

NUVEEN MASSACHUSETTS PREMIUM INCOME MUNICIPAL FUND  
Form 8-A12B  
January 13, 2010

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

**FORM 8-A**

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES**  
**PURSUANT TO SECTION 12(b) OR (g) OF THE**  
**SECURITIES EXCHANGE ACT OF 1934**

**Nuveen Massachusetts Premium Income Municipal Fund**

(Exact Name of Registrant as Specified in Its Charter)

**MASSACHUSETTS**  
(State of Incorporation

or Organization)

**333 West Wacker Drive**  
**Chicago, Illinois 60606**

**36-7032570**  
(I.R.S. Employer

Identification No.)

(Address of Principal Executive Offices)

**Securities to be registered pursuant to Section 12(b) of the Act:**

<b>Title of Each Class to be so Registered</b>	<b>Name of Each Exchange On Which Each Class is to be Registered</b>
<b>MuniFund Term Preferred Shares of Beneficial Interest, \$10.00 liquidation preference per share</b>	<b>New York Stock Exchange</b>

**If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), please check the following box.**

**If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), please check the following box.**

**Securities Act registration statement file number to which this form relates: 333-163256**

**Securities to be registered pursuant to Section 12(g) of the Act:**

**NONE**

**(Title of Class)**

**Item 1. Description of Registrant's Securities to be Registered.**

The shares (the "Shares") to be registered hereunder are MuniFund Term Preferred Shares, \$10.00 liquidation value per share, of Nuveen Massachusetts Premium Income Municipal Fund (the "Registrant"). A description of the Shares is contained under the heading "Description of Shares" in the prospectus to be included in an amendment to the Registrant's registration statement on Form N-2, which registration statement was filed under the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, on January 14, 2010 (Registration Nos. 333-163256 and 811-07484, respectively), and such description is incorporated herein by reference. The description of the Shares contained in the definitive prospectus to be filed pursuant to Rule 497, which will contain the final terms of the Shares, is deemed to be incorporated herein by reference and made part of this registration statement.

**Item 2. Exhibits.**

1. Form of Share Certificate
2. Rating Agency Guidelines
3. Form of Statement Establishing and Fixing the Rights and Preferences of Registrant's MuniFund Term Preferred Shares

**SIGNATURE**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

Date: January 13, 2010

NUVEEN MASSACHUSETTS PREMIUM INCOME  
MUNICIPAL FUND

By /s/ Gifford R. Zimmerman  
Name: **Gifford R. Zimmerman**  
Title: **Chief Administrative Officer**