

FOR IMMEDIATE RELEASE

Kayne Anderson MLP Investment Company Files Notice with SEC to Redeem All of Its Outstanding Auction Rate Senior Notes in Early July 2008

HOUSTON, TX – May 16, 2008 – Kayne Anderson MLP Investment Company (the “Company”) (NYSE: KYN) announced today that it has filed with the Securities and Exchange Commission a notice of its intention to redeem \$505 million aggregate principal amount of its outstanding Series A, B, C, E, and F auction rate senior notes (“ARNs”) in early July 2008. The table below sets forth amounts outstanding under each series of ARNs and anticipated redemption dates. The Company currently expects to finance the redemption using borrowings under its existing revolving credit facility and a private placement of debt securities.

SERIES	CUSIP	PRINCIPAL OUTSTANDING	TOTAL NOTES OUTSTANDING	EXPECTED REDEMPTION DATE
A	486606AA4	\$85,000,000	3,400	July 08, 2008
B	486606AB2	85,000,000	3,400	July 10, 2008
C	486606AC0	90,000,000	3,600	July 14, 2008
E	486606AD8	60,000,000	2,400	July 07, 2008
F	486606AE6	185,000,000	7,400	July 09, 2008
TOTAL		\$505,000,000	20,200	

UPDATE FOR AUCTION RATE PREFERRED SHAREHOLDERS

The Company continues to evaluate options for refinancing its Series D auction rate preferred shares (“ARPs”) (CUSIP 486606205) in a manner that preserves flexibility under asset coverage ratios required by the Investment Company Act of 1940, as amended (“the 1940 Act”), and that has an appropriate cost relative to leaving the ARPs in place. At this time, the Company does not have a viable option for refinancing its ARPs as the currently available solutions are either more expensive than the current dividend rate on the ARPs or would reduce the Company’s flexibility in complying with asset coverage tests under the 1940 Act.

Kayne Anderson MLP Investment Company (“the Company”) is a non-diversified, closed-end management investment company registered under the Investment Company Act of 1940, whose common stock is traded on the NYSE. The Company’s investment objective is to obtain a high after-tax total return by investing at least 85% of its total assets in energy-related master limited partnerships and their affiliates, and in other companies that, as their principal business, operate assets used in the gathering, transporting, processing, storing, refining, distributing, mining or marketing natural gas, natural gas liquids (including propane), crude oil, refined petroleum products or coal.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS: This press release contains “forward-looking statements” as defined under the U.S. federal securities laws. Generally, the words “believe,” “expect,” “intend,” “estimate,” “anticipate,” “project,” “will” and similar expressions identify forward-looking statements, which generally are not historical in nature. Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ from the Company’s historical experience and its present expectations or projections indicated in any forward-looking statements. These risks include, but are not limited to, changes in economic and political conditions; regulatory and legal changes; MLP industry risk; leverage risk; valuation risk; interest rate risk; tax risk; and other risks discussed in the Company’s filings with the SEC. You should not place undue reliance on forward-looking statements, which speak only as of the date they are made. The Company undertakes no obligation to publicly update or revise any forward-looking statements made herein. There is no assurance that the Company’s investment objectives will be attained.

Contact:

KA Fund Advisors, LLC
<http://www.kaynefunds.com>
 Monique Vo, 877-657-3863

Kayne Anderson MLP Investment Company
 877-657-3863