



DIVISION OF
CORPORATION FINANCE

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

February 14, 2012

Via Email

James J. Barnes, Esquire
Reed Smith LLP
225 Fifth Avenue, Suite 1200
Pittsburgh, PA 15222

**Re: Mastech Holdings, Inc.
Schedule TO-I
Filed February 7, 2012
File No. 5-84265**

Dear Mr. Barnes:

We have limited our review of the above referenced filing 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 filing, by providing the requested information, or by advising us of when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

Schedule TO-I

Exhibit 99 (a)(1)(A): Offer to Purchase

General

1. Based on disclosure in the Form 10-K for the fiscal year 2010 and the current Offer to Purchase, approximately 142,000 shares of the 750,000 shares authorized for repurchase pursuant to the company's repurchase plan, were repurchased during 2011 through to the time of commencement of the current offer. Please provide supplementally further

details of how and when such repurchases occurred and the approximate amount of shares repurchased in such transaction(s). We may have additional comment.

Section 7. Conditions of the Exchange Offer, page 13

2. Please refer to the last paragraph of this section relating to your failure to exercise any of the rights described in this section. When an offer condition is triggered by events that occur during the offer period and before the expiration of the offer, the company should inform holders of securities how it intends to proceed promptly, rather than wait until the end of the offer period, unless the condition is one where satisfaction of the condition may be determined only upon expiration. Please confirm the company's understanding in your response letter.

Section 9. Interests of Directors and Executive Officers...., page 16

3. Please refer to Item 8 of Schedule TO and corresponding Item 1008(b) of Regulation M-A and the instructions to Item 1008(b) that are included thereto. Please provide the required transaction disclosure for the filing person. If the company did not engage in any transactions in the sixty days prior to the date of the offer to purchase, please disclose this fact.

Section 10. Source and Amount of Funds, page 18

4. Please refer to Item 7 of Schedule TO and corresponding Item 1007(b) of Regulation M-A. Please disclose any alternate sources of funding if the primary financing falls through. If there are none, revise to so state.

* * *

Please amend your filing in response to these comments. Please electronically submit a cover letter with your amendment that keys your responses to our comments. 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 filings reviewed by the staff to be certain that they have provided all material information to investors. 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.

Please direct any questions to me at (202) 551-3757. You may also contact me via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

/s/ Mellissa Campbell Duru

Mellissa Campbell Duru
Special Counsel
Office of Mergers & Acquisitions