

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

November 29, 2010

John J. Cronin, Jr. Chief Financial Officer Mastech Holdings, Inc. 1000 Commerce Drive Suite 500 Pittsburgh, PA 15275

Re: Mastech Holdings, Inc.

Form 10-K for Fiscal Year Ended

December 31, 2009 Filed March 8, 2010

Form 10-Q for Quarterly Period Ended

September 30, 2010 Filed October 29, 2010 File No. 001-34099

Dear Mr. Cronin:

We have reviewed your response letter dated November 18, 2010 and have the following additional comments. In our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us 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.

John J. Cronin, Jr. Mastech Holdings, Inc. November 29, 2010 Page 2

Form 10-K for the year ended December 31, 2009

Financial Statements

Notes to Consolidated Financial Statements

General

1. We note your response to our prior comment two. Please provide a more robust analysis of paragraph 6 of ASC 280-10-50. Your response should include, but not necessarily be limited to, a discussion of the nature of the business activities of each component, the existence of managers responsible for them, and information presented to the board of directors.

10. Transactions with Former Parent, page 47

2. We note your response to our prior comment three. Please tell us how your discussion of the individuals negotiating these transactions, the existence of formal contracts, and the lack of an obligation to use the related party substantiates that these transactions are arms-length transactions. Further, we understand that you continuously explore cost-effective alternatives to the offshore contractors and IT support services provided by iGATE Global Solutions; please tell us how you determined that this process results in these services not being provided at below market rates. Additionally, we understand that iGATE Global Solutions' procurement personnel submits a request to your company and to other IT staffing providers and that your consultant is selected if it is the best value proposition; please tell us how you determined that this process results in these consultants not being provided at below market rates. Refer to paragraph 5 of ASC 850-10-50.

Form 10-Q for the quarterly period ended September 30, 2010

Financial Statements

Notes to Condensed Consolidated Financial Statements

13. Divestiture of GFS, page 10

3. We note your response to our prior comment four. Based on your response, it appears that you can distinguish revenues and operating profits for your brokerage operations unit. We understand that you cannot distinguish the operational support and general and administrative functions. Pursuant to paragraph 9 of ASC 205-20-45, general corporate overhead shall not be allocated to discontinued operations. Please tell us if you are able to clearly distinguish all non-general corporate overhead for your brokerage operations unit.

John J. Cronin, Jr. Mastech Holdings, Inc. November 29, 2010 Page 3

You may contact Jennifer Monick, Senior Staff Accountant, at 202-551-3295 or me at 202-551-3629 if you have questions.

Sincerely,

Kevin Woody Branch Chief