

Kayne Anderson MLP Investment CO  
Form AW  
January 19, 2010

**Kayne Anderson MLP Investment Company**  
1800 Avenue of the Stars, Second Floor  
Los Angeles, California 90067  
(310) 556-2721  
January 19, 2010

**VIA EDGAR**

Mr. Christian T. Sandoe  
Senior Counsel  
United States Securities and Exchange Commission  
Division of Investment Management  
100 F Street, N.E.  
Washington, D.C. 20549

Re: **Kayne Anderson MLP Investment Company (the Registrant )**  
**File Nos. 333-151975 and 811-21593**  
**CIK No. 0001293613**  
**Accession No. 0000950123-10-003013**

Dear Mr. Sandoe:

Pursuant to Rule 477 promulgated under the Securities Act of 1933, as amended (the Act ), the Registrant respectfully requests that the Securities and Exchange Commission (the Commission ) consent to the withdrawal of the Registrant s Post-Effective Amendment No. 2 to the Registration Statement on Form N-2 and all exhibits thereto that was filed with the Commission on January 15, 2010 (the Post-Effective Amendment ), and issue an order to that effect.

The Fund requests this withdrawal because, upon reconsideration and consultation with the Staff of the Commission, the Post-Effective Amendment was not required to complete the offering of 5,500,000 shares of the Registrant s Common Stock, for which a prospectus supplement was filed with the Commission on January 15, 2010. Through the date hereof, the Post-Effective Amendment has not been declared effective and no securities have been sold in connection with the Post-Effective Amendment. Based on the foregoing, the Registrant submits that the withdrawal of the Post-Effective Amendment is consistent with the public interest and protection of investors.

Upon the grant of the Commission s consent hereto, please return a dated copy of the order granting such withdrawal as soon as it is available. We would appreciate it if such order would be placed in SEC File Nos. 333-151975 and 811-21593.

Please do not hesitate to contact the undersigned or David A. Hearsh, Esq. of Paul, Hastings, Janofsky & Walker LLP, counsel to the Company, at (415) 856-7008 with any questions with regard to this matter.

---

\*\*\*\*\*

Very truly yours,

KAYNE ANDERSON MLP  
INVESTMENT COMPANY

/s/ David S. Shladovsky  
David S. Shladovsky, Esq.  
Secretary and Chief Compliance Officer

cc: Kevin S. McCarthy, Kayne Anderson (w/enclosures)  
David A. Hearth, Esq. (w/ enclosures)

2