Kayne Anderson

MLP Investment Company

Kayne Anderson MLP Investment Company Announces Distribution of \$0.45 per Share for Q3 2017

Houston, TX – September 29, 2017 – Kayne Anderson MLP Investment Company (the "Company") (NYSE: KYN) announced today its quarterly distribution of \$0.45 per share for the quarter ended August 31, 2017.

The distribution will be payable on October 13, 2017 to common stockholders of record on October 9, 2017, with an ex-dividend date of October 5, 2017. The Company estimates that 55% of its distribution for the quarter ended August 31, 2017 will be treated as a return of capital for tax purposes. This estimate is based on the Company's anticipated earnings and profits for fiscal 2017 (including gains and losses on sales of securities during the nine months ended August 31, 2017) and its accumulated earnings and profits as of August 31, 2017. The Company's estimate does not include a projection of gains or losses on the sale of securities for the remainder of fiscal 2017. The final determination of the tax character of the distribution will be made in early 2018 when the Company can determine its actual earnings and profits for the full year (including gains and losses on the sale of securities for the remainder of fiscal 2017) and 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 (collectively, "MLPs"), 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 Fund'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 Fund'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 Fund undertakes no obligation to publicly update or revise any forward-looking statements made herein. There is no assurance that the Fund's investment objective will be attained.

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