. Given the significant increases in your accounts receivable noted on page F-1, please revise to provide a discussion of the contractual terms for collecting those receivables and how those terms may impact your liquidity or financial condition. Include in your revised disclosure a description of the payment terms for your sales contracts.
37. Please tell us why the matters referenced on pages F-31 and F-32 are not discussed in this section.

Results of Operation, page 47

38. Please revise this section to present the period-by-period comparison required by Item 303 of Regulation S-K for the significant changes in the individual line items of your statement of operations. As one example, we note that you have not discussed the reasons underlying the significant changes in your selling, general and administrative expenses from March 31, 2009 to March 31, 2010. Quantify the impact of changes in volume and price, and describe in what target market mentioned in your "Business" section your sales have occurred.
39. Please revise your disclosure to clarify the underlying reason for the increase in revenue in license fees in the three month period ended March 31, 2010 and twelve month period ended December 31, 2009 compared with the prior periods. For instance, if you entered into a new license agreement not in effect in the prior period, please revise to clarify the disclosure and identify the license agreement.

Market Analysis, page 55

40. We note your response to prior comment 32. In addition to providing support in your disclosure, please also provide us with supplemental support for the data you cite, clearly marking the relevant sections. Also, your response implies that some of the studies and data you cite were financed by you. Please clearly identify those studies and data and tell us the nature and extent of your involvement with the preparation of that data.

Recreational Vehicles, page 58

41. We note the websites mentioned in the footnotes to the fifth and sixth paragraphs on page 58. Please refer to footnote 41 of Exchange Act Release No. 42728 and revise your disclosure accordingly.

U.S. Federal Government, page 59

42. Please clarify the nature of the GSA contract you mention. For example, does the contract entitle you to sell a minimum amount of product each month or year? Or does the contract simply allow, but not entitle, you to sell your product to the government? Can the contract be terminated at any time by the government? Please also file this contract as an exhibit.
43. Please clarify the nature of the “approval and validation” you have received from third parties, including the validation you say you received from the FDA.
44. The first sentence of the second paragraph indicates it is a statement by GSA. Please file the consent required by Rule 436 of Regulation C.
45. If your product has not been used in military combat situations or operational bases, then please revise the third paragraph to remove any implication to the contrary.

Sales and Marketing Plan, page 60

46. Please expand your revisions added in response to prior comment 33 to clarify the number of direct sales persons and number of third parties mentioned here.

Intellectual Property, page 65

47. Please disclose the duration of the patents mentioned in your response to prior comment 36.

Research and Development, page 70

48. Please reconcile the reference on page 70 to an “in-house staff, including research staff” with your disclosure on page 72 that none of your 8 employees perform research and development.

IMPACT Award Finalist, page 73

49. Clarify when each of the awards you mention were “recently announced.” Also disclose whether you received those awards.
50. Please disclose the criteria for selecting finalists for and recipients of the awards referenced in your document. Also disclose who makes those selections.

Directors, Executive Officers . . . , page 73

51. Please refer to Sections II.A.2 and II.B. of Securities Act Release No. 9089 (Dec. 16, 2010) and revise your disclosure accordingly.
52. Please avoid vague phrases like Mr. Ross “worked for and with” companies. Instead, provide clear disclosure regarding the nature of his responsibilities and business experience with those companies and the dates during which he was affiliated with them.

Vicki Jones, Director, page 74

53. Clarify what you mean by “expertise in profit and loss management.”

Summary Compensation Table, page 75

54. We note the deletion mentioned in response to prior comment 39, including the deletion of disclosure regarding Mr. Freeman’s employment agreement. While your disclosure indicates that Mr. Freeman is no longer employed by you, it is unclear why you believe you are not required to include disclosure regarding his employment agreement with you. See Regulation S-K Item 402(o). Likewise, since you continue to provide compensation disclosure for Mr. Freeman for 2008, we reissue the last sentence of prior comment 39.
55. Please revise to comply with Instruction 1 to Item 402(n)(2)(v) and (n)(2)(vi) of Regulation S-K. Also tell us how your table accounts for the penny warrants Mr. Ross received, as indicated in note 8.
56. Tell us whether the penny warrants you issued to Mr. Ross and Mr. Reed described on pages 88 and 89 were intended to compensate them for their services. If they were issued for that purpose, please also revise your disclosure here and on page 77 to include disclosure required under Item 402.

