



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

April 13, 2010

Mail Stop 4631

**Via U.S. mail**

James Kerstein  
Chief Executive Officer  
Axion International Holdings, Inc.  
180 South Street  
New Providence, NJ 07974

Re: **Axion International Holdings, Inc.**  
**Registration Statement on Form S-1**  
**Filed on: March 22, 2010**  
**File No.: 333-165616**

Dear Mr. Kerstein:

We have limited our review of your filing to those issues we have addressed in our 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 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

**General**

1. Please note that the completion of our review of your registration statement is subject to the resolution of our outstanding comments on your September 30, 2009 Form 10-K. Please confirm that the disclosures in the registration statement reflect our Form 10-K comments, and in particular, the revised disclosures set forth in the Amendment to the Form 10-K for the fiscal year ended September 30, 2009, as filed with the Commission on March 19, 2010.

Cover Page of the Registration Statement

2. It appears that your primary standard industrial classification code number is 3086 rather than 2836. Please advise or revise accordingly.

Prospectus Summary, page 3

3. Please disclose here that you have received a going concern opinion from your auditor. We note risk factor disclosure “Our independent auditors have expressed that there is substantial doubt about our ability to continue as a going concern” on page 7.

Lincoln Park Capital Transaction, page 4

4. The Purchase Agreement and the Registration Rights Agreement appear to require that you file a registration statement covering the Purchase Shares, 50% of the Commitment Shares and the Warrant Shares. However, it appears that the Form S-3 only covers the Purchase Shares and 50% of the Commitment Shares. Please advise or revise accordingly.

Special Note Regarding Forward-Looking Statements, page 5

5. Please delete the reference to the safe harbor for forward-looking statements provided for by the Private Securities Litigation Reform Act of 1995 because such protection, including Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, is not available in connection with offerings of penny stock (we note risk factor “Our stock is deemed to be penny stock...” on page 11).

Business, page 12

6. We note that your disclosure incorporates statistical information, estimates and other industry data (we note “Transportation” and “Marine” discussions on page 15); however, you do not disclose the basis for some of the assertions made in your disclosure and it is unclear whether the cited information is publicly available or whether it was funded or paid by you. If you do not have appropriate independent support for a statement, please revise the language to make clear that this is your belief based on your experience in the industry, if true, or disclose the source.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 17

Liquidity and Capital Resources: Plan of Operation, page 21

7. Please revise your disclosure to include a discussion about any outstanding debt. We note disclosure on page F-8 of the financial statements where you disclose the amount of debt outstanding. In addition, please remove the last paragraph of your disclosure here since it appears to be identical with the preceding paragraph.

Management, page 24

8. Please ensure that you provide complete disclosure about each officer's and director's business experience for the most recent five years, and to the extent that an officer or director is self-employed or retired, so disclose. For example, it is unclear what the exact time period was during which Mr. Kerstein served as the President of Plast-O-Matic Valves Inc., and what Mr. Green's experience was during the 2004-2007 period. Please revise your disclosure in accordance with Item 401(e)(1) of Regulation S-K.

Compensation of Directors, page 29

9. Please provide a narrative description of the directors compensation arrangements to help investors better understand your tabular disclosure. Please see Item 402(r)(3) of Regulation S-K.

Certain Relationships and Related Transactions, page 31

10. Please tell us what consideration you have given to filing the agreement with Regal and the consulting agreement with Mr. Love as exhibits to the registration statement.

The Lincoln Park Capital Transaction, page 35

Purchase of Shares Under the Purchase Agreement, page 36

11. In accordance with Section 11(g) of the Purchase Agreement, please disclose here or in another appropriate section of the filing that LPC's rights under the agreement are not transferable.

Selling Shareholder, page 39

12. Since this offering represents an indirect primary offering by LPC, please revise the tabular presentation to include the 1,542,500 shares in the “Common Stock Owned Prior to Offering” column.

Where You Can Find More Information, page 44

13. We note the qualification in the first sentence of the second paragraph. Please be advised that you may not qualify information in your prospectus in this manner unless incorporation by reference or a summary of a document filed as an exhibit is required. See Rule 411(a) of Regulation C. Please revise to remove this qualification.

Undertakings, page II-8

14. Please revise your disclosure to include the undertaking set forth in Item 512(a)(5)(ii) of Regulation S-K.

Signatures, page 56

15. Please ensure that the registration statement is signed by the controller or principal accounting officer.

Exhibit 5.1. Opinion of Counsel

16. We note that counsel assumes the “authority of the parties” in paragraph A. This assumption does not appear appropriate. Please advise or have counsel revise its opinion accordingly. Please also comply with this comment with respect to the assumption in paragraph D.
17. We note that counsel qualifies its opinion to the date of the opinion in paragraph C. The opinion must speak as of the effective date of the registration statement. Please have counsel revise its opinion accordingly.
18. Please have counsel revise its opinion to remove the qualification in the second sentence of paragraph F that counsel is not admitted to practice law in Colorado.
19. Please have counsel confirm to us that it concurs with our understanding that its reference to the Colorado Business Corporation Act includes the statutory provisions and all applicable provisions of the Colorado Constitution and any reported judicial decisions interpreting these laws. Please have counsel file this confirmation as correspondence on EDGAR.

20. The language in the last paragraph of the legal opinion appears to inappropriately limit an investor's reliance on the legal opinion. Please have counsel revise its opinion accordingly.

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As appropriate, please amend your filing and respond to these comments. 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 Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, 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.

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 connection with our review of your filing or in response to our comments on your filing.

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

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securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Era Anagnosti, Staff Attorney, at (202) 551-3369 or Andrew Schoeffler, Senior Staff Attorney, at (202) 551-3748 with any questions.

Sincerely,

Pamela A. Long  
Assistant Director

cc: Richard Feiner, Esq.  
Silverman Sclar Shin & Byrne PLLC  
381 Park Avenue South, Suite 1601  
New York, NY 10016  
Via Facsimile at (212) 779-8858