

Kayne Anderson MLP Investment Company Announces Distribution of \$0.48 per Share for Q3 2010

Houston, TX – September 23, 2010 – Kayne Anderson MLP Investment Company (the “Company”) (NYSE: KYN) announced today its quarterly distribution of \$0.48 per share for the period June 1, 2010 to August 31, 2010.

The distribution for the quarter ended August 31, 2010 will be payable on October 15, 2010 to common stockholders of record on October 5, 2010, with an ex-dividend date of October 1, 2010. It is anticipated that a significant portion of this distribution will be treated as a return of capital for tax purposes. The final determination of such amount will be made in early 2011 when the Company can determine its earnings and profits. The final tax status of the distribution may differ substantially from this preliminary information.

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Kayne Anderson MLP Investment 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.

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