

Kayne Anderson MLP Investment Company Announces Distribution of \$0.48 per Share for Q3 2009 and Maintains Distribution Guidance for Fiscal 2009

Houston, TX – September 18, 2009 – Kayne Anderson MLP Investment Company (the "Company") (NYSE: KYN) announced today its quarterly distribution of \$0.48 per share for the period June 1, 2009 to August 31, 2009 and stated that it expects to maintain its quarterly distribution at \$0.48 per share for the remainder of fiscal year 2009.

The distribution for the quarter ended August 31, 2009 will be payable on October 9, 2009 to common stockholders of record on October 5, 2009, with an ex-dividend date of October 1, 2009. It is anticipated that substantially all 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 2010 when the Company can determine its earnings and profits. The final tax status of the distribution may differ substantially from this preliminary information.

"We are happy to announce that we have fully invested the proceeds of our recent equity offering, along with proceeds from additional borrowings, in additional portfolio securities. Based on the cash and other investment income expected to be generated by our current portfolio, we expect to maintain a quarterly distribution of \$0.48 for the remainder of fiscal year 2009," McCarthy stated.

"Payment of future distributions is subject to board approval, as well as meeting the covenants of our senior debt and the asset coverage requirements of the 1940 Act. Of course, should MLP distributions be less than our expectations, we would re-evaluate the appropriate distribution rate at that time," stated Mr. McCarthy.

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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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