

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

July 1, 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

Dear Mr. Mathews:

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.

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

Principal Risks and Uncertainties, page 6

1. Please use the caption "Risk Factors," as Item 3.D of Form 20-F requires. Also, you state that "[t]he following describes some of the material risks that could affect Rio Tinto." Please eliminate the suggestion in the first paragraph that you have not discussed all known material risks in this section.

Copper, page 16

2. You refer throughout your document to OECD demand and OECD countries. As some readers might not be familiar with the acronym you use for the Organisation for Economic Co-operation and Development, please define the acronym in context the first time it appears in your document.

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Global Functions, page 17

3. The charts and tables you present at pages 19 and 104 are difficult to read. Please present them in legible form. See generally Exchange Act Rule 12b-12.

Operating and Financial Review and Prospects

Financial Review, page 87

4. Please provide a statement that your working capital is sufficient for your present requirements, or, if not, how you propose to provide the additional working capital needed. See Item 5.B.1(a) of Form 20-F. We note the related disclosure at page A-112. In addition, please include a short summary of your liquidity and capital resources, including the amount of debt payable in 2010, your projected capital expenditures, your borrowing capacity, and your projected 2010 cash flow. In this regard, we note that you include such information in various parts of the filing, but that you do not provide an overview of your liquidity and capital resources.

Notes to the 2009 Financial Statements

Note 1 Principal Accounting Policies

(c) Sales Revenue, page A-11

- 5. We note from your disclosure on the top of page A-12 that "Where the benchmark price has not been finally agreed at the end of an accounting period, revenue is estimated based on the best available information, having reference to the terms of the contractual agreement and, where appropriate, to sales with other customers." Given that the 2009 iron ore benchmark prices with China were never officially agreed upon, please provide us the following information regarding your sale of iron ore to China during 2009:
 - Tell us the process you used to determine the price at which such sales were recorded;
 - Provide the amount and reason for any adjustments made to the amount of iron ore revenue recorded; and
 - Tell us why you believe recording revenue for such iron ore sales to China meets the revenue recognition requirement in IAS 18 paragraph 14(c).

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

6. We note your disclosure that "Ore reserves presented in accordance with SEC Industry Guide 7 do not exceed the quantities that, it is estimated, could be extracted economically

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> if future prices were to be in line with the average of historical prices for the three years to 30 June 2009, or contracted prices where applicable... Moreover, reported ore reserve estimates have not been increased above the levels expected to be economic based on Rio Tinto's own long term price assumptions. Therefore, a reduction in commodity prices from the three year average historical price levels would not necessarily give rise to a reduction in reported ore reserves." This disclosure appears to imply that your reserve estimates disclosed in the filing are based upon your own internal price assumptions rather than the average historical prices for the three years to June 30, 2009 and that the use of such internal price assumptions results in reporting lower reserve volumes than would otherwise be reported if average historical prices for the three years to June 30, 2009 had been used. Please clarify this disclosure, and explain in further detail how your long term price assumptions impact the reserves you report. As part of your response, please tell us why you believe use of your own long term price assumptions is appropriate in the circumstances in which you use them, and, to the extent the prices you used to report reserves differed from the three year historical average, please provide us with the prices you used.

Closing Comments

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.

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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