



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

DIVISION OF CORPORATION FINANCE  
MAIL STOP 7010

June 19, 2007

via U.S. mail

Mr. Robert Scherich  
Chief Financial Officer  
Horsehead Holding Corp.  
300 Frankfort Road  
Monaca, PA 15061

**Re: Horsehead Holding Corp.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed June 6, 2007  
File No. 333-142113**

Dear Mr. Scherich:

We have reviewed your filing and your response letter dated June 6, 2007 and have the following comments. Where indicated, we think you should revise your document 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 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.

Amendment No. 1 to Registration Statement on Form S-1

General

1. We note your response to prior comment 3, and we reissue it. Please revise your prospectus cover page and plan of distribution section to specifically state that the selling shareholders will sell at a price of \$x.xx (or a range) per share until your shares are quoted on The Nasdaq Global Market or an exchange and, thereafter, at prevailing market prices or privately negotiated prices.

Prospectus Summary

2. We note to prior comments 6 and 7 and reissue them in part. Continue to revise the summary section to balance your disclosure with your challenges and the risks facing your company. For example, discuss your need to perform additional maintenance that had been deferred by your predecessor.

Recent Developments, page 4

3. We note your response to prior comment 13, and we reissue it in part. Please explain why you needed authorization by the U.S. Federal Energy Regulatory Commission of your proposed application of the net proceeds. For instance, it remains unclear whether this is a standard procedure or was required for a particular reason. We may have further comment.

Industry Overview, page 5

4. We note your response to prior comment 12. Please quantify for us the “nominal subscription fees” to which you refer. We may have further comment.

Risk Factors, page 8

5. We note your response to prior comment 19. However, it appears you have added mitigating language, such as in your discussion of how the strike at one of your plants did not have a material adverse effect on certain operations because of its short duration and your effective contingency plans. Please revise to focus on the risks associated with such strikes. If appropriate, you may discuss other details later in the prospectus.

Selected Historical Consolidated Financial and Other Information, page 20

6. We note that in response to prior comment 25, you revised your disclosure and presentation to reflect your predecessor financial statements on a U.S. GAAP basis, including the recognition of a \$54.9 million impairment charge to reduce the carrying value of your predecessor’s long-lived assets to their estimated fair value as of December 23, 2003. However, we note that you classify this impairment charge as a non-operating other income (expense) item on page 21. Ordinarily, the presentation of this type of charge would need to be above, and included within, the measure of income (loss) from operations to comply with paragraph 25 of SFAS 144.
7. The ordering of the columnar information in your financial statements is not consistent with the ordering of the corresponding information under this heading or in your prospectus summary. Please revise the presentation of your tabular financial information throughout the filing as necessary so that the ordering of

columns, having periodic results or other measures, appear consistently, reading from left to right across the page (e.g. 2004, 2005, 2006; or 2006, 2005, 2004), as discussed in SAB Topic 11:E.

Management's Discussion and Analysis of Financial Condition . . . page 22

Overview, page 22

8. We note your response to prior comment 27, and that the need to perform additional maintenance on key equipment has prevented you from taking full advantage of the consumption increase. Please quantify the impact the additional maintenance has had on your production capacity. In addition, please disclose whether you continue to perform needed additional maintenance, and if so, how long you expect this process to continue.

Selling, general and administrative expenses, page 31

9. We note your response to prior comment 29. If true, please clarify that the revised disclosure on page 34 explaining the terms of a management services agreement between you and an affiliate of Sun Capital concerns the same management services agreement between you and Sun Capital Partners Management III, LLC, which you refer to on page 31.

Management, page 57

10. We note your response to prior comment 39. Please disclose the arrangement pursuant to which Mr. Terry was elected. See Item 401(a) of Regulation S-K.

