

Kayne Anderson MLP Investment CO
Form N-23C-2
October 18, 2016

Securities and Exchange Commission

Washington, DC 20549

Rule 23c-2 Notice of Intention to

Redeem Securities

of

Kayne Anderson MLP Investment Company

811 Main Street, 14th floor

Houston, Texas 77002

under the

Investment Company Act of 1940

Securities Act File No. 333-165775

Investment Company Act File No. 811-21593

(1) Title of the class of securities of Kayne Anderson MLP Investment Company (the Company) to be redeemed: Series A Mandatory Redeemable Preferred Shares, liquidation preference \$25.00 per share (CUSIP 486606 2#2) (the Series A Shares).

(2) Date on which the securities are to be called or redeemed:
The date fixed for redemption of the Series A Shares is November 9, 2016.

(3) Applicable provisions of the governing instrument pursuant to which the securities are to be redeemed:
The Series A Shares are to be redeemed pursuant to Section 3(a)(i) of the Company s Articles Supplementary for the Series A Mandatory Redeemable Preferred Shares, filed with the State Department of Assessments and Taxation of the State of Maryland on May 5, 2010.

(4) The principal amount or number of shares and the basis upon which the securities to be redeemed are to be selected:
The Company will redeem all 4,160,000 of the outstanding Series A Shares, representing an aggregate liquidation preference amount of \$104,000,000.00, at a total redemption price of \$105,110,286.67 and a redemption price per share of \$25.26689583. The redemption price per share is equal to \$25.00, plus accumulated but unpaid dividends of \$0.26689583, calculated using the current rate of 5.57% accrued (whether or not earned or declared by the Company, but excluding interest thereon) to, but not including, the redemption date.

SIGNATURE

Pursuant to the requirement of Rule 23c-2 under the Investment Company Act of 1940, the Company has duly caused this Notice of Intention to Redeem Securities to be signed on its behalf by the undersigned on this 18th day of October, 2016.

KAYNE ANDERSON MLP INVESTMENT
COMPANY

By: /s/ Terry A. Hart

Name: Terry A. Hart

Title: Chief Financial Officer