Outstanding Equity Awards . . . , page 76

57. We note your revisions in response to prior comment 41. Please tell us why this table does not include the option to acquire 71,500 shares mentioned in note 20 to the table on page 80.
58. Your disclosure here implies that your fiscal-year ends March 31, contrary to the information in your financial statements. Please reconcile.

Julian T. Ross, page 77

59. Please provide current disclosure. We note the reference to information as of June 22, 2009.

Security Ownership . . . , page 80

60. It remains unclear from your response to prior comment 42 and revisions here how your disclosure in this table includes the shares of common stock issuable upon conversion of the notes held by your affiliates, as indicated in Exhibits 10.5-10.7.2. Therefore, we reissue prior comment 42.
61. Given the number of warrants mentioned in note 20, it appears the information in the table does not include the all of the penny warrants held by JTR Investments, including those mentioned on pages 88 and 89. It also appears that the table does not include the shares underlying warrants issued to Mr. Ross under his employment agreement, as noted on page 77. Please revise.
62. We note the disclosure on page 90 regarding the securities issued to Afritex. Please tell us, with a view toward disclosure, whether Mr. Ross has or shares voting and/or investment power with respect to those securities.

Advisory Board, page 81

63. We note your revisions added in response to prior comment 43. Given your disclosure regarding the functions performed by your advisory board and compensation you pay to those members, please provide us your analysis of whether disclosure is required pursuant to Regulation S-K Item 401(c).

Related Party Transactions, page 88

64. Please expand your response to prior comment 44 to tell us the nature of the “Repayment Agreements” mentioned in your prior disclosure. Also tell us the identities of the “Related Companies” and explain how your prior disclosure was “incorrectly stated.”
65. Please update the disclosure in this section to be as of the most recent practicable date. It appears much of the information you disclose is limited to the period ended March 31, 2010.
66. Identify the “other related party” in the table on page 89.
67. You disclose on page 90 that you issued a \$270,000 note to Afritex. Reconcile that amount with the amount in the first paragraph of Exhibit A to Exhibit 10.31.
68. With a view toward disclosure, please tell us the nature of the business conducted by Afritex. Also tell us the number of employees it has, in what jurisdictions it operates, the amount of business it conducts and the source(s) of funds to fulfill its payment obligations to you.

Changes In and Disagreements with Accountants..., page 93

69. We note that you did not include all of the disclosures required by Item 304 of Regulation S-K as requested in our comment letter dated December 30, 2009. Please revise to include all the disclosures required by Item 304 of Regulation S-K, including paragraphs (a)(1)(ii), a(1)(iii), and a(1)(iv).
70. Further, please revise the filing so that your disclosure in response to Item 304(a)(1)(iv) addresses the period during the company's two most recent fiscal years and any subsequent interim period preceding such dismissal and not just 'during their engagement.'
71. In this regard, as we previously requested, please either file the Exhibit 16 letter from the Blackwing Group as required by Item 304(a)(3), or if you are unable to obtain an Exhibit 16 letter from the Blackwing Group, then please disclose that fact and include the disclosures required by Rule 12b-21(b).

Financial Statements, page F-1

72. Please update the financial statements to comply with Rule 8-08 of Regulation S-X.
73. Your response to prior comment 49 appears to be a repetition of your response to prior comment 48 and we do not see where you have provided the requested revisions. Consistent with Instruction 2 to Rule 8-03 of Regulation S-X, please revise the notes to the interim financial statements to include an affirmative statement that the interim financial statements include all adjustments that, in the opinion of management, are necessary in order to make the financial statements not misleading.

Balance Sheets, page F-1

74. We note that cash and cash equivalents is a credit balance. Please reclassify any overdraft balances in your checking accounts from current assets to current liabilities.
75. Refer to our prior comment 57 and revise to correctly state the number of the voting common stock issued and outstanding as of March 31, 2009.
76. Please describe to us the nature and the terms of the "Warrants Issuance" in the Stockholders Equity and explain to us how you accounted for the transaction, citing the accounting literature upon which you relied.
77. Please explain to us the nature of the items and their related amounts included in other assets of \$421,696 as of March 31, 2010.

78. As we requested in prior comment 85, please revise to state that your preferred stock is convertible.
79. Your presentation of shares issued and outstanding for both your preferred stock and voting common stock may be confusing to investors. Please revise the captions to reflect the number of shares issued and outstanding as of March 31, 2010 and 2009 and December 31, 2008 and 2009 and remove all references to “in 1Q 2010, 1Q 2009, 2009 and 2008” as these phrases appear to imply average shares outstanding and do not specify a date. Further, ensure that the number of shares agree to your statements of stockholders’ equity.

