



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

Mail Stop 7010

August 18, 2006

By U.S. Mail and Facsimile

Mr. R. Michael McEntee
Chief Financial Officer
Fansteel Inc.
570 Lake Cook Road, Suite 200
Deerfield, Illinois, 60015

Re: Fansteel Inc.
Form 10-K for the Fiscal Year Ended December 31, 2005
Form 10-Q for the Fiscal Quarter Ended March 31, 2006
Form 10-Q for the Fiscal Quarter Ended June 30, 2006
File No. 001-08676

Dear Mr. McEntee:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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 your filing. 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.

Form 10-K for the Fiscal Year Ended December 31, 2005

Management's Discussion and Analysis, page 15

Results of Operations, page 16

1. Please revise MD&A in future filings to provide a more comprehensive discussion and analysis of the specific facts and circumstances that impacted your results of operations during the periods presented. Revise future filings to quantify the impact of changes in volume and changes in prices on sales and to provide a more

comprehensive discussion and analysis of operating income, including separate disclosures related to the reasons for changes in cost of products sold and selling, general and administrative expenses and the percentages of these costs relative to sales.

Liquidity and Capital Resources, page 20

2. It appears to us that your liquidity position may be deteriorating and that MD&A does not adequately disclose and discuss negative liquidity trends, their potential consequences and your plans to address them. Please revise future annual and quarterly filings to:
 - Address the potential implications and risks associated with: significant increases in short-term borrowings; limited amounts of available credit; negative working capital; and negative operating cash flows from continuing and discontinued operations;
 - Disclose the most restrictive debt covenants and your compliance with them, quantified, to the extent applicable;
 - Discuss the potential consequences of the negative liquidity trends; and
 - Discuss your plans to address the negative liquidity trends, including the potential consequences if you are unable to reverse them. Specifically address how you intend to fund the repayment of short-term borrowings due January 15, 2007.

In addition, based on the renewal date of the prior and amended revolving facilities, please explain why they are classified as current. If the facilities include terms, such as a subjective acceleration clause, please ensure that those terms and the related risks are adequately disclosed.

3. In future filings, please expand your discussion of operating cash flows to explain the reasons for significant fluctuations in working capital items (i.e., accounts receivable, inventories, and accounts payable) as applicable. Please refer to Section IV.B. of Release No. 33-8350, *Interpretation - Commission's Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations* for guidance.

Critical Accounting Policies, page 22

4. Please revise your disclosures in future filings to provide a more comprehensive analysis and discussion of the significant estimates and assumptions you used to determine critical accounting estimates and, to the extent applicable, the potential impact of different estimates and assumptions. For example, revise your disclosures related to:
 - Accounts receivable to disclose and discuss the significant allowance you recorded during 2004 and the significant reversal you recorded during 2005;

- Excess reorganization value to disclose and discuss the significant assumptions you used to determine no impairment and address and quantify the potential impact of different assumptions; and
- Environmental liabilities to disclose and discuss the significant assumptions underlying your obligations and quantify the potential impact of different assumptions.

Consolidated Statements of Cash Flows, page 29

5. Please revise future filings to disclose the amount of interest paid each period as required by paragraph 29 of SFAS 95, *Statement of Cash Flows*.

Note 2 – Significant Accounting Policies, page 30

General

6. Please revise future filings to add an accounting policy regarding your environmental remediation obligations and costs. See SOP 96-1, *Environmental Remediation Liabilities*, for guidance.

Inventories, page 30

7. We note that you changed your method for valuing inventory from LIFO to FIFO on January 23, 2004. Please supplementally tell us the reason for the change and why this method is preferable. In addition, please tell us if a preferability letter was filed as required by Exhibit 601(B)(18) of Regulation S-K or if not, why not.

Note 6 – Discontinued Operations including Certain Environmental Remediation, page 40

8. In regard to your bankruptcy proceedings and discontinued operations, please address the following:
 - Explain to us the structure of and your accounting for the special purpose subsidiaries you formed pursuant to the bankruptcy plan and help us understand your obligations and their obligations related to the environmental matters, including when and how the amounts of contingent notes will be determined and who will be liable;
 - Explain to us how each of the activities you record in discontinued operations meets the requirements of paragraph 41 of SFAS 144;
 - Provide us a roll-forward of the environmental liabilities during the periods presented;
 - Tell us how you determined the timing of the cash payments of the environmental liabilities to calculate their present value;

- Tell us what is included in operating cash flows from discontinued operations during each period presented;
 - Tell us where the payments related to the notes to the EPA and PBCG are reflected in your statements of cash flows; and
 - Tell us the nature of the specific assets and liabilities related to discontinued operations. We note that the segment note in your Form 10-Q for the fiscal quarter ended June 30, 2006 identified discontinued operation assets of \$5,139,583 at December 31, 2005. Explain to us how your balance sheet presentation complies with paragraph 46 of SFAS 144.
9. Please tell us whether it is reasonably possible that you will incur material environmental remediation costs in excess of amounts accrued. If additional material losses are reasonably possible, tell us, and revise future filings to disclose, the range of reasonable possible additional losses.
10. Please tell us, and clarify in future filings, if your balance sheets include any receivables representing anticipated insurance recoveries.
11. Since disbursements for your environmental remediation activities are expected to continue over the long term, please tell us, and disclose in future filings, estimated remediation payments for each of the next five years.

Note 7 – Property Held for Sale, page 43

12. In light of the extended time period that the Lexington facility has been held for sale, please tell us, and revise future filings to clarify, how you concluded that the carrying value is recoverable.

Note 14 – Business Segments, page 50

13. Please provide us copies of the internal reports your CODM uses to manage and operate your business.

* * *

Please respond to these comments within 10 business days, or tell us when you will provide us with a response. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please furnish your response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your 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 Exchange Act of 1934 and that they have provided all information

Mr. R. Michael McEntee
Fansteel Inc.
August 18, 2006
Page 5

investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in their filings;
- 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.

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 our review of your filing or in response to our comments on your filing.

If you have any questions regarding these comments, you may contact Dale Welcome, Staff Accountant, at (202) 551-3865, Anne McConnell, Senior Staff Accountant, at (202) 551-3709 or, in their absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash
Accounting Branch Chief