



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

Mail Stop 7010

August 9, 2007

Via U.S. mail and facsimile

Mr. Mark C. Miller
President and Chief Executive Officer
Stericycle, Inc.
28161 North Keith Drive
Lake Forest, IL 60045

**Re: Stericycle, Inc.
Registration Statement on Form S-4
Filed July 16, 2007
File No. 333-144613**

**Form 10-K for the fiscal year ended December 31, 2006
Filed March 1, 2007
File No. 000-21229**

**MedSolutions, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed July 16, 2007
File No. 000-32995**

Dear Mr. Miller:

We have reviewed the above-referenced filings and have the following comments. Where indicated, we think you should revise these 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.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in the filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Registration Statement on Form S-4

General

1. Please provide us with copies of all materials prepared by the valuation advisor and provided to MedSolutions' board of directors or its representatives, such as board books and all transcripts, summaries and video presentation materials.
2. Please provide us with all financial projections and forecasts that were prepared by the parties or their advisors. In this regard, we note the disclosure on page 42 regarding the forecasts reviewed by the valuation advisor. Please note that any such material forecasts must be disclosed in the filing.
3. We note the omitted information throughout your filing. It does not appear to be information you may exclude in reliance upon Rule 430A of Regulation C. Please be advised that all omitted information must be included in your filing prior to effectiveness.
4. Please file on EDGAR the form of letter of transmittal and related documents, including the consideration election form.
5. Please update the financial statements and auditor consents pursuant to Article 3-12 of Regulation S-X.
6. Please revise the pro forma balance sheet data to give effect to the estimated SFAS 141 fair value adjustments and to the merger consideration.
7. We note that MedSolutions' ratio of the allowance for doubtful accounts to gross receivables declined significantly @3/31/07. Given the materiality of bad debt expense to earnings, please explain this variance in MD&A. Specifically address any material changes in the aging of the accounts receivable portfolio.
8. Page 4 of the Stericycle form 10-K states that the estimated U.S. market size is \$3.5 billion. This approximates a 16% increase over the prior year. Further, in comparing market size data with the U.S. sales data on p. 55, it appears that company's market share in the U.S. market has increased in the periods presented. These known factors should be addressed in MD&A because they can reasonably be expected to have a material impact on historical and future revenues. See Section 501.01 of the Financial Reporting Codification.
9. Page 23 of the Stericycle form 10-K attributes internal revenue growth to increases in the Steri-Safe, Bio Systems, and returns management revenue streams. However, it does not appear that the existing disclosure enables a

reader to fully understand the extent to which sales were impacted by: changes in the number of active customer accounts (page 21); price reductions (page 13); exchange rate fluctuations (page 14); revenue increases in specific countries (page 55); realized benefits from changes in sales/marketing strategies and expenditures; and changes in average revenue per account. Similarly, it does not appear that the following factors were fully addressed in explaining gross margin variances: an increase in the proportion of revenues generated from higher-margin small quantity generators (SQG), and; an increasing rate of SQG customers subscribing for higher-priced service offerings (select vs. preferred). We are aware that certain of this data is regularly provided to analysts. Absent the requested clarification in MD&A, readers could errantly conclude that all of these factors have had an equivalent and/or immaterial impact on the company's operating results. In future filings, please provide MD&A disclosures addressing these and any other known factors that have had, or can reasonably be expected to have, a material impact on revenues and operating results. See Section 501.12.b.4 of the Financial Reporting Codification.

10. Section 501.12.b.1 of the Financial Reporting Codification contains relevant guidance on the disclosure requirements for key indicators of operating performance. This includes a consideration of the data provided to analysts, in order to assess whether such data would materially increase an investor's understanding of the company's operating results that are explained in MD&A. It appears that the following data has been provided to analysts during the periods presented: quarterly quantification of revenues derived from SQG accounts for both domestic and international operations; quarterly and annual quantification of new Bio Systems accounts; changes in proportion of SQG revenues comprised by Steri-Safe customers; changes in proportion of Steri-Safe customers subscribing to higher-margin services; quarterly number of new Steri-Safe accounts on higher levels as percentage of total Steri-Safe accounts on higher levels; quarterly quantification of SQG and LQG account growth; quantification of new MedWaste contracts; quarterly and annual quantification of revenues generated from pharmaceutical services (elsewhere identified as a potential growth sector); and progress and impact of Bio Systems optimal route density achievements. We understand that certain data could reasonably be viewed as immaterial and not warranting MD&A disclosure. However, given the pronounced disparity between these disclosures and the information contained in MD&A, we remind management of the requirement to reassess this issue when preparing future filings with the Commission.
11. The SFAS 131 data reflects substantial disparities between the pre-tax margins and revenue growth rates of the U.S. and International segments. In future filings, please revise MD&A to separately discuss the operating results of your

reportable segments. See Section 501.12.b.2 of the Financial Reporting Codification.