Statements of Operations and Accumulated Deficit, page F-2

80. Please tell us the nature of the amounts reflected as prior period adjustments in 2009 and 2008. Tell us how you accounted for these items and why, citing the accounting literature you applied and how you applied it. We note a similar presentation on page F-34.
81. Please revise this page and page F-34 to include your net loss per share for each period consistent with FASB ASC 260-10-45-2.

Statement of Stockholders’ Equity, page F-3

82. Please tell us why you reflect the issuance of preferred Series A stock warrants in 2004 as the issuance of 125,000 shares of Series A preferred stock.

Statements of Cash Flows, page F-5

83. Please reconcile the amounts shown as cash from the issuance of common stock and common stock and warrants for the three months ended March 31, 2010 and the years ended December 31, 2009 and 2008 to your statements of shareholders’ equity. It appears that a substantial portion of these amounts related to non-cash activity which, according to FASB ASC 230-10-50-3, you are required to disclose as non-cash investing and financing activities and not as a cash activity in your statements of cash flows. For example, on page F-4 you reflect \$677,681 of APIC related to stock warrants issued pursuant to a financing. This description implies that the warrants were not issued for cash proceeds. This comment also applies to page F-38. Please revise or advise.

Note 1. Summary of Significant Accounting Policies, page F-7

84. Please remove the word ‘CONTINUED’ from the top of page F-7 since it appears that this is the first page of your notes. Otherwise, please insert the prior page(s) of notes that are missing. This comment also applies to page F-39.

85. Please revise your revenue recognition policy to disclose the nature of your discounts and rebates, how you measure the amount of those items and when you record them. This comment also applies to page F-40.
86. We note that initial license fees are generally recognized upon granting of the license to the licensee. Please explain to us why the initial license fees are recognized upon granting of the license as opposed to recognized over the term of the license. Please cite the applicable U.S. GAAP and how you applied it to your facts and circumstances. Also in this regard, please explain to us how you considered the impact of the guidance at SAB Topic 13.A(3)(f), Question 1.
87. Also, disclose how you record revenues related to distributors. Since you do not defer the related revenue, please disclose why. This comment also applies to page F-40.
88. There appears to be an error in your disclosure related to the fair value of financial instruments since you disclose that recorded value approximates recorded value. This disclosure should discuss the fair value of your financial instruments. This comment also applies to page F-40.
89. Please tell us why amortization expense was zero for each of the quarters ended March 31, 2009 and 2010 as disclosed on page F-9. Discuss how this is consistent with your policy to amortize these assets.
90. Please consolidate the two accounting policies for research and development expenses shown on pages F-9 and F-10. In addition, please disclose the amount of research and development costs incurred in each period presented in your statements of operations consistent with FASB ASC 730-10-50-1. This comment also applies to pages F-41 and F-42.
91. We note that you determine the interest rate used in your Black-Scholes valuations based upon observed interest rates. Please revise to disclose in more detail the type of interest rate you used in the valuations. This comment also applies to page F-42.
92. You disclose that you record at least the minimum amount for litigation and settlement costs. You also disclose that you generally do not recognize these amounts until an agreement in principle has been reached by both parties that include substantive terms, conditions and amounts. Please explain how your accounting policy considered FASB ASC 450-20, including 450-20-03-1 and 450-20-25-3. This comment also applies to page F-43.

Note 4. Notes Payable, page F-14

93. Please disclose how you accounted for and valued the warrants issued in connection with the Agave/JTR subordinated notes, the JTR Senior note, the First and Second Landlord

notes and the Afritex note. Also disclose the amount of and how you are accounting for any related discount. Tell us how you considered FASB ASC 470-20-25-2. This comment also applies to Note 4 on pages F-46 through F-49.

94. Please tell us the status of payments, if any, that were due in 2009 and 2010 under the Frisco note.
95. Please disclose the aggregate maturities of your debt for each of the five years following the date of the latest balance sheet presented as required by FASB ASC 470-10-50-1. This comment also applies to Note 4 on pages F-46 through F-49.

