



DIVISION OF
CORPORATION FINANCE

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

October 20, 2010

Ben Mathews
Secretary
Rio Tinto plc and Rio Tinto Limited
2 Eastborn Terrace
London, W2 6LG, United Kingdom

Re: Rio Tinto plc and Rio Tinto Limited
Form 20-F for Fiscal Year Ended December 31, 2009
Filed May 27, 2010
File No. 1-10533 and 1-34121
Response letter dated September 27, 2010

Dear Mr. Mathews:

We have reviewed your response letter and have the following comment. 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 comment applies 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 this comment, we may have additional comments.

Form 20-F for the Fiscal Year Ended December 31, 2009

Note 1 Principal Accounting Policies, page A-9

(j) Determination of Ore Reserves, page A-15

1. We note your response to comment number one from our letter dated August 31, 2010 in which you explain that "since the long-term price assumptions form part of a set of internally generated investment assumptions that are confidential to Rio Tinto, disclosure of these prices could prejudice the company in negotiations with partners, customers and transaction counterparties. Disclosure would also provide commercially sensitive information to our competitors, putting us at a competitive disadvantage." Please expand your response to clarify in detail why you believe disclosing this information could prejudice you in negotiations with partners, customers and transaction counterparties, and why disclosing such information could cause you competitive harm.

Mr. Ben Mathews
Rio Tinto plc and Rio Tinto Limited
October 20, 2010
Page 2

Closing Comments

You may contact Mark Wojciechowski at (202) 551-3759, or Mark Shannon, Branch Chief, at (202) 551-3299 if you have questions regarding comments on the financial statements and related matters. Please contact Sean Donahue at (202) 551-3579, or in his absence, Timothy Levenberg, Special Counsel at (202) 551-3707, or me at (202) 551-3745 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director