



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

DIVISION OF
CORPORATION FINANCE

May 19, 2016

Mail Stop 4631

Via E-Mail

Robert P. Capps
Co-Chief Executive Officer and
Chief Financial Officer
Mitcham Industries, Inc.
8141 SH 75 South
P.O. Box 1175
Huntsville, TX 77342

**Re: Mitcham Industries, Inc.
Amendment No. 4 to Registration Statement on Form S-1
Filed May 18, 2016
File No. 333-208177**

Dear Mr. Capps:

We have reviewed your amended registration statement and have the following comments. Please respond to this letter by amending your registration statement and providing the requested information. If 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 our comments, we may have additional comments.

Capitalization, page 23

1. We note that you have provided "as adjusted" information to reflect the offering and the application of the net proceeds as described in "use of proceeds." Given that your use of proceeds information is currently blank, please revise your presentation to provide additional footnote disclosure which quantifies the proceeds from this offering that you have estimated in your presentation. Please also clearly indicate in the footnotes to your capitalization table how you computed each "as adjusted" amount.
2. Additionally, please reconcile your disclosure in footnote (1) which indicates that as of May 12, 2016, borrowings of approximately \$14.1 million were outstanding, with your disclosure on page 22 which states that as of May 12, 2016 you had approximately \$13.1 million drawn under your credit facility, or revise your filing as appropriate.

Robert P. Capps
Mitcham Industries, Inc.
May 19, 2016
Page 2

Description of the Series A Preferred Stock, page 27

Conversion Rights, page 31

3. We note your disclosure on page 32 that the conversion rights would be subject to shareholder approval of an amendment to your articles of incorporation to increase the number of authorized shares of preferred stock. Please explain why the exercise of conversion rights would necessitate an increase in the number of authorized shares of preferred stock. Alternatively, please revise your disclosure to refer, if true, to the need for an increase in the number of authorized shares of common stock. Please add corresponding disclosure to the risk factor on page 17 that deals with the risk associated with a holder of preferred stock not being able to exercise its conversion rights.

You may contact Melinda Hooker (Staff Accountant) at 202-551-3732 or Dale Welcome (Staff Accountant) at 202-551-3865 if you have questions regarding comments on the financial statements and related matters. Please contact Frank Pigott (Staff Attorney) at 202-551-3570 or me at 202-551-3729 with any other questions.

Sincerely,

/s/ Craig Slivka, for

Pamela Long
Assistant Director
Office of Manufacturing and
Construction

cc: Gillian A. Hobson
Vinson & Elkins, L.L.P.