

Mail Stop 6010

May 9, 2006

Gregory Witchel
Chief Executive Officer
DiaSys Corporation
81 West Main Street
Waterbury, CT 06702

**Re: DiaSys Corporation
Amendment No. 1 to Annual Report on Form 10-KSB
for the fiscal year ended June 30, 2005
Filed April 7, 2006
Quarterly Report on Form 10-QSB for the quarters ended
September 30, 2005 and December 31, 2005
Filed November 14, 2005 and February 14, 2006
File No. 1-16285**

Dear Mr. Witchel:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Amendment No. 1 to Form 10-KSB for the fiscal year ended June 30, 2005

Item 1. Description of Business, page 2

1. Please refer to prior comment 1. Please expand your disclosure to explain how and why the change-in-control occurred. Include disclosure of the relationships of the parties involved in the 2003 change in control.
2. We will evaluate your response to prior comment 3 after you provide the supplemental material you mention in your response, including an explanation of deleted disclosure as requested in the third bullet point of comment 2 in our August 12, 2005 letter to you.

3. We note your response to comment 4; however, material developments during the applicable period should be disclosed in your Form 10-KSB. If “subsequent events” affect the significance of previous material announcements, you also should explain those subsequent events and how they affected previous developments.

Strategic Relationships, page 5

4. Please expand your response to prior comment 8 to provide us your analysis of the materiality of the agreements with Hua-Sin Science Co. Ltd. Include in your analysis specific reference to your public announcements regarding the size of the agreements.

Recent Issuances of Unregistered Securities, page 14

5. Please refer to prior comment 10. Please expand the references on pages 13 and 14 to compensation for services to explain the nature of the services. Also, revise the third full paragraph on page 14 to disclose the term of the warrants.
6. Please tell us the file number of the registration statement in which you registered your issuance of shares to Icon investors as mentioned in your response to comment 11.
7. Please refer to prior comment 11. The disclosure in the third full paragraph on page 14 is not consistent with the disclosure on page 33. Also, the disclosure in the fourth full paragraph on page 15 conflicts with the disclosure on page 34. Please revise.
8. Please file as an exhibit the October 14, 2005 agreement with investors.

Financial Condition, page 17

9. We note your response to prior comment 13; however, that comment sought a discussion of the trends in your cost of capital, rather than mere disclosure of an aggregate number representing those costs.

Item 8A Controls and Procedures, page 20

10. Please refer to prior comment 18. We reissue prior comment 10 of our August 12, 2005 letter.
11. Please refer to prior comment 19. Please disclose any changes in your internal control over financial reporting during your fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, your internal control over financial reporting. Your disclosure regarding changes that

“significantly affect” controls does not sufficiently address the materiality standard in Regulation S-B Item 308(c). Please similarly revise your disclosure in your Form 10-QSB for the periods ended September 30, 2005 and December 31, 2005.

Item 9. Directors and Executive Officers, page 20

12. Please refer to prior comment 21. Please add footnotes to the table that explain the other compensation in 2004. Also, the other compensation should be in dollars, not shares.

Item 12. Certain Relationships and Related Transactions, page 25

13. Please refer to prior comment 24 and exhibits 10.24-10.30 which are not disclosed in this section. Please provide the disclosure required by Item 404 of Regulation S-B for the last two years.
14. Please refer to prior comment 25. Please disclose the purpose and terms of the July 16, 2004 Settlement Agreement and General Release. Also, please revise the exhibit index to include the agreement.
15. Please refer to prior comment 26. Please file as an exhibit the agreement with John Winfield.

Section 16(a) Beneficial Ownership Reporting Compliance, page 21

16. Please refer to prior comment 30. Please provide us with a table that supports your belief that transactions by your officers and directors have been reported. The table should address the transactions discussed on pages 21 and 22 and include specific dates when the transactions were reported under Section 16.
17. We note that you have not filed proxy materials since July 2004. Please advise us whether you had an annual meeting in 2005. Also, advise us when you intend to have your annual meeting in 2006.

