



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

Mail Stop 3720

May 12, 2008

Mr. David G. Derrick  
Chief Executive Officer  
RemoteMDx, Inc.  
150 West Civic Center Drive, Suite 400  
Sandy, Utah 84070

Re: **RemoteMDx, Inc.**  
**Form 10-KSB for Fiscal Year Ended September 30, 2007**  
**Filed January 15, 2008**

**Forms 10-QSB for Fiscal Quarters Ended December 31, 2007**  
**File No. 000-23153**

Dear Mr. Derrick:

We have reviewed your supplemental response letter dated April 28, 2008 as well as your filing and have the following comments.

Form 10-KSB for the Fiscal Year Ended September 30, 2007

Recent Sales of Unregistered Securities, page 12

1. We note your response to our prior comment 4. Please identify which specific section of the Securities Act or rule of the Commission under which you claimed exemption from registration and ensure that all relevant facts relied upon to make the exemption available are disclosed. For example, if the company relied upon Rule 506, include disclosure regarding the nature of the purchasers who were not accredited investors. See Rule 506(b)(2)(ii) in Regulation D.

Selling, General and Administrative Expenses, page 15

2. We note your response to our prior comment 6 and your statement that a non-billable unit is a TrackerPAL device that did not generate any revenue for the period. In this regard, tell us how you considered your impairment policy for your non-billable TrackerPAL devices.

Consolidated Balance Sheet, page F-4

3. We note your response to our prior comments 12 and 16 and your statement that the normal payment terms for the monitoring device product sales range between 120-180 days. We also note that the normal payment terms for sales of monitoring services are 30 days. Tell us your business reason for having payment terms that last as long as 120-180 days for the monitoring equipment. In addition, tell us why your payment terms differ between monitoring equipment and monitoring services by as much as 90-150 days.
4. We note your response to our prior comments 12 and 15. We are unclear regarding your statement that “the Company recognizes revenue from the sale of devices separately from the monitoring services to be provided to the customer using the residual method prescribed by EITF 00-21. The Company allocates revenue to each element of the contract based on the relative fair value of the elements.” These two sentences seem to contradict each other. Please advice.

Revenue Recognition, page F-18

5. We note your response to prior comment 15 and your statement that you reviewed your existing contracts and subsequently determined that \$1,300,000 of revenues did not meet the requirements of EITF 00-21. Please tell us and disclose in detail why \$1,300,000 of revenues did not meet the requirements of EITF 00-21. Your response and disclosure should provide a detailed discussion of why you have an error.

Note 4. Monitoring Equipment, page F-24

6. We note that you plan to restate your balance sheet for monitoring equipment, net of accumulated depreciation. We also note that your policy regarding monitoring equipment remained the same and states that you depreciate monitoring equipment using the straight-line method over an estimated useful life of 3 years. In this regard, since you are restating your balance sheet for monitoring equipment, tell us why you believe your policy is still in effect. If your policy has changed, please tell us and disclose the change in your financial statements.

Exhibits

7. We note your response to our prior comment 17. Please update your exhibit index to reflect the additional exhibits.

Form 10-QSB for the Fiscal Quarter Ended December 31, 2007

Condensed Consolidated Statements of Operations, page 4

8. We note your response to our prior comment 18. We also note that you have included an identical gain of \$2,400,000 in your financial statements for the fiscal year ended September 30, 2007 as well as for the fiscal quarter ended December 31, 2007. Please confirm that you have two identical gains in both periods and please include disclosure regarding this gain in the notes to your financial statements and Management's Discussion and Analysis of your Form 10-Q for the fiscal quarter ended December 31, 2007.

(10) Minority Interest, page 13

9. We note your response to our prior comment 20. In your response you state that at December 31, 2007 you "had the sole voting power for 2,562,500 shares as described below." However the next two paragraphs of your response discussed events that occurred "subsequent" to December 31, 2007. Please advise.
10. In addition, in your response to our prior comment 20, you state that subsequent to December 31, 2007 that you directly or indirectly control over 47% of the issued and outstanding voting securities of Reagents. In accordance with FIN 46R you must consolidated Reagents. "The factors that were considered include... (2) RemoteMDx has the obligation to absorb losses beyond its ownership percentage." However, in accordance with paragraph 14 of FIN 46R an enterprise shall consolidate a variable interest entity if that enterprise has a variable interest that will absorb a majority of the entity's expected losses, receive a majority of the entity's expected residual returns, or both. Tell us in detail how you met the requirements of paragraph 14 of FIN 46R. In addition tell us in detail why you believe that RemoteMDx has a variable interest in Reagents and why RemoteMDx is the primary beneficiary. Your response should reference the corresponding literature in FIN 46R.

Mr. David Derrick  
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Please respond to these comments through correspondence over EDGAR within 10 business days or tell us when you will provide us with a response. You may contact Inessa Kessman, Senior Staff Accountant, at (202) 551-3371 or Dean Suehiro, Senior Staff Accountant, at (202) 551-3384 if you have questions regarding comments on the financial statements and related matters. Please contact Jessica Plowgian, Staff Attorney, at (202) 551-3367, Robert Bartelmes, Senior Financial Analyst at (202) 551-3354 or me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spigel  
Assistant Director