Note 6 – Stock Options and Warrants, page F-19

96. Tell us the fair values of all options and warrants issued in 2010. Also in this regard, revise your management discussion and analysis to discuss each significant factor contributing to any differences between the estimated IPO price and the fair value of your common stock underlying your valuations as of the date of each grant and equity-related issuance.
97. Your response to prior comments 73 and 74 did not provide us with the requested information. Please show us where each of the transactions disclosed as either stock option activity or warrant activity in Item 15. Recent Sales of Unregistered Securities is included in your rollforward of stock options and warrants.
98. Please revise the stock option table to correctly foot.

Note 7. Income Taxes, page F-24

99. Please explain why the company has not reflected any amounts for deferred tax assets or liabilities or a valuation allowance. For example, discuss whether the company has a deferred tax asset related to its net operating losses for which a full valuation allowance is recorded. Refer to FASB ASC 740-10-50-2 and 50-3. This comment also applies to Note 74 on pages F-54 through F-56.

Note 8. License and Service Agreements, page F-24

100. We note that you entered into a licensing and distribution agreement with Afritex as well as a convertible note payable and warrants. Please tell us how you are accounting for these agreements and why, citing the accounting literature you applied and how you applied it. Discuss why you issued a convertible note to Afritex and whether this relates to the payment of \$225,000 for the upfront license fee. Tell us why the warrants were recorded as a license expense in the quarter.

Note 9. Commitments and Contingency, page F-25

101. Please reconcile your disclosure that you are not presently involved in any legal proceedings with your disclosure on page F-11 that you are involved in disputes, litigation and other legal actions.

Note 11. Net Income (Loss) Per Share, page F-28

102. Please include a reconciliation of your net loss per share for each period presented in your statements of operations. Refer to FASB ASC 260-10-50-1.
103. The net loss for the quarter ended March 31, 2010 of \$(82,820) does not agree to your net loss in the statements of operations on page F-2 of \$(131,214) for that same period. Please revise or advise.
104. In footnote (1) you disclose that potentially dilutive common shares were excluded from your computation of diluted earnings per share. In the table above that footnote, you include dilutive potential common shares in your calculation of shares used in computing diluted per share amounts. Also, it appears from your presentation of diluted loss per share that you did not include those shares in your calculation. Since the inclusion of the common shares would be antidilutive, please revise the table to reflect the actual shares used to compute diluted loss per share and include the disclosures required by FASB ASC 260-10-50-1(c). This comment also applies to Note 11 on page F-59.

Note 15 – Going Concern, page F-30

105. Refer to prior comment 71. We note from your disclosure that you have a stockholders' deficit of \$9,677,643 as of March 31, 2010. We also note that your balance sheet shows that you have a stockholders' deficit of \$9,726,028. Please reconcile the difference.

Annual Financial Statements, page F-33

Report of Independent Registered Public Accounting Firm, page F-26

106. Please include an audit report from your independent registered public accounting firm in your next amendment. Refer to Article 2 and Rule 8-02 of Regulation S-X.

Balance Sheets, page F-33

107. We note that you include both a total for all intangible assets in the line item 'Intangible assets, net', as well as the detail of the items in that category (see Patent, net and Trademarks). As a result, your balance sheet does not foot. Please revise the balance sheet to include either the total intangible assets or the detail of the two components but not both and ensure that your balance sheet foots.

Statements of Stockholders' Equity, page F-35

108. We no longer note any disclosures regarding a development stage company in this amendment, yet you continue to present your statement of stockholders' equity from inception through December 31, 2009. We note that the statement is marked as audited. Either include an audit opinion that relates to the audited periods presented, or revise your presentation to clearly disclose which periods are unaudited. Please also confirm, if true, that you do not consider your company to be in the development stage.

Sinacola Subordinated Convertible Notes, page F-48

109. We note that you issued warrants to Sinacola and you accounted for the warrants as prepaid rent, which will be amortized in five years. Please explain to us why you accounted for the warrants as prepaid rent and why the five-year period is appropriate for amortization. Explain to us and revise to disclose the facts and circumstances and provide us with the applicable U.S. GAAP to support your accounting.

Note 6 – Stock Options and Warrants, page F-52

110. We note the Board of Directors and the stockholders approved the adoption of a Voting Stock Option Plan, which provides stock options to eligible *employees*. Please revise your disclosure, if true, to state that this plan provides stock options to non-employees. Otherwise, please explain to us from what plan you are issuing stock options to non-employees.
111. As we requested in our prior comment 88, explain to us the significant terms of each of the warrants outstanding and how you accounted for them. Revise your disclosure to address our comment.
112. Refer to prior comment 89. Please provide disclosures required under paragraphs a, c liii, d1, d2, e, g, h, i and j of FASB ASC 718-10-50-2.