Note 14. Common Stock, page 41

18. Notwithstanding your response to prior comment 33 from our letter dated December 20, 2005, the notes to financial statements must include full disclosure about all significant terms of borrowings from both related and non-related parties. Those disclosures should include complete disclosure about all the material terms of the convertible term note, including but not limited to, the conditions under which you or the holder may convert into common shares, the conversion rate and all conditions that may result in adjustments to that rate, any conditions under which you or the holder may accelerate payment of the notes,

the interest rate and the conditions that result in adjustments to that rate. Your disclosure should also address collateral and default provisions. Please expand.

19. As a related matter, you should clearly disclose your relationship with related party debt holders. The description, "two individuals who are not members of management" does not clearly identify the relationship. Refer to paragraph 2 of SFAS 57.
20. Refer to prior comment 34 in our letter dated December 20, 2005. Regarding warrants and stock issued for services or in connection with your financing transactions, we do not see where you have disclosed how you determined the fair value of the instruments granted, including identification of the model(s) applied and significant assumptions. In addition, when you issue stock or debt with warrants you should disclose how you allocated the proceeds to each feature. Please revise.
21. In reference to prior comment 35 in our letter dated December 20, 2005, it does not appear that you have filed or otherwise provided us copies of the agreements underlying the cash sales of equity during fiscal 2005 and to-date during fiscal 2006, including agreements addressing the terms and conditions of warrants issued in the transactions. For example, we note multiple issuances of common stock with warrants as described in the second paragraph of Note 4 in your Form 10-Q for the quarter ended December 31, 2005 for which no agreements were filed or otherwise provided to the Commission.

Signatures

22. We reissue comment 36. That comment sought that you indicate below the second paragraph required on the Signatures page who signed in the capacity of controller or principal accounting officer; this is in addition to signing the document in the capacity of principal financial officer.

Form 10-QSB for the fiscal quarter ended September 30, 2005

Recent Sales of Unregistered Securities, page 11

23. Please refer to prior comment 39. Please provide us the requested analysis and, if applicable, confirm your understanding of the effect.
24. Please refer to prior comment 40. Please tell us where you have provided the disclosure required by this Item for the warrant sales mentioned on pages 5 and 8.
25. Please refer to prior comment 41. Please revise this section and your most recent Form 10-QSB to disclose the facts relied upon to make each cited exemption from registration available. See Regulation S-B Item 701(d).

Exhibits

26. Please refer to prior comment 42. Please submit certifications that do not alter the language required by Regulation S-B Item 601(b)(31). For example, we note the change you made in paragraph 4(b) of the certification.

Form 10-QSB for the fiscal quarter ended December 31, 2005

27. Please file as exhibits the agreements discussed in the first paragraph of Note 4 on page 8.

Liquidity and Capital Resources, page 9

28. Please file as exhibits your December 15, 2005 agreement and your January 24, 2006 agreement. Also, file your written agreement with Repreclin Lab. In addition, discuss the material terms of the agreements.
29. Please revise the references to “product registration” on page 10 to clarify the steps that you need to take in order to complete such registration.

Net Sales, page 10

30. We see that revenue decreased 39% and 30% from the prior comparable three and six-month periods, respectively. You explain that the reason for a portion of the decreases is the loss of revenue from one customer, but do not explain the reasons for the remainder of the decreases. Please revise to fully explain the reasons for significant changes in revenues, including any trends, events or uncertainties that have had or that are reasonably expected to have a material impact on the net sales.

Gross Profit and Gross Profit Margin, page 10

31. We note that gross margin as a percentage of net sales increased significantly from 57% for the three months ended December 31, 2004 to 65% for the three months ended December 31, 2005. However, gross margin as a percentage of net sales increased only 2% from the six months ended December 31, 2004 to the six months ended December 31, 2005. Please revise to explain the circumstances that resulted in such a significant increase in gross margin for the three month period while the six months was not as significantly impacted.

Selling, General & Administrative, page 10

32. We also see that SG&A expense decreased 50% and 44% from the prior comparable three and six-month periods, respectively. You state that the

decreases are due to the restructuring of personnel functions and the elimination of public relations costs. Please revise to quantify the effect of each of these items on SG&A expense. Also clarify why a restructuring of personnel functions in the fourth quarter of fiscal 2004 did not significantly affect reported expenses until fiscal 2006.

As appropriate, please amend your filings and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Kristin Lochhead at (202) 551-3664 or Gary Todd at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3617 with any other questions.

Sincerely,

Russell Mancuso
Branch Chief

cc: (via fax): Richard T. Keppelman