



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

DIVISION OF  
CORPORATION FINANCE

*Via U.S. Mail and facsimile (713/615-5794)*

April 13, 2011

Billy F. Mitcham, Jr.  
President and Chief Executive Officer  
Mitcham Industries, Inc.  
8141 SH 75 South, P.O. Box 1175  
Huntsville, Texas 77342

**Re: Mitcham Industries, Inc.  
Registration Statement on Form S-3  
Filed March 18, 2011  
File No. 333-172935**

Dear Mr. Mitcham:

We have limited our review of your registration statement to those issues we have addressed in our 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 by amending your registration statement and providing the requested information. Where 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 registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. Please provide a detailed explanation as to the availability of General Instruction I.B.1 to the subject transaction. Provide a specific calculation of how you determined that you the aggregate market value your voting and non-voting common equity held by non-affiliates equals or exceeds \$75 million.
2. Please note that at the time of effectiveness, the registration statement must be in compliance with the financial statement requirements for subsidiary guarantors as set forth in Rule 3-10 of Regulation S-X. Please advise us as to how you plan to comply with these requirements. See SEC Release No. 33-7878 (August 15, 2000).

Calculation of Registration Fee Table

3. We note disclosure in footnote 1 that securities registered may be sold separately or as units with the other securities registered under the Form S-3. Please revise to identify the units as a separate security, pay the appropriate registration fee, and revise the registration statement, including the Calculation of Registration Fee table, the prospectus cover page and description of securities section to include the units. Please arrange for counsel to opine on the legality of the units.

Ratio of Earnings to Fixed Charges, page 6

4. The ratio of earnings to fixed charges information required by Item 503(d) of Regulation S-K should be included in your registration statement prior to effectiveness. Please revise.

Exhibit 5.1

5. We note the date limitation on page 5 of counsel's legal opinion. Please have counsel provide a new legal opinion dated at or in close proximity to the date of effectiveness. Alternatively, counsel may delete the date qualification.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and 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.

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Please refer to Rules 460 and 461 regarding requests for acceleration. 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 of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Sherry Haywood, Staff Attorney at (202) 551-3345 or, in her absence, me at (202) 551-3397 with any questions.

Sincerely,

Jay Ingram  
Legal Branch Chief

cc: Gillian A. Hobson (*Via facsimile 713/615-5794*)  
Vinson & Elkins L.L.P.  
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1001 Fannin Street, Suite 2500  
Houston, Texas 77002