



DIVISION OF
CORPORATION FINANCE

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

October 28, 2010

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

**Re: American Scientific Resources, Incorporated
Amendment No. 5 to Registration Statement on Form S-1
Filed October 14, 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.

Selling Security Holders, page 13

1. Please tell us where in your response to prior comment 3 you address the 88,606,649 shares offered by Gols. We note your disclosure on page 7 that these shares were acquired in December 31, 2009.
2. Regarding your response to prior comment 6, please tell us which exhibit contains the settlement agreement that gave rise to the issuance of the 88,606,649 shares.
3. Also, with regard to prior comment 6, we note that you have not filed fully executed copies of the subscription agreements and/or warrant agreements for the other selling stockholders. In addition, it appears that the subscription agreements and warrants are incomplete and do not include all attachments, exhibits and

schedules. Note that you are required to file complete and fully executed copies of all exhibits. Please confirm that you will comply. Alternatively, please tell us the basis upon which you rely to file form of agreements or agreements that are otherwise incomplete.

4. While we note your revisions to the selling shareholder table, it appears that you still intend to register the shares underlying certain outstanding warrants. Given that you do not have sufficient authorized shares to allow conversion of your outstanding convertible debentures and your outstanding warrants, please tell us why you believe that these shares may be appropriately registered at this time. In addition, please tell us how you will be able to provide an unqualified opinion as required by Item 601(b)(5) of Regulation S-K.

Legal Proceedings, page 25

5. We note your added disclosure regarding the complaint filed by Tecnimed. Please disclose the name of the court where the proceeding is pending.

Purchase of Disintegrator Patent, page 28

6. We note your response to prior comment 14. However, removing text from this amendment would not appear to address the fact that projections were disclosed without balancing language. Please revise to provide appropriate balancing metrics or tell us why you believe that revisions are unnecessary. Refer to Item 10(b)(2) of Regulation S-K and revise accordingly.
7. Please clarify your disclosure in response to prior comment 15 to indicate how the company determines that a contact has been made due to Mr. Roth. For example, how, if at all, will the company distinguish between introductions made by Mr. Roth in his personal, as opposed to official, capacity? Will any introduction by Mr. Roth of a product that the company is not currently distributing qualify?

Subsequent Events, page 36

8. Refer to the first paragraph of this section. For purposes of consistency with your disclosure elsewhere in the registration statement, please define Lanktree Consulting Corp. as "Lanktree" rather than "Lender 1." Note that defined terms should be used uniformly throughout the prospectus. Similarly, please revise this section to clarify your reference to Note 1 so that investors do not have to search the prospectus to find the term.
9. Please revise to fully disclose the material terms of the agreement with Lanktree, including termination provisions and registration rights, if any.

10. It appears that the disclosure in this section does not account for the additional common stock outstanding from the previous amendment to your registration statement. Please reconcile.

Financial Statements

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

Exhibit 23.1 Consent of Independent Registered Public Accounting Firm

12. 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.

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You may contact Jeanne Bennett at (202) 551-3606 or Gary Todd, reviewing accountant, 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