



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 3720

March 13, 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 filing 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 information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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

General

1. It appears that your market capitalization exceeded \$25 million at December 14, 2007 and December 12, 2006. Please tell us why you meet the definition of “small business issuer” set forth in Item 10 of Regulation S-B.

Intellectual Property, page 7

2. Disclose the duration of the four U.S. and one Chinese patent you reference in the first sentence of this section. See Item 101(b)(vii) of Regulation S-B.

Market for Common Equity and Related Stockholder Matters, page 12

3. Revise this disclosure to include the high and low bid price information for each quarter as required by Item 201(a)(1)(ii) of Regulation S-B.

Recent Sales of Unregistered Securities, page 12

4. Disclose all of the specific information required by Item 701(b) of Regulation S-B including the facts relied upon to claim exemption from registration under the Securities Act of 1933.

Management’s Discussion and Analysis or Plan of Operation, page 14

5. We note the statement on page 25 that your business plan anticipates significant growth through sales and acquisitions. The Commission’s Interpretive Release No. 33-8350, “Commission Guidance Regarding Management’s Discussion and Analysis of Financial Condition and Results of Operations,” explains that companies must discuss and analyze known trends, events, demands, commitments and uncertainties that are reasonably likely to have a material effect on financial condition or operating performance. Please consider expanding your MD&A, including your liquidity section, to provide quantitative analysis to the extent practicable of any known material trends or uncertainties associated with the expansion of your services, as well as the consummation of any acquisition or sale of businesses, products or technologies.

Selling, General and Administrative Expenses, page 15

6. Tell us the nature of the amortization from TrakerPAL devices and communication services from cellular charges on non-billable units. Also, tell us why these costs should be included in selling, general and administrative expenses instead of cost of goods sold. Refer to your basis in accounting literature.

Royalty Settlement Expense, page 16

7. Tell us and disclose in your footnotes more detailed information regarding your settlement valued at \$1,759,010 to settle an outstanding obligation to pay \$0.10 for each active TracherPAL device per day. Also, tell us why the royalty expenses are not included in cost of goods sold and why these expenses were not previously accrued.

Liquidity and Capital Resources, page 16

8. Please consider enhancing your analysis and explanation of the sources and uses of cash and material changes in particular items underlying the major captions reported in your financial statements. Refer to FR-72 at <http://www.sec.gov/rules/interp/33-8350.htm>.

Royalty Settlement Expense, page 16

9. Clarify whether the obligation to pay \$0.10 for each TrackerPAL device is satisfied in full or whether it is an on-going obligation.

Executive Compensation, page 33

10. Provide disclosure regarding the specific material terms of each named executive officer's employment arrangement, whether written or unwritten. Explain the material differences in compensation policies for individual officers. In this regard, we note the significantly higher amounts paid to Mr. Derrick and Mr. Dalton.

Signatures, page 46

11. Amend the signature page to clearly identify the person signing the Form 10-KSB in the capacity as your controller or principal accounting officer. See Instruction C2 to the form 10-KSB.

Consolidated Balance Sheet, page F-4

12. Tell us why your accounts receivable balance as of September 30, 2007 is more than half your revenue for the fiscal year ended September 30, 2007. Tell us and disclose your collection time frames with regard to your revenue.

Consolidated Statements of Operations, page F-6

13. We note on page 3 that you have both product sales and monitoring service revenue. Please revise to separately present revenues from products and revenues from services. Also, revise to separately present the related cost of goods sold and cost of services.

2. Summary of Significant Accounting Policies, page F-15

Revenue Recognition, page F-18

14. We note your disclosure on page 4 which states that under your current business model, the majority of your customers lease your TrackerPAL devices. TrackerPAL devices are leased on a contract (usually at least one year) and can only be cancelled as the contract expires. Please tell us and disclose your revenue recognition policy with regard to the lease of your TrackerPAL devices.
15. Based on your discussion on page 3, we note that you occasionally sell your TrackPal devices as part of a monitoring contract. Following activation, your TrackPAL customers pay a daily monitoring fee. Please tell us how you considered EITF 00-21 with regard to your revenue recognition policy. We note that "products sold with long-term service contracts are recognized ratably over the expected life of the contract." Include in your response the accounting for products sold with short-term service contracts and the basis for your accounting.
16. We note that you sale products and services through dealers and distributors. Tell us the terms of these arrangements including the credit terms and the products return policy. Also, tell us when the sales to your dealers and distributors are recognized as revenues.

Exhibits

17. File all material contracts upon which your business is substantially dependent as exhibits to the registration statement pursuant to Item 601(b)(10) of Regulation S-K, including:

- any agreements documenting the strategic alliances disclosed on page 9;
- your contract with Electronic Monitoring Service; and
- the lease for your headquarters facility, as well as any other material lease.

If you believe the filing of these agreements is not required, please provide a supporting analysis in your response letter.

Form 10-QSB for the three months ended December 31, 2007

Condensed Consolidated Statements of Operations, page 4

18. Please tell us and disclose in detail what your gain on sale of intellectual property relates to. Also, tell us why your accounting is appropriate and refer to your basis in the accounting literature.

(5) Goodwill and Intangible Assets, page 10

19. It appears to us that your acquisition of Midwest Monitoring & Surveillance met the requirements of Item 310 (c) and (d) of Regulation S-B. Please provide the audited and pro forma financial statements or provide us with the calculations that support your conclusion that these financial statements are not required. Also, provide pro forma results of operations for the corresponding period in the preceding year under paragraph 58(b) of SFAS 141.

(10) Minority Interest, page 13

20. As of September 30, 2007, we note that you had 50% ownership interest in Volu-Sol Reagents. During the three months ended December 31, 2007, you issued additional 4.8 million shares for cash proceeds and services. It appears to us that the issuance of additional shares reduced your ownership interest below 50%. Please tell us how you maintained voting control to consolidate Volu-Sol Reagents. If you have a voting control arrangement with other shareholders, tell us the terms of the arrangement.

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As appropriate, please amend your filing 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 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.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

Mr. David Derrick  
RemoteMDx Inc.  
March 13, 2008  
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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