



April 22, 2016

Pamela Long
Assistant Director
Office of Manufacturing and Construction
United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-3561

**Re: Mitcham Industries, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed December 24, 2015
File No. 333-208177
Form 10-K for Fiscal Year Ended January 31, 2015
File No. 000-25142
Response dated January 12, 2016
File No. 0-00000**

Ladies and Gentlemen:

Set forth below are the responses of Mitcham Industries, Inc. (the “**Company**”, “**we**,” “**us**” or “**our**”) to comments received from the staff of the Division of Corporation Finance (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) by letter dated January 22, 2016, with respect to Amendment No. 1 to Registration Statement on Form S-1, File No. 333-208177, filed with the Commission on December 24, 2015 (the “**Registration Statement**”), the Annual Report on Form 10-K for the Fiscal Year Ended January 31, 2015, File No. 000-25142, filed with the Commission on April 8, 2015 (the “**Form 10-K**”), and the Company’s response letter, dated January 12, 2016, to comments received from the Staff by letter dated January 7, 2016 (the “**Response Letter**”).

Concurrently with the submission of this letter, we are filing through EDGAR Amendment No. 2 to the Registration Statement (“**Amendment No. 2**”). For your convenience, we have also hand delivered five copies of this letter, as well as five copies of Amendment No. 2 marked to show all changes made since the first amendment to the Registration Statement.

For your convenience, each response is prefaced by the exact text of the Staff’s corresponding comment in bold, italicized text. All references to page numbers and captions correspond to the Form 10-K unless otherwise specified.

General

- 1. We have read your response to prior comment one of our letter dated January 7, 2016. In future periodic filings, please provide disclosure to explain the factors that you considered when determining that your redeemable preferred stock is non-redeemable and, as such, your determination that the stock should be classified as equity. Additionally, please tell us what consideration you have given to revising the name of this security since it is not considered to be redeemable under the applicable authoritative guidance you cited in your response.***

RESPONSE: We acknowledge the Staff's comment. In future periodic filings, we will provide the above noted disclosure as appropriate. For example, we included the following disclosure on page 43 of the Company's Annual Report on Form 10-K for the period ended January 31, 2016:

We have filed with the SEC a registration statement pursuant to which we may offer for sale an undetermined amount of preferred stock. Such preferred stock equity issuance, should the offering be completed, (i) would allow for redemption on at our option (even in the event of a change of control), (ii) would not be anticipated to grant holders with voting control of our Board of Directors and (iii) would only provide holders with a conversion option (into common stock) upon a change of control which upon conversion would be subject to a limit on the maximum number of shares of common stock to be issued.

In response to the Staff's comment and our determination that the stock should be classified as equity because it is not considered to be redeemable under the applicable authoritative guidance, we have revised the name of the security from "Series A Cumulative Redeemable Preferred Stock" to "Series A Cumulative Preferred Stock." Please see the cover page of the prospectus included in Amendment No. 2.

Form 10-K for the Fiscal Year Ended January 31, 2015

Critical Accounting Policies, page 42

Income Taxes, page 44

- 2. We read your response to prior comment two. In future periodic reports, please disclose the amount of income that must be generated to fully realize your net operating loss and tax credit carry forwards.***

RESPONSE: We acknowledge the Staff's comment. In future periodic reports, we will provide the above noted disclosure as appropriate. For example, we included the following disclosure on page 51 of the Company's Annual Report on Form 10-K for the period ended January 31, 2016:

The deferred tax asset in the United States relates primarily to net operating loss carryovers. Although we do not have a history of such loss carryovers expiring without being utilized and the earliest expiration of a loss carryforward in 2025, we have a recent history of taxable losses in the United States and future earnings in this jurisdiction are uncertain. In order to fully utilize the deferred tax assets in the United States we must generate taxable income of approximately \$40.0 million.

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Please direct any questions that you have with respect to the foregoing or if any additional supplemental information is required by the Staff, please contact Gillian A. Hobson of Vinson & Elkins L.L.P. at (713) 758-3747.

Very truly yours,

Mitcham Industries, Inc.

By: /s/ Robert P. Capps

Name: Robert P. Capps

Title: Co-Chief Executive Officer and Chief Financial Officer

Enclosures

cc: Frank Pigott (Staff Attorney)
Gillian A. Hobson (Vinson & Elkins L.L.P.)