

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-4631

Mail Stop 4631

May 27, 2010

via U.S. mail and facsimile

Frank J.M. ten Brink, CFO Stericycle, Inc. 28161 North Keith Drive Lake Forest, Illinois 60045

RE: Stericycle, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2009

Filed February 26, 2010

Form 8-K Filed on February 4, 2010

Definitive Proxy Statement on Schedule 14A

Filed April 15, 2010

Form 10-Q for the Fiscal Quarter Ended March 31, 2010

File No. 0-21229

Dear Mr. ten Brink:

We have reviewed your response letter dated April 13, 2010, and have the following additional comments. Where indicated, we think you should revise your documents in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2009

Note 4 – Acquisitions and Divestitures, page 44

1. We note your response to comment 9 in our letter dated March 25, 2009. Specifically, we note that you are assessing materiality for providing the disclosures required by SFAS 141 by using the significance tests in Rule 1-02(w) of Regulation S-X. Please tell us how you determined that using significance tests for purposes of determining whether acquiree financial statements and pro forma financial information is to be provided is appropriate for purposes of determining whether footnote disclosures should be provided for material acquisitions within a fiscal year either individually or in the aggregate. We continue to request that you provide the appropriate disclosures required by ASC 850-10-50 (paragraphs 67-73 of SFAS

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141R) for material acquisitions either individually or in the aggregate. Please refer to SFAS 141 for those acquisition completed prior to the adoption of SFAS 141R. Further, to the extent that you have recognized a material amount of goodwill and/or other intangible assets, please disclose the amounts of goodwill and/or other intangible assets recognized by category and the period over which you are amortizing the other intangible assets, as appropriate. Please note that materiality should be assessed based on the extent to which the assets could be material to any quarterly or annual operating results and/or total stockholders' equity should the assets become fully impaired.

Definitive Proxy Statement on Schedule 14A

General

- 2. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.
- 3. We cannot locate any disclosure responsive to Item 407(c)(2)(vi) of Regulation S-K. Please advise.

Compensation Discussion and Analysis, page 13 Stock Options, page 15

4. Although you provide general disclosure relating to the procedure for determining the amount of securities granted, your disclosure does not meaningfully convey the reasons why you structure the program mechanics in the manner you have nor does it address the reasons why the actual amounts awarded for these forms of compensation were appropriate under the circumstances. Please understand that Item 402(b) of Regulation S-K requires a complete qualitative and quantitative discussion of how the Committee determined to award each specific form and level of compensation in 2009. To the extent applicable, this includes discussion of the various items of corporate and individual performance that the Compensation Committee considered in deriving specific levels of compensation. Please advise.

Form 10-Q for the Fiscal Quarter Ended March 31, 2010

Note 10 – Comprehensive Income, page 12

5. In future filings, please revise the table presented to clarify that the row including \$515,000 and \$19,000 attributable to non-controlling interests represents the non-controlling interests' share of net income rather than comprehensive income, as

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stated. In this regard, we note your presentation on page 4. Refer to ASC 810-10-50-1A for guidance.

Exhibits 31.1 and 31.2

6. As previously requested in comment 13 in our letter dated March 25, 2010, please revise the language in the 302 certifications to conform exactly to the language in Item 601(B)(31) of Regulation S-K. We note in particular that the language in paragraph 4(d) of the certification has been revised.

* * * *

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter on EDGAR that keys your responses to our comments and provides any requested information. Detailed response letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Tracey Houser, Staff Accountant, at (202) 551-3736, or in her absence, Al Pavot, Staff Accountant, at (202) 551-3738, or me at (202) 551-3355, if you have questions regarding comments on the financial statements and related matters. For other comments, please contact Errol Sanderson at (202) 551-3746, or in his absence, Jay Ingram, Legal Branch Chief, at (202) 551-3397.

Sincerely,

Terence O'Brien Accounting Branch Chief