



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-3030

February 8, 2011

Adam S. Jackson
Chief Financial Officer
Non-Invasive Monitoring Systems, Inc.
4400 Biscayne Blvd., Suite 180,
Miami, Florida 33137

Re: Non-Invasive Monitoring Systems, Inc.
Form 10-K for the Fiscal Year Ended July 31, 2010
Filed October 29, 2010
File No. 000-13176

Dear Mr. Jackson:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Jeffrey Jaramillo
Accounting Branch Chief