

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

February 4, 2011

Mr. William T. Hull Chief Financial Officer RTI International Metals, Inc. Westpointe Corporate Center One – 5th Floor 1550 Coraopolis Heights Road Pittsburgh, PA 15108-2973

Re: RTI International Metals, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2009

Forms 10-Q for the Fiscal Quarters Ended March 31, 2010, June 30, 2010

and September 30, 2010

Form 8-K filed December 8, 2010

File No. 001-14437

Dear Mr. Hull:

We have reviewed your response letter dated January 7, 2011 and have the following comments.

Form 10-Q for the Fiscal Quarter Ended September 30, 2010

- 1. We note your response to prior comment one, from our letter dated December 22, 2010, and appreciate the information you provided. Please also address the following:
 - Explain to us the facts and circumstance that resulted in changes in your annual forecasts during each quarterly period;
 - Better explain to us why you determined it was not appropriate to change the methodology you used to determine the interim tax provision during the quarter ended June 30, 2010, but that it was appropriate to change your methodology during the quarter ended September 30, 2010; and
 - Provide us your actual effective income tax rates for the quarter ended December 31, 2010 and the year ended December 31, 2010, including how the amounts were impacted by your changed methodology.

Form 8-K filed December 8, 2010

2. We note your response to the second bullet of prior comment two, from our letter dated December 22, 2010, and understand that parent company equity was incorrectly reflected in the condensed consolidating balance sheets. Please explain to us what other equity disclosures were misstated in light of the incorrect parent company equity balances. Also, please explain to us why you believe it is appropriate to correct this misstatement in

Mr. William T. Hull RTI International Metals, Inc. February 4, 2011 Page 2

future filings and what consideration you have given to revising your disclosures in a Form 8-K/A.

Please respond to this letter within ten business days 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, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

You may contact Dale Welcome at (202) 551-3865 or Anne McConnell at (202) 551-3709 if you have questions regarding these comments.

Sincerely,

John Cash Accounting Branch Chief