

January 12, 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. 00025142

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 7, 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"), and the Annual Report on Form 10-K for the Fiscal Year Ended January 31, 2015, File No. 00025142, filed with the Commission on April 8, 2015 (the "Form 10-K").

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 two of our letter dated December 17, 2015. Please further tell us what consideration you gave to classifying your redeemable preferred stock outside of permanent equity. Please refer to ASC 480-10-S99.

RESPONSE:

ASC 480-10-S99 defines "Non-Redeemable Preferred Stock" as any preferred stock that does not meet the criteria for classification as "Redeemable Preferred Stock." "Redeemable Preferred Stock" is defined as any stock with the following attributes:

- (i) The issuer undertakes to redeem at a fixed or determinable price on the fixed or determinable date or dates, whether by operation of a sinking fund or otherwise; or
- (ii) Is redeemable at the option of the holder; or
- (iii) Has conditions for redemption which are not solely within the control of the issuer.

The preferred stock is redeemable only at the option of the Company or upon events within the control of the Company, accordingly it does not meet the above definition of "Redeemable Preferred Stock" and therefore is "Non-Redeemable Preferred Stock." As such, it is appropriate to classify the

preferred stock within permanent equity as provided for in ASC 480-10-S99 (ASR 268.03). In determining that redemption is solely within the control of the Company we noted the following factors and guidance per ASC 480-10-S99-3A (paragraphs 5-11):

- The terms of the preferred stock allow for redemption only at the option of the Company;
- Holders of the preferred stock are not anticipated to have representation on the Company's Board of Directors and therefore will not have voting control of the Board of Directors;
- Upon a change of control, the holders of the preferred stock have a conversion option (into common stock), but no redemption option, and the conversion option is subject to a limit on the maximum number of shares of common stock to be issued; and
- The preferred stock has no other provisions which might allow holders to redeem at their option (such as registration obligations, covenants or earnings targets).

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

Critical Accounting Policies, page 42

Income Taxes, page 44

2. We note your response to prior comment 13. Please provide to us the MII's historical taxable income or loss for the last five fiscal years.

Additionally, please tell us how much income MII will be required to generate to fully realize its net operating loss and tax credit carryforwards.

RESPONSE:

MII's historical taxable income for the last five fiscal years is as follows:

Fiscal year ended January 31,	Taxable income (loss)
2015	(2,898,000)
2014	(5,146,000)
2013	780,000
2012	18,883,000
2011	(1,527,000)

Taxable income of approximately \$20.4 million is required to fully utilize MII's net operating loss and tax credit carryforwards.

Notes to the Consolidated Financial Statements

1. Organization and Summary of Significant Accounting Policies, page F-9

Change in Functional Currency, page F-12

3. We note your response to prior comment 16. For each of MML, MEL, MHL, and the Colombia branch, please tell us the facts and circumstances of their respective economic environments that led to your determination to change the functional currency at each subsidiary or branch from its local currency to the U.S. dollar, including providing us with a quantitative analysis of each of the economic factors in ASC 830-10-55-5 you considered in your determination; including providing, at a minimum: the percentage of revenue, costs and expenses, total assets, and borrowings denominated in U.S. dollars for each of the last three fiscal years at each of the impacted subsidiaries and branch. Additionally, please tell us the nature of the transactions your parent has with its subsidiaries and branch.

RESPONSE: We acknowledge the Staff's comment and provide the facts and circumstance of the economic environments of MML, MEL, MHL and our Colombian branch at February 1, 2014, below.

MML

MML was established in fiscal 2012 and was capitalized via a contribution of certain lease pool equipment and existing rental contracts from MII through MML. These transactions were denominated in U.S. dollars. Its first full year of operations was fiscal 2013. Based upon experience during fiscal 2013 and fiscal 2014, and discussions with existing and potential customers, it was determined that essentially all customer contracts could, and would, be denominated in U.S. dollars rather than local currency. Accordingly, sales and cash inflow indicators were determined to be in U.S. dollars. Additions to MML's lease pool subsequent to its initial capitalization had not been material and it was determined in late fiscal 2014 that essentially all incremental purchases of equipment would be made from MII, due to MII relationships with suppliers, or MML's equipment requirements would be satisfied with the sublease of equipment from MII. Each of these transactions would be denominated in U.S. dollars. Accordingly, cost and expense indicators would be denominated primarily in U.S. dollars. The percentage of revenue, costs and expenses and total assets denominated in U.S. dollars for each of the last three fiscal years were as follows:

	Year ended	Year ended	Year ended
	January 31, 2015	January 31, 2014	January 31, 2013
Revenue	100%	100%	99%
Costs and expenses	82%	90%	89%
Total assets	98%	91%	98%

MML's transactions with its parent, MII, consist of purchases of lease pool equipment from time to time, the short-term sub-lease of equipment from time to time and provision of administrative and management services by MII pursuant to an Inter-company Services Agreement.

Financing indicators – MML has been self-sufficient from a financing stand-point since its inception and has not required financing support. MML has provided short-term financing to MHL via an Inter-company Credit Agreement from time to time (see discussion of MHL below).

MEL

MEL was established in fiscal 2012 but did not have significant revenue activity until mid-fiscal 2014. Based upon experience during fiscal 2014, and discussions with existing and potential customers, it was determined that essentially all customer contracts could, and would, be denominated in U.S. dollars rather than local currency. Accordingly, sales and cash inflow indicators were determined to be in U.S. dollars. At that point it was also determined that the majority of MEL's lease pool equipment would be purchased from MII, due to MII relationships with suppliers, or MEL's equipment requirements would be satisfied with the sub-lease of equipment from MII. Each of these transactions would be denominated in U.S. dollars. Accordingly, cost and expense indicators would be denominated primarily in U.S. dollars. The percentage of revenue, costs and expenses and total assets denominated in U.S. dollars for each of the last three fiscal years were as follows:

	Year ended	Year ended	Year ended
	January 31, 2015	January 31, 2014	January 31, 2013
Revenue	100%	100%	100%
Costs and expenses	57%	70%	61%
Total assets	93%	90%	93%

MEL's transactions with its parent, MII, consist of purchases of lease pool equipment from time to time, the short-term sub-lease of equipment from time to time and provision of administrative and management services by MII pursuant to an Inter-company Services Agreement.

Financing indicators – During 2014, MEL's financing needs increased and it was determined that these needs would be provided by inter-company borrowing arrangements. Financing for MEL is provided pursuant to an Inter-company Credit Agreement with MHL. This agreement is denominated in U.S. dollars (see discussion of MHL below).

MHL

MHL was established in fiscal 2012 and is a holding company for the Company's foreign subsidiaries. It has no operations. MHL does provide financing services to its subsidiaries pursuant to a series of Inter-company Credit Agreements. These agreements are denominated in U.S. dollars. Effective February 1, 2014 the level of this financing activity had

increased. The percentage of interest income, costs and expenses and total assets denominated in U.S. dollars for each of the last three fiscal years were as follows:

	Year ended	Year ended	Year ended
	<u>January 31, 2015</u>	January 31, 2014	January 31, 2013
Interest Income and Dividends	100%	100%	100%
Costs and expenses	89%	86%	91%
Total assets	100%	100%	100%

MHL's transactions with MII consist of financing transactions pursuant to an Inter-company Credit Agreement.

Colombian branch

Based upon experience during fiscal 2014 and fiscal 2013, and discussions with existing and potential customers, it was determined that essentially all customer contracts could, and would, be denominated in U.S. dollars rather than local currency. Accordingly, sales and cash inflow indicators were determined to be in U.S. dollars. At that point it was also determined that the majority of the branch's lease pool equipment would be purchased from MII, due to MII relationships with suppliers, or the branch's equipment requirements would be satisfied with the sub-lease of equipment from MII. Each of these transactions would be denominated in U.S. dollars. Accordingly, cost and expense indicators would be denominated primarily in U.S. dollars. The percentage of revenue, costs and expenses and total assets denominated in U.S. dollars for each of the last three fiscal years were as follows:

	Year ended January 31, 2015	Year ended January 31, 2014	Year ended January 31, 2013
Revenue	97%	96%	97%
Costs and expenses	90%	80%	87%
Total assets	76%	86%	89%

Financing indicators – Financing of our Colombian branch is provided through contributions to and distributions from the branch. The currency for these transactions is based on the local reporting currency for the branch. Effective February 1, 2014 due to changes in regulations in Colombia, the branch was allowed to change its reporting currency to the U.S. dollar.

The branch's transactions with its parent, MII, consist of purchases of lease pool equipment from time to time, the short-term sub-lease of equipment from time to time and provision of administrative and management services by MII pursuant to an Inter-company Services Agreement.

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.)