12. Page 38 of the Stericycle form 10-K states that customer relationship intangible assets have a weighted average useful life of 38.9 years. Given the materiality of this asset, please expand the critical accounting estimates disclosure (p. 22) in future filings to identify the specific factors considered by management in deriving this estimate. Reconcile this extended amortization period with the disclosure on page 8 that describes the industry as highly competitive with minimal barriers to entry. Please also state whether the 38.9 year life is consistent with the company's historical rate of active customer retention.
13. Page 55 of the Stericycle form 10-K does not include "similar economic characteristics" in the listed aggregation criteria. We also note the substantial growth in the company's operations over the periods presented. In order for us to better understand your compliance with paragraph 17 of SFAS 131, please provide us with copies of each financial report that the CODM received during 2006 and through 6/30/07. Multiple versions of the same report may be excluded. You may request that the reports be returned upon completion of our review. See Section 240.12b-4 of the Exchange Act Rules.
14. Page 13 of the Stericycle 3/31/07 form 10-Q discloses the potential write-down of incineration equipment. In future filings, please disclose the current net carrying value of this equipment so that readers can better assess the materiality of assets at risk.

Cover Page of Registration Statement

15. Please clarify the manner in which the value of the options was determined, as discussed in clause (ii) of footnote (2).

Outside Front Cover Page of Prospectus

16. Please disclose the title and total amount of securities being offered. Please also briefly describe the securities. See Item 501(b)(2) of Regulation S-K.

References to Additional Information

17. The page reference in the last sentence of the first paragraph does not appear to be correct. Please revise accordingly.

Questions and Answers about the Merger and the Special Meeting, page 1

About the Special Meeting, page 4

18. Please revise A18 to clearly state that the number of shares committed to vote to approve the proposed merger is sufficient, without any additional votes, to adopt the merger agreement and approve the merger.

Summary, page 9

19. Please disclose the aggregate amount of consideration to be paid in the merger.
20. Please describe the manner in which the merger consideration may be adjusted, including the adjustments to the repayment of the promissory notes. Please also discuss the reasonable likelihood of the adjustment provisions being triggered.
21. Please briefly discuss the advantages and disadvantages of the proposed merger for security holders.

Exchange of MedSolutions Shares (page)

22. Please briefly describe the terms of the promissory notes.

Material United States Federal Income Tax Consequences..., page 10

23. Please briefly summarize the material tax consequences.

Opinion of MedSolutions' Valuation Advisor (page 37), page 10

24. The valuation advisor opinion clearly states that it is not a "fairness opinion" in the third paragraph. Please explain the type of opinion the valuation advisor has provided and explain how it differs from a fairness opinion. Please also comply with this comment with respect to the last risk factor on page 18.
25. Please briefly disclose the conclusion of the valuation advisor's opinion.

Interests of Certain MedSolutions Officers and Directors..., page 11

26. Please briefly describe the interests of the officers and directors.
27. We note the statement in the third sentence. Please clearly disclose whether any directors were disinterested with respect to vote on the proposed merger.

Risk Factors, page 16

28. Please provide a risk factor addressing MedSolutions' long-term liquidity risk. In this regard, we note the negative operating cash flows in 2007, the significant working capital deficit, and the uncertainty regarding future funding sources.

The opinion obtained by MedSolutions..., page 18

29. Please also discuss the fact that the valuation advisor had no financial data for the period after March 31, 2007 through the valuation date.

The promissory notes are not secured obligations..., page 19

30. Please disclose the aggregate amount of Stericycle's indebtedness, including the amount of indebtedness that will be senior to the promissory notes.

Payments under the promissory notes are subject to reduction, page 20

The principal amount of the promissory notes is subject to reduction, page 20

31. Please illustrate the reductions and disclose the maximum possible reductions.

The Merger, page 36

32. Please disclose how you intend to finance the cash portion of the consideration.

Background of the Merger, page 34

33. It appears that MedSolutions only considered one alternative to the merger with Stericycle between March 2006 and the signing of the merger agreement in July 2007. Please disclose whether MedSolutions considered any other alternatives. In this regard, we note the disclosure in the third bullet point under the heading "MedSolutions' Reasons for the Merger" on page 39.
34. Your discussion of the background does not appear to discuss the negotiation of the material terms of the merger agreement, other than the consideration. Please expand the disclosure to discuss these negotiations, in particular the negotiations involving merger consideration adjustments.
35. Please explain why the merger consideration was structured to be paid partially in promissory notes.
36. Please explain the gap in the background between May 2006 and October 2006.

37. Please explain the reasons why MedSolutions contacted Stericycle in October 2006 to continue discussions.
38. In light of the interests of the directors in the proposed merger, please discuss the extent to which MedSolutions' board of directors considered appointing a special committee of independent directors to review the proposed merger.

MedSolutions' Reasons for the Merger, page 39

39. The disclosure in the bullets points identifies factors considered, but does not explain in sufficient detail why those factors either were favorable, neutral or negative. Please revise accordingly.
40. Please discuss the consideration MedSolutions' board of directors gave to the fact that security holders would no longer have an interest in the business and the fact that the merger consideration was subject to adjustment.
41. Please discuss the consideration that MedSolutions' board of directors gave to the fact that the valuation advisor had no financial data for the period after March 31, 2007.

