

SIRIUS XM
RADIO INC.

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May 21, 2010

VIA EDGAR

Mr. Larry Spiegel
Assistant Director
Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Mailstop 3720
Washington, D.C. 20549

**RE: Sirius XM Radio Inc.
Form 10-K for the year ended December 31, 2009
Filed February 25, 2010
File No. 001-34295**

Dear Mr. Spiegel:

This letter is in response to the Staff's follow-up comment regarding the Annual Report on Form 10-K (the "Form 10-K") of Sirius XM Radio Inc. ("we", "our", or the "Company") for the year ended December 31, 2009. The follow-up comment was received in the course of a telephone conversation between Mr. Dean Suehiro and representatives of the Company on Thursday, May 13, 2010, and asked that we provide additional clarity and the magnitude of certain items with respect to our response to comment number 8 in the response letter dated May 10, 2010 relating to the Staff's letter dated April 26, 2010. To assist your review, we have retyped the text of the Staff's comment number 8 (in bold) and our initial response thereto (in italics) below. We have included our response to the follow-up oral comment as "Supplemental Response" following our initial response below.

Note 3. Inventory, page F-16**8. Please tell us why a portion of your estimated allowance for inventory is “reported as component of Subscriber acquisition costs” in your consolidated statements of operations.***Initial Response:*

Our inventory allowance is reported in the same line item as the underlying inventory charges are recognized in our statement of operations. Inventory allowances for items included in our direct to consumer distribution channel are reported as component of Cost of equipment. As disclosed in Note 3 to our consolidated financial statements (see page F-14 of the Form 10-K filed with the Commission on February 25, 2010), we reimburse automakers for certain costs associated with the satellite radio installed in the applicable vehicle at the time the vehicle is manufactured and provide chip sets to radio manufacturers. The associated payments to the automakers and radio manufacturers for both OEM and aftermarket installations are included in Subscriber acquisition costs as part of our strategy to acquire new subscribers.

Supplemental Response:

The allowance for inventory charge reported as a component of Subscriber acquisition costs for the years ended December 31, 2009, 2008 and 2007 represented 2.6%, 4.2% and 3.3% of the total Subscriber acquisition costs as reported in our consolidated statements of operations, respectively. Subscriber acquisition costs include, among other things, hardware subsidies paid to radio manufacturers, distributors and automakers and allowances for product obsolescence and warranty costs associated with hardware and chip sets. Hardware subsidies are paid in the form of cash, components and/or chip sets used in the manufacture of radio receivers and related accessories. Those components and chip sets are not held for resale by us. Our assumption of product warranty costs minimizes the manufacturers’ risks associated with satellite radio receivers, components and related accessories and thereby minimizes initial direct subsidies. Although the provision for product obsolescence and warranty costs is immaterial, we included the disclosure on page F-16 of the Form 10-K for the year ended December 31, 2009 to enhance transparency and conform to the definition of Subscriber acquisition costs on page F-14.

In future Form 10-K filings, we will include the following incremental disclosure regarding our allowance for inventory in the Inventory section of the notes to our consolidated financial statements (emphasis added to incremental disclosure):

“Inventory consists of finished goods, refurbished goods, chip sets and other raw material components used in manufacturing radios. Inventory is stated at the lower of cost, determined on a first-in, first-out basis, or market. We record an estimated allowance for inventory that is considered slow moving or obsolete or has a carrying value in excess of net realizable value. The provision related to products purchased for our direct to consumer distribution channel and components held for resale by us is reported as a component of Cost of equipment in our consolidated statements of operations. The ~~remaining~~ provision related to inventory consumed in our OEM and retail distribution channels is reported as a component of Subscriber acquisition costs in our consolidated statements of operations.”

* * * *

As requested by the Staff, we acknowledge that, with respect to filings made by us:

- We are responsible for the adequacy and accuracy of the disclosure in our filings;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- We may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Any questions concerning the above supplemental response to the Staff's comment may be directed to me by telephone at (212)-584-5170 or by fax at (212)-584-5252.

Sincerely,

/s/ David J. Frear
David J. Frear
Executive Vice President and Chief Financial Officer

cc: Securities and Exchange Commission
Dean Suehiro, Staff Accountant