Kayne Anderson MLP Investment Company

Kayne Anderson MLP Investment Company Enters Into \$150 Million Revolving Credit Facility

Houston, TX – March 1, 2016 – Kayne Anderson MLP Investment Company (the "Company") (NYSE: KYN) announced today that it has entered into a \$150 million unsecured revolving credit facility (the "Credit Facility") with a syndicate of lenders. The Credit Facility has a two-year term, maturing on February 28, 2018. The Credit Facility replaces the Company's \$250 million unsecured revolving credit facility that was scheduled to mature on March 4, 2016.

Commitments under the Credit Facility are immediately available, subject to the Company's compliance with the terms of the Credit Facility, including a condition to borrowing that the Company's net assets must be in excess of a minimum net asset value threshold. Subject to certain adjustments, this minimum net asset value threshold is equal to 50% of the Company's net assets as of February 29, 2016.

Outstanding loan balances under the Credit Facility will accrue interest daily at a rate that