UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported) August 20, 2012

MASTECH HOLDINGS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Pennsylvania (State or Other Jurisdiction of Incorporation)

001-34099 (Commission File Number)

1000 Commerce Drive, Suite 500, Pittsburgh, PA (Address of Principal Executive Offices) 26-2753540 (IRS Employer Identification No.)

> 15275 (Zip Code)

(412) 787-2100

(Registrant's Telephone Number, Including Area Code)

N/A

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(b) On August 20, 2012, Edward Meindl advised the registrant of his resignation as Chief Operating Officer of the registrant effective September 7, 2012. In connection with such resignation, Mr. Meindl and the registrant will adhere to the provisions of his Executive Employment Agreement, dated January 4, 2006, as amended and reinstated on March 25, 2009 and further amended on March 20, 2012, and filed as exhibit 10.5 to the 2011 Annual Report of Form 10-K filed by the registrant on March 23, 2012 and incorporated by reference herein.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

MASTECH HOLDINGS, INC.

By: /s/ John J. Cronin

Name:John J. CroninTitle:Chief Financial Officer

August 23, 2012