Compensation Discussion and Analysis, page 61

11. We note your response to prior comment 43. You identify six companies that you expect will provide a relevant benchmark for comparison and state that the CEO will provide recommendations to the compensation committee "based on this data." Please expand to discuss in more detail how you will use the information you obtain from your benchmarking to establish compensation. For example, do you have a policy for setting the pay of your executive officers within a specified range of the compensation levels of these companies? If you do not have specific guidelines on use of this data, please disclose this. Please also clarify whether these benchmarks will be used only for base salary or for other elements of compensation.
12. We note your disclosure on page 63. Please disclose the reasons and the factors considered in the decision in 2006 to increase the amount of the bonus eligible to your named executive officers, which increase appears to have resulted in cash bonuses that exceeded the pre-determined maximum percentages of base salary

set forth in each officer's employment agreement. See Item 402(b)(2)(ix) of Regulation S-K. Discuss how you took the pre-determined maximum percentages into account in determining the cash bonuses, and whether you intend to or have the discretion to exceed these pre-determined maximums in the future. Clarify whether the one-time bonuses discussed on page 64 were subject to the pre-determined maximums.

13. We note your response to prior comment 44 and your disclosure on page 64 regarding the one-time bonuses. We further note that Mr. Hensler received a bonus that was roughly four times greater than that received by Messrs. Scherich and Alavi in connection with the November private placement. Please expand to discuss how the amount of the bonus was determined and how the bonus was structured to reflect, if at all, the named executive officer's individual performance or individual contribution. See Item 402(b)(1)(v) and (b)(2)(vii) of Regulation S-K and Release 8732A, Section II.B.1. Provide similar disclosure with respect to the other bonuses awarded, such as in connection with the October 2006 dividend and the bonus associated with the filing of the Form S-1.

Certain Relationships and Related Transactions, page 94

14. We note your response to prior comment 51. Please revise the prospectus to include the information found in your response relating to the arrangements entered into in connection with the acquisition of the Company's business by Sun Capital.

Note B – Summary of Significant Accounting Policies, page F-18

Shipping and Handling Fees and Costs, page F-19

15. We note your response to prior comment 56 indicating that while you have reclassified shipping and handling costs incurred to move product from your place of business to the buyer's designated location to cost of sales, you view costs incurred to move EAF dust to your facilities as a "component of revenue" that should be included as an offset.

Although we understand your view on the applicability of EITF 00-10, given the definition outlined in paragraph 3, we do not see how this alone supports recording the costs as an offset to the service fees you collect in revenue. Since you are receiving service fees for removing the EAF dust, tell us why you would not need to report these revenues, and the related costs of moving the EAF dust, on separate lines in your Statements of Income to comply with Rule 5-03(b) of Regulation S-X. And for any arrangements under which you obtain EAF dust without generating revenues, tell us why you believe the costs of moving the material to your facilities would not represent an inventoriable cost, following the

guidance in ARB 43, paragraph 5 of Chapter 4. Please submit a schedule quantifying the amounts in question.

In addition, we note your disclosure in the second paragraph on page 51, stating that in many cases, "...customers are also suppliers of secondary materials" to you. Please indicate the extent to which suppliers of EAF dust also purchase your products; and for these arrangements, explain how you have negotiated the service of removing EAF dust, relative to the sales of products, with emphasis on any correlation between the terms for quantities and pricing, and the timing of payment, hauling, and delivery.

Note R – Subsequent Events, page F-36

16. We have read your response to prior comment 59, indicating that you have received FERC authorization to repurchase certain shares and to redeem certain warrants; thereby alleviating the prospect of having to redeem any of the shares issued in your April 2007 private placement. Please update your disclosure under this heading with your new information, consistent with your presentation on page F-12.

Closing Comments

As appropriate, please amend your registration statement in response 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 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.

Please contact Lily Dang at (202) 551-3867 or, in her absence, Karl Hiller, Branch Chief, at (202) 551-3686 if you have questions regarding comments on the financial statements and related matters. Please contact Jason Wynn at (202) 551-3756 or, in his absence, me at (202) 551-3611 with any other questions. Direct all correspondence to the following ZIP code: 20549-7010.

Sincerely,

Anne Nguyen Parker  
Branch Chief

cc: L. Dang  
K. Hiller  
J. Wynn

via facsimile

James S. Rowe and Gregory C. Vogelsperger  
Kirkland & Ellis LLP  
(312) 861-2200