Opinion of MedSolutions' Valuation Advisor, page 41

42. Please disclose whether the valuation advisor considered the possible impact of the merger consideration adjustments.

General, page 41

43. We note the disclosure in the second paragraph. This disclosure is vague. Please revise to be more specific

Assumptions Made and Qualifications...., page 42

44. Please disclose the basis for the assumptions in the first paragraph.
45. We note the assumption in the fourth bullet point on page 43. Please advise us as to whether there were any significant events that affected this assumption.

Guideline Company Analysis, page 44

46. Please briefly revise to disclose the criteria utilized by the valuation advisor in selecting the companies evaluated. Please also disclose whether any companies satisfying these criteria were nonetheless excluded from the analysis and, if so, disclose the basis for such exclusion.

Appraisal and Dissenters' Rights, page 45

47. Please delete the term "brief" from the first sentence of the second paragraph.
48. Please remove the statement in the second sentence of the second paragraph that the summary is not complete. A summary, by its nature, is not complete and the statement suggests that you have not summarized all material terms. Please also revise this sentence to remove the qualification of the summary, as your security holders are entitled to solely rely on the disclosure in the filing.

The Merger Agreement, page 54

49. Please be advised that, notwithstanding the statement in the second introductory paragraph, you are responsible for considering whether additional disclosures may be required to make the statements included in the filing not misleading.

Merger Consideration, page 54

50. The page references in the fourth sentence of the first paragraph and in the last sentence of the third paragraph do not appear to be correct. Please revise.

Description of Promissory Notes, page 72

51. Please delete the term "certain" from the first sentence of the first introductory paragraph, as you must describe all material terms.
52. Please remove the statement in the second sentence of the first introductory paragraph that the summary is not complete. A summary, by its nature, is not complete and the statement suggests that you have not summarized all material terms.
53. Please revise the first sentence of the second introductory paragraph to remove the implication that your security holders do not have rights with respect to the disclosure in the filing.

Where You Can Find More Information, page 213

54. We note the Form 8-K you have incorporated by reference. It appears that this Form 8-K was filed on May 17 and not May 16. Please revise accordingly.

Annex B

55. We note the statements in the second to last paragraph. Please revise to remove the implication that security holders are not entitled to rely on the opinion.

Item 21. Exhibits and Financial Statement Schedules, page II-1

56. Please file the voting agreement as an exhibit to the registration statement.

Item 22. Undertakings, page II-3

57. Please provide the undertakings required by Item 512(a) of Regulation S-K.

Form 10-K for the fiscal year ended December 31, 2006

Item 9A. Controls and Procedures, page 60

58. We note the disclosure in paragraph (b). It does not appear that this disclosure fully complies with the requirements of Item 308(c) of Regulation S-K. In this regard, we note that Item 308(c) is not based on a significance factor. We also note the disclosure under “Internal Control Over Financial Reporting” on page 14 of your Form 10-Q for the quarter ended March 31, 2007.

Preliminary Proxy Statement on Schedule 14A

59. Please provide a risk factor addressing the company’s long-term liquidity risk. In this regard, we note the negative operating cash flows in 2007, the significant working capital deficit, and the uncertainty regarding future funding sources.
60. We note that the ratio of the allowance for doubtful accounts to gross receivables declined significantly @3/31/07. Given the materiality of bad debt expense to earnings, please explain this variance in MD&A. Specifically address any material changes in the aging of the accounts receivable portfolio.
61. Please update the financial statements pursuant to Item 310(g) of Regulation S-B.

* * * *

As appropriate, please amend the filings in response to these comments. You may wish to provide us with marked copies of the amendments to expedite our review. Please furnish a cover letter with the amendments that keys your responses to our comments and provides any requested information. Detailed cover letters greatly

facilitate our review. Please understand that we may have additional comments after reviewing the amendments and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include all information required under the Securities Act and the Exchange Act and that they have provided all information investors require for an informed investment decision. Since the companies and their management are in possession of all facts relating to the companies' disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, in the event Stericycle requests acceleration of the effective date of its registration statement, Stericycle and MedSolutions should each furnish a letter, at the time of such request, acknowledging that:

- staff comments, changes in disclosure in response to staff comments or the staff, acting pursuant to delegated authority, declaring the filing effective, does not foreclose the Commission from taking any action with respect to the filings;
- the company is responsible for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments or the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of the filings or in response to our comments on the filings.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act and the Exchange Act as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Mr. Mark C. Miller
Stericycle, Inc.
August 9, 2007
Page 11

Please contact Al Pavot, Staff Accountant, at (202) 551-3738 or Terence O'Brien, Accounting Branch Chief, at (202) 551-3355 if you have questions regarding comments on the financial statements and related matters. Please contact Andrew Schoeffler, Staff Attorney, at (202) 551-3748 or, in his absence, the undersigned at (202) 551-3767 with any questions.

Sincerely,

Jennifer Hardy
Branch Chief

cc: Mr. Matthew H. Fleeger
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