Note 7 – Income Taxes, page F-54

113. We note you adopted the provisions of ASC 830-740, "Accounting for Uncertainty in Income Taxes". Please note that FASB ASC 830 is accounting guidance for Foreign Currency Matters. Please revise or advise. This comment also applies to the disclosure on page F-22.

Note 9 – Commitments and Contingency, page F-57

Lease – page F-57

114. Further to your response to prior comment 91, please explain how you are accounting for the leasehold improvement allowance given your response.
115. Please explain to us why the amount representing interest and unamortized discount related to Series A convertible preferred stock is zero in the total minimum lease payment table.

Note 14 – Segment Information, page F-61

116. We note that your ROW revenues are material to your total revenues. Please provide any disclosures required by FASB ASC 280-10-50-41(a).

Note 15 – Going Concern, page F-61

117. Please show us how you calculated the working capital deficit of \$656,983 and \$851,691 as of December 31, 2009 and 2008, respectively.

Part II

Item 15. Recent Sales of Unregistered Securities, page 3

118. We reissue prior comment 95 because:
- your disclosure continues to include vague references to when transactions occurred, such as “during 2008”;
 - it remains unclear what consideration you received for many of the issuances you disclose. We note the continuing vague references to “consulting services” and “professional services” as examples; and
 - it is unclear where you have identified the number of purchasers for each issuance you disclose.
119. Your disclosure in this section does not appear to match the disclosure on pages F-3 to F-5. As one example only, your disclosure here does not mention the issuance of 635,000 shares mentioned on page F-3. In addition, your disclosure in this section does not appear to include the entire time period specified in Regulation S-K Item 701. We note, for example, that your disclosure does not discuss issuances in 2006, which was within 3 years of the date when you filed this registration statement.

Signatures, page 13

120. We note your response to prior comment 97 indicating that “Reed Daniels” is one of your directors. Please expand your response to clarify who Mr. Daniels is, where he is discussed in your disclosure and why he has not signed your document. Also tell us why Mr. Reed is not mentioned as a director in that response.

Exhibit 3.1

121. Please expand your response to prior comment 98 to clarify which single exhibit you have filed represents a complete copy of your articles, as amended. We note, in this regard, the multiple exhibits that appear to be amendments to your articles. We also note that it appears none of those exhibits contain the rights and preferences of the preferred stock you previously issued.

Exhibit 4.1

122. We note your response to prior comment 99. Please clarify what you mean when you say “we are registering the shares underlying the warrants.” To the extent you mean that you are registering the resale of those shares, please reconcile with your response to prior comment 18 and notes to your fee table that no shares issuable upon exercise of outstanding warrants are being registered for resale. Alternatively, if you mean that you are registering the issuance of shares upon the exercise of the warrants, please provide a response to the second and third sentences of prior comment 99.

Exhibit 5.1

123. Please file an updated version of the exhibit required by Item 601(b)(5) of Regulation S-K.

Exhibit 10.8

124. Please expand your response to prior comment 100 to tell us where you have attached a complete copy of Exhibit 10.8. We note that your exhibit list indicates it was previously filed and such exhibit was not included with this amendment to your registration statement.

Exhibit 23.2

125. Please have your auditors revise their consent to address the following:
- Replace the reference to “incorporation by reference” in the first line with language that indicates that the report is included in the Form S-1 (e.g., we consent to the inclusion of our report in this Form S-1).

- Revise the second line to change the word “reports” (plural) to “report” (singular).
- Revise to indicate the correct date on which the Form S-1 was filed. We see that the current consent refers to an S-1 dated July 7, 2010 although the S-1 was filed on July 15, 2010.
- Remove the reference in the fourth line to “financial statement schedules listed in the accompanying index” since there are no schedules or accompanying index in this Form S-1.

Exhibit 23.3

126. We note that this consent relates to the review of your interim financial statements. As noted in our comment above on the Summary Financial Data on page 5, please revise the Form S-1 to include the letter from your independent accountant relating to unaudited interim financial information as Exhibit 15 pursuant to Item 601 of Regulation S-K. Remove this consent, as consents pursuant to Exhibit 23 of Item 601 of Regulation S-K are not required for review reports.

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 11, 2010
Page 20

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,

Russell Mancuso
Branch Chief

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