



DIVISION OF  
CORPORATION FINANCE

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

*Via U.S. Mail and facsimile (713/615-5794)*

May 6, 2011

Billy F. Mitcham, Jr.  
President and Chief Executive Officer  
Mitcham Industries, Inc.  
8141 SH 75 South, P.O. Box 1175  
Huntsville, Texas 77342

**Re: Mitcham Industries, Inc.  
Amendment No. 1 to Registration Statement on Form S-3  
Filed April 25, 2011  
File No. 333-172935**

Dear Mr. Mitcham:

We have limited our review of your registration statement to those issues we have addressed in our comment.

General

1. Please be advised that you must either file your definitive proxy statement or amend your Form 10-K for the fiscal year ended January 31, 2011 to include Part III information and clear any outstanding Staff comments on your Form 10-K and proxy statement before you may request to accelerate the effectiveness of your registration statement. See Question 123.01 of the Securities Act Forms Compliance and Disclosure Interpretations which is available on our website and may be found at <http://www.sec.gov/divisions/corpfin/guidance/safinterp.htm>.

Please contact Sherry Haywood, Staff Attorney at (202) 551-3345 or, in her absence, me at (202) 551-3397 with any questions.

Sincerely,

Jay Ingram  
Legal Branch Chief

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cc: Gillian A. Hobson (*Via facsimile 713/615-5794*)  
Vinson & Elkins L.L.P.  
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