

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

August 10, 2012

Via E-mail
Mr. Tom Albanese
Chief Executive
Rio Tinto plc and Rio Tinto Limited
2 Eastbourne Terrace
London W2 6LG
United Kingdom

Re: Rio Tinto plc and Rio Tinto Limited

Form 20-F for Fiscal Year Ended December 31, 2011

Filed March 16, 2012

Response dated July 20, 2012

File Nos. 001-10533 and 001-34121

Dear Mr. Albanese:

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 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.

Form 20-F for Fiscal Year Ended December 31, 2011

Risk Factors, page 10

"The Group's operations are vulnerable to a range of interruptions, not all of which are covered fully by insurance," page 12

1. Based on your response and news articles over the past few years, it appears that you have experienced one or more cybersecurity incidents that have not been material to your business or results of operations. If true, please confirm that in your next annual report on Form 20-F you will simply state this fact in this risk factor so that investors are able to evaluate your cybersecurity risks in the appropriate context.

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Group Cash Flow Statement, page 133

2. We reviewed your response to our prior comment 5. We do not concur with your position. As such, please confirm in future filings you will revise your presentation to have a reconciliation that begins with either profit before taxation, profit from continuing operations, or profit for the year. Please ensure your revised presentation provides retrospective application to all periods presented.

Note 1 – Principal Accounting Policies

(f) Exploration and Evaluation, page 141

3. We reviewed your response to our prior comment 6. In order to provide a reader with a greater understanding of how you determine whether there is a high degree of confidence in an evaluation project's viability, please confirm in future filings you will revise your disclosure to discuss (i) the relevant factors considered to determine viability, and (ii) the factors used to support a high degree of confidence. Please provide us with draft disclosure of your planned revisions.

Critical accounting policies and estimates, page 148

4. We reviewed your response to our prior comment 7. In order to provide a reader with a greater understanding of how you determine commercial viability, please supplement your proposed disclosure to include the specific items you cite in your response (e.g. ore reserve estimates, the net present value of the project, and a sensitivity analysis around key assumptions). Please also clarify in your disclosure that the criteria and the way that the criteria are applied or evaluated are consistent from period to period. Refer to paragraph 9 of IFRS 6. Please provide us with draft disclosure of your planned revisions.

Note 25 – Consolidated Net Debt, page 169

5. We reviewed your response to our prior comment 9, noting that management considers consolidated debt as a key metric to forecast, monitor and control liquidity. Please confirm in future filings you will revise your disclosure in Note 31 (v) to provide additional qualitative information on how consolidated net debt is used and the relevance of variances between periods. Refer to paragraph 135 of IAS 1. Please provide us with draft disclosure of your planned revisions.

You may contact James Giugliano at (202) 551-3319 or Brian Bhandari at (202) 551-3390 if you have questions regarding comments on the financial statements and related matters. You may contact John Coleman, Mining Engineer, at (202) 551-3610 with questions about

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engineering comments. Please contact Adam Turk at (202) 551-3657, Pamela Howell at (202) 551-3357 or me at (202) 551-3871 with any other questions.

Sincerely,

/s/Tia L. Jenkins

Tia L. Jenkins Senior Assistant Chief Accountant Office of Beverages, Apparel, and Mining