

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

September 23, 2010

Mr. Henry W. Knueppel Chairman and Chief Executive Officer Regal Beloit Corporation 200 State Street Beloit, Wisconsin 53511-6254

Re: Regal Beloit Corporation

Form 10-K for the Fiscal Year Ended January 2, 2010

Filed March 2, 2010 File No. 1-7283

Dear Mr. Knueppel:

We have reviewed your response letter dated September 8, 2010 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 10-K for Fiscal Year Ended January 2, 2010

Notes to the Consolidated Financial Statements

Note 8 – Debt and Bank Credit Facilities, page 40

1. We note your response to prior comment 10. You state that 'as the value of the debt was previously amortized up to its face value as of March 15, 2009, there was no equity component of the convertible Debt redemption that was subject to the provisions of ASC 470-20-40-20. Please explain this statement to us in greater detail. Explain how the amortization of the debt discount impacts the amount allocated to the equity component of the convertible notes and how this treatment is consistent with paragraph 470-20-35-17 of the FASB Accounting Standards Codification.

Mr. Henry W. Knueppel Regal Beloit Corporation September 23, 2010 Page 2

2. Further to the above, we note from your disclosures that at December 31, 2008 and 2009, the fair value of the convertible notes significantly exceeded the book value. Please tell us the fair value of the liability component of these Notes immediately before the extinguishment.

You may contact Gary Newberry at (202) 551-3761 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. Please contact Allicia Lam at (202) 551-3316 or Tim Buchmiller at (202) 551-3635 if you have questions on other comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3671.

Sincerely,

Kevin L. Vaughn Accounting Branch Chief