



DIVISION OF
CORPORATION FINANCE

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

September 30, 2010

Christopher F. Tirotta
President
American Scientific Resources, Incorporated
1112 Weston Road, Unit 278
Weston, FL 33326

**Re: American Scientific Resources, Incorporated
Amendment No. 4 to Registration Statement on Form S-1
Filed September 16, 2010
File No. 333-164517**

Dear Dr. Tirotta:

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.

We have had limited operations...., page 6

1. Refer to the fourth sentence of this section. Please provide additional detail regarding the loan commitments you have received. Make corresponding revisions to the Business and Management's Discussion & Analysis sections, as appropriate.

We are in default on some of our convertible...., page 7

2. Please file all the agreements described in this risk factor or tell us why they should not be filed.

Selling Security Holders, page 13

3. We note your conclusory statement in response to comment 5 that selling stockholders who have held their shares for over three months have born the risk of ownership for a substantial period of time. Please provide the legal support for this conclusion. In addition, please tell us why you have not analyzed the facts and circumstances of the selling stockholders as this analysis would seem relevant to a determination of investment intent.
4. In your prior amendments, we note multiple revisions regarding the consideration received by the company in exchange for the shares issued. In the most recent amendment, you have further revised to disclose that the selling security holders' securities were issued in exchange for services that were completed on the same day as issuance. We note, however, that certain agreements, such as the advertising services agreement with Media4Equity dated April 16, 2008, did not appear to terminate and would not appear to have been completed until after the date that shares were issued. We note that other agreements, such as the Project Agreement with Future Now dated October 5, 2007 and the financial consulting agreement with Kauderer Group dated February 12, 2008, were entered into on the same day that you indicate services were completed and shares issued. For each selling security holder, please reconcile the term of the agreement and the date that the agreement was entered into with the date that services were completed and shares issued. If certain agreements were fully performed on the same day that they were entered into, please advise us of that fact.
5. In addition, please address whether there are any remedies available for failure to perform services where shares were issued prior to completion of the services under the agreement. Refer to our prior comment 6.
6. Please tell us which exhibit relates to the shares offered by each selling shareholder in your table.
7. Given the addition of Granite Financial as a selling shareholder, please provide us your analysis supporting the conclusion that this is a secondary offering by Granite, by applying all relevant factors in Securities Act Rules Compliance and Disclosure Interpretations 612.09. We note the possible broker-dealer status, the holding period, the services provided, and the number of shares offered.
8. Please tell us why you do not identify throughout your prospectus that Granite Financial is a broker-dealer.
9. Please refer to the selling shareholders table on page 15. With a view toward disclosure, please tell us why Granite Financial group is selling more shares than

- it beneficially owns and why it will own more shares after the offering than it did prior to the offering.
10. Please tell us how you calculated the percentage owned by Granite Financial after the offering. Based on the number of shares outstanding as of August 30, 2010 that you disclose on page 46, it appears that Granite's ownership would exceed 4.99%.
 11. It appears that your disclosure in this section of your document may be inconsistent with your disclosure elsewhere. For example, exhibit 10.49 indicates that 5,000,000 shares were issued for the preparation of a registration statement on Form S-1. Please tell us whether the registration statement referred to in the exhibit is still being prepared and if not how you concluded that the preparation was completed on December 1, 2009.

Description of Business, page 19

Kidz-Med, Inc., page 20

12. Please reconcile the disclosure in your third sentence in this section that you manufacture the Kidz-Med Non-Contact 5-in-1 with the deletion in the Prospectus Summary of that statement.

Legal Proceedings, page 26

13. Please revise your disclosure to include the information contained in your response to prior comment 12.

Management's Discussion and Analysis..., page 27

Overview, page 28

14. You disclose probable revenues over the next three years in the last paragraph on page 29 and the paragraph immediately following. Please note that it is inappropriate to provide projections without appropriate balancing metrics. Refer to Item 10(b)(2) of Regulation S-K and revise accordingly.

Purchase of Disintegrator Patent, page 29

15. With a view to disclosure, please tell us how you will determine for purposes of Mr. Roth's compensation whether Mr. Roth's contact with a product owner is made from his personal contacts.

Contracts to be Settled with the Company's Own Equity, page 36

16. We note the final paragraph on page 36. Please revise the prospectus to add appropriate risk factor disclosure.

Subsequent Events, page 37

17. We note your response to prior comment 15. Please tell us whether any of the shares issued are being registered pursuant to this registration statement.
18. Refer to the fifth paragraph of this section. Please clarify your reference to the 2007 note. We note that a 2007 note is not otherwise discussed in this section.

Security Ownership of Certain Beneficial Owners..., page 46

19. Given the number of shares underlying Granite Financial's convertible debenture, please tell us why it is not included in the table on page 46.

Financial Statements

20. Please update the financial statements when required by Rule 8-08 of Regulation S-X.

Item 16. Exhibits, page 54

21. We note the references to exhibits in exhibit 10.105. Please file a complete copy of this exhibit.

Exhibit 23.1 Consent of Independent Registered Public Accounting Firm

22. Please include a currently dated and signed consent from your independent auditors with any amendment of the filing.

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 Jeanne Bennett at (202) 551-3606 or Gary Todd, accounting reviewer, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Gabriel Eckstein at (202) 551-3286 or Daniel Morris, Special Counsel, at (202) 551-3314 if you have any other questions.

Sincerely,

Martin James
Acting Assistant Director

cc (via fax): David B. Manno, Esq.
Sichenzia Ross Friedman Ference LLP