



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

DIVISION OF
CORPORATION FINANCE

September 23, 2011

Via E-mail

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, 2010
Filed March 15, 2011
File No. 1-10533 and 1-34121**

Dear Mr. Mathews:

We have reviewed your filings 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, 2010

General

1. We note disclosure from your 2007 Form 20-F regarding plans to divest your interest in the Sari Gunay gold project and to close your office in Iran and cease having any interests there. Please clarify to us whether you have closed your offices in Iran.

We note that your Form 20-F no longer includes disclosure about contacts with Iran. Please update us on all contacts with Iran since your letters to us of February 28, 2005 and January 27, 2006, whether through affiliates, subsidiaries, or other direct or indirect arrangements. In this regard, we note 2010 and 2011 news articles stating that you are the largest shareholder of Rossing Uranium Ltd., which operates the Rossing uranium mine in Namibia. The articles state that Rossing Uranium Ltd. is 15% owned by Iran

Foreign Investment Company (“IFIC”), an Iranian government entity which is included on the U.S. Department of Treasury’s Specially Designated Nationals List.

2. Please tell us the amount of proceeds, profits or other monies paid to IFIC or the Iranian government as a result of IFIC’s partial ownership of the Rossing Mine and/or any other payments you or Rossing Uranium Ltd. have made to the government of Iran.
3. Please discuss the materiality of your contacts with Iran described in response to the foregoing comments and whether those contacts constitute a material investment risk for your security holders. You should address materiality in quantitative terms, including the approximate dollar amounts of any associated revenues, assets, and liabilities for the last three fiscal years and the subsequent interim period. Also, address materiality in terms of qualitative factors that a reasonable investor would deem important in making an investment decision, including the potential impact of corporate activities upon a company’s reputation and share value. Various state and municipal governments, universities, and other investors have proposed or adopted divestment or similar initiatives regarding investment in companies that do business with U.S.-designated state sponsors of terrorism. Your materiality analysis should address the potential impact of the investor sentiment evidenced by such actions directed toward companies that have operations associated with Iran. Address specifically the potential for reputational harm from co-owning a mine with an Iranian government entity that is a Specially Designated National. In this regard, we note several 2010 and 2011 news articles providing negative press about your co-ownership of a uranium mine with the Iranian government.

Notes to the 2010 Financial Statements, page 163

Note 11 Goodwill, page 189

4. As it relates to Aluminum’s 2010 annual impairment review, we note that the recoverable amount exceeds the carrying value by 16%. We also note that Aluminum’s net operating assets total \$38,326 million and the net book value of its goodwill is \$13,678 million, as of December 31, 2010. Based on the aforementioned, it would appear that the fair value attributable to Aluminum’s cash generating units that have goodwill allocated to them is large relative to the total market capitalization of your company, while Aluminum’s contribution to your operating cash flow is only 6%. To help us further understand how you arrived at your conclusion related to goodwill impairment, please (i) provide us a schedule that identifies the components of the total recoverable amount of your Aluminum cash generating units where goodwill is allocated and (ii) provide us the cash flow schedule that was utilized to determine fair value less costs to sell for the related cash generating units, in total (please identify the cash generating units that are being included in the summary schedule.).

Note 41 Purchases and sales of subsidiaries, joint ventures, associates and other interests in businesses, page 226

Consolidation of Oyu Tolgoi LLC, page 226

5. We note that as a result of a new agreement with Ivanhoe Mines Ltd, you now consolidate Oyu Tolgoi LLC by virtue of your contractual rights which permit you to exercise control over certain policies and activities of Oyu Tolgoi LLC. Please describe for us the significant terms and conditions of this agreement, such that you now control Oyu Tolgoi LLC.
6. We also note that Ivanhoe Mines continues to consolidate the operations of Oyu Tolgoi LLC as of December 31, 2010. Please clarify for us why it is appropriate for the same operations to be consolidated by two separate entities under the same agreement.
7. We also note that “The historic cost of acquiring the Group’s indirect share of Oyu Tolgoi LLC through its investment in Ivanhoe Mines was deducted from Investments in equity accounted units. The Group’s remaining interest in the assets of Ivanhoe that does not relate to Oyu Tolgoi LLC continues to be equity accounted. The transaction generated a non cash gain of US\$531 million.” Please provide us an analysis that explains how you determined the historical costs of your indirect investment in Oyu Tolgoi LLC used in determining the remaining amount to be accounted for under the equity method and used in determining the amount of gain recorded in conjunction with this transaction.

Engineering comments

Reserves, page 85

8. We note your Form 20-F reserve disclosure lacks proven and probable reserve estimates for your Tincalayu Borate mine, Richards Bay Mineral Sands operations, the Argyle and Murowa Diamond mines, and the Lake McLeod Salt mine. We also note the Richards Bay Minerals, Argyle and Murowa Diamond mines appear to have reserves reported on the Australian stock exchange. Supplementally provide an explanation for these omissions and the variance in reporting practice.

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.

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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 Mark Wojciechowski at (202) 551-3759 or, in his absence, Michael Fay, at (202) 551-3812 if you have questions regarding comments on the financial statements and related matters. You may contact George K. Schuler, Mining Engineer, at (202) 551-3718 regarding engineering comments. Please contact me at (202) 551-3489 with any other questions.

Sincerely,

/s/ Brad Skinner

Brad Skinner
Senior Assistant Chief Accountant