

Ms. Mellissa Campbell Duru  
Special Counsel  
Office of Mergers & Acquisitions  
United States Securities and Exchange Commission  
100 F. Street, N.E.  
Washington, D.C. 20549

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

Dear Ms. Campbell Duru:

On behalf of Mastech Holdings, Inc. (the "Company," "our" or "we"), we are providing the following responses to your comments set forth in your letter dated February 14, 2012. For your convenience, the numbered paragraphs of this letter correspond to the numbered paragraphs of your comment letter.

Schedule TO-I

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

General

1. **SEC COMMENT:** *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.*

**COMPANY RESPONSE:** A summary of our monthly common stock repurchases during 2011 through to the time of commencement of the current offer is set forth in the table below. The Company repurchased all such shares of common stock pursuant to open market transactions.

<u>Periods</u>	<u>Total Number of Shares purchased</u>	<u>Average Price Per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</u>	<u>Maximum Number of Shares that May Yet Be Purchased Under this Plan or Programs</u>
January 1, 2011 – January 31, 2011	0	—	0	750,000
February 1, 2011 – February 28, 2011	7	\$ 4.89	7	749,993
March 1, 2011 – March 31, 2011	3,426	\$ 4.90	3,426	746,567
April 1, 2011 – April 30, 2011	1,949	\$ 4.04	1,949	744,618
May 1, 2011 – May 31, 2011	23,788	\$ 4.02	23,788	720,830
June 1, 2011 – June 30, 2011	2,598	\$ 3.82	2,598	718,232
July 1, 2011 – July 31, 2011	0	—	0	718,232
August 1, 2011 – August 31, 2011	42,182	\$ 4.17	42,182	676,050
September 1, 2011 – September 30, 2011	3,120	\$ 4.00	3,120	672,930
October 1, 2011 – October 31, 2011	6,500	\$ 3.77	6,500	666,430
November 1, 2011 – November 30, 2011	53,216	\$ 3.75	53,216	613,214
December 1, 2011 – December 5, 2011	6,100	\$ 3.86	6,100	607,114
December 6, 2011 – February 6, 2012	0	—	0	607,114

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2. **SEC COMMENT:** 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.

**COMPANY RESPONSE:** We confirm our understanding that when an offer condition is triggered by events that occur during the offer period and before the expiration of the offer, we will inform holders of securities how we intend 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.

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3. **SEC COMMENT:** 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.

**COMPANY RESPONSE:** The Company did not engage in any transactions in the sixty days prior to the date of the offer to purchase.

4. **SEC COMMENT:** 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.

**COMPANY RESPONSE:** The Company anticipates that we will fund the repurchase of shares tendered in the offer, and the related expenses, primarily from available cash. To the extent that available cash is not sufficient to fund the repurchase of shares tendered in the offer, the Company will use its existing credit facility with PNC Bank, National Association (the "PNC Facility") to address any deficiency. The Company believes that its available cash balances and available lines of credit under the PNC Facility will be more than sufficient to fund the repurchase of shares tendered in the offer.

In connection with responding to the staff's comments, the Company hereby acknowledges 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 law of the United States.

If you have any questions regarding the Company's responses provided herein, please do not hesitate to call us, or our outside counsel, James J. Barnes, at (412) 288-7164.

Sincerely,

/s/ John J. Cronin, Jr.

John J. Cronin Jr.  
Chief Financial Officer

cc: D. Kevin Horner  
President and Chief Executive Officer