

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