

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

June 2, 2011

U.S. Mail and Fax (646-313-2170)

Mr. David Frear Executive Vice President and Chief Financial Officer Sirius XM Radio Inc. 1221 Avenue of the Americas, 36th Floor New York, NY 10020

Re: Sirius XM Radio Inc.

Form 10-K for the fiscal year ended December 31, 2010

Filed February 16, 2011

Form 10-Q for the quarterly period ended March 31, 2011

Filed May 3, 2011 File No. 001-34295

Dear Mr. Frear:

We have reviewed your response letter dated May 20, 2011 and your filings and have the following comments. As noted in our letter dated May 9, 2011, we have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Please provide us with the requested information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2010

Management's Discussion and Analysis of Financial Condition and Results of Operations Subscribers, page 34

Free Cash Flow, page 37

1. We note your response to comment one in our letter dated May 9, 2011. Please provide us with a revised proposed discussion that discusses in more detail how you use free cash flow to measure the success of your business.

Mr. David Frear Sirius XM Radio Inc. June 2, 2011 Page 2

Form 10-Q for the Quarterly Period Ended March 31, 2011

Management's Discussion and Analysis of Financial Condition and Results of Operations

Subscriber Data, page 30

2. We note your response to comment two in our letter dated May 9, 2011. Please confirm to us that the subscriber information based on retail, OEM and rental is not provided to management including your Board of Directors. If such information is provided to management, tell us why.

Please file all correspondence over EDGAR. You may contact Dean Suehiro, Senior Staff Accountant, at (202) 551-3384 or Robert Littlepage, Accountant Branch Chief, at (202) 551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spirgel
Assistant Director