



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-4628

June 10, 2010

Mr. Desmond Morgan, Chief Financial Officer  
Rockwell Diamonds Inc.  
Level 0, Wilds View, Island of Houghton  
Corner Carse O'Gowrie & Boundary Road  
Houghton Estate, Johannesburg 2198  
P.O. Box 3011 Houghton, South Africa, 2041

**Re: Rockwell Diamonds Inc.**  
**Form 20-F for the Fiscal Year Ended February 28, 2009**  
**Filed September 14, 2009**  
**File No. 000-30588**  
**Response materials received on April 26, 2010**

Dear Mr. Morgan:

We have reviewed your filing and response materials 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.

General

1. Please file as correspondence on EDGAR the supplemental response materials provided to us on April 26, 2010.
2. Please provide a version of your amended Form 20-F that identifies all the revisions made to the initially filed document. This document is typically referred to as the "redlined" version.

Cover Page

3. We note you have not denoted on the cover of your draft Form 20-F for the fiscal year ended May 31, 2009 that it is an amendment to this document. Please adhere to the guidance in Rule 12b-15 of the Exchange Act when filing this amended document. In addition, please include an explanatory paragraph at the forefront of the document, stating the reasons for the amendment and directing readers to those sections where further details are provided.
4. As previously requested in our prior comment 1, please state the number of common shares outstanding as of the close of the period covered by this annual report.

Draft of Report on Independent Registered Public Accounting Firm

5. In our prior comment 4 we requested your accountants identify in further specificity the financial statement periods covered by their report. It appears they have made the appropriate revisions in their introductory paragraph; however, similar revisions were not made in the opinion paragraph. Please request your accountants to further revise their report to state that they opined on the consolidated income statements, the statements of changes in equity and the cash flow statements for the year ended February 28, 2009, the nine months ended February 29, 2008 and the year ended May 31, 2007, as indicated by the financial statements provided.

Note 17 – Differences Between Canadian and United States Generally Accepted Accounting Principles

6. Please expand your accounting policy disclosure to clarify that you use estimates of recoverable resources for purposes of calculating DD&A under both Canadian and U.S. GAAP. Further, please describe your methodology for estimating resources and the reasons that estimates of reserves are not undertaken. It should be clear from your disclosure that the application of the unit of production method using resources results in the depreciation of your mineral property acquisition costs on a rational and systematic basis.

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:

Mr. Desmond Morgan  
Rockwell Diamonds Inc.  
June 10, 2010  
Page 3

- 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 Jenifer Gallagher at (202) 551-3706 or Kimberly Calder, Assistant Chief Accountant at (202) 551-3701, if you have questions regarding comments on the financial statements and related matters. You may contact Ken Schuler, Mining Engineer, at (202) 551-3718 with questions about engineering comments. Please contact me at (202) 551-3686 with any other questions.

Sincerely,

Karl Hiller  
Branch Chief

cc: Mr. John Bristow