

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

November 8, 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 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 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 8, 2010 Page 2

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

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>

Liquidity and Capital Resources

<u>Investing Activities</u>, page 27

1. It appears your "maintenance-type capital expenditures" were capitalized to equipment, software and leasehold improvements. The characterization of these costs as maintenance-type does not appear to be consistent with your policy note on page 38. Please tell us how you determined it was appropriate to capitalize these items.

Financial Statements

Notes to Consolidated Financial Statements

General

2. We note your disclosure on page 9 that "[t]he Company operates as a single reportable segment...." We further note your discussion of your four sales channels within your Results of Operations, beginning on page 22. Please tell us how you determined you only have one single reportable segment. Please refer to ASC 280-10.

10. Transactions with Former Parent, page 47

3. We note your disclosure that many transactions with your former parent and their affiliates were negotiated as arms-length transactions. Please tell us how you have complied with 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

4. We note that you sold your brokerage operations unit during 2010. Please tell us how you have complied with ASC 205-20-45, or tell us how you determined it was not necessary to report the earnings from this unit within discontinued operations.

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Exhibit 31.1 and 31.2

5. We note your certifications do not comply with the content of the certifications required under Exchange Act Rules 13a-14(a) and 15d-14(a). Specifically, we note you have replaced the phrase "quarter (the registrant's fourth fiscal quarter in the case of an annual report)" with the phrase "three months" in paragraph 4(d). Please revise your certifications in future filings to comply with the Exchange Act Rules.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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.

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