

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-4631

Mail Stop 4631

December 27, 2017

Via E-Mail
Mr. Robert P. Capps
Co-Chief Executive Officer and Chief Financial Officer
Mitcham Industries, Inc.
8141 AH 75 South
P.O. Box 1175
Huntsville, TX 77340

Re: Mitcham Industries, Inc.

Registration Statement on Form S-3

Filed December 22, 2017 File No. 333-222278

Dear Mr. Capps:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action, or absence of action by the staff.

You may contact Edward M. Kelly, Senior Counsel, at (202) 551-3728 with any questions.

Very truly yours,

/s/ Pamela A. Long

Pamela A. Long Assistant Director Office of Manufacturing and Construction

cc: Via E-Mail

Mr. Robert P. Capps Mitcham Industries, Inc. December 27, 2017 Page 2

> Gillian A. Hobson, Esq. Vinson & Elkins L.L.P. 1001 Fannin Street, Suite 2500 Houston, TX 77002