



May 13, 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. 2 to Registration Statement on Form S-1
Filed April 22, 2016
File No. 333-208177**

Ladies and Gentlemen:

Set forth below is the response of Mitcham Industries, Inc. (the “*Company*”, “*we*,” “*us*” or “*our*”) to the comment received from the staff of the Division of Corporation Finance (the “*Staff*”) of the Securities and Exchange Commission (the “*Commission*”) by letter dated May 10, 2016, with respect to Amendment No. 2 to Registration Statement on Form S-1, File No. 333-208177, filed with the Commission on April 22, 2016 (the “*Registration Statement*”).

Concurrently with the submission of this letter, we are filing through EDGAR Amendment No. 3 to the Registration Statement (“*Amendment No. 3*”). For your convenience, we have also hand delivered five copies of this letter, as well as five copies of Amendment No. 3 marked to show all changes made since the second amendment to the Registration Statement.

For your convenience, our response is prefaced by the exact text of the Staff’s comment in bold, italicized text. All references to page numbers and captions correspond to Amendment No. 2 to the Registration Statement unless otherwise specified.

Summary Historical Financial Data, page 10

Selected Historical Financial Data, page 23

- 1. We note your presentation of EBITDA includes an adjustment for impairment of intangible assets. Measures referred to as EBITDA should not exclude items other than interest, taxes, depreciation and amortization. Please revise your presentation accordingly. Refer to Question 103.01 of the Compliance and Disclosure Interpretations for Non-GAAP Financial Measures. Please also revise your presentation of EBITDA in future Exchange Act filings.***

RESPONSE: We have revised the Registration Statement to exclude adjustments for impairment of intangible assets in our presentation of EBITDA. Please see pages 11 and 12 of Amendment No. 3. In future Exchange Act filings, we will also revise our presentation of EBITDA accordingly.

* * * * *

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)
Melinda Hooker (Staff Accountant)
Dale Welcome (Staff Accountant)
Gillian A. Hobson (Vinson & Elkins L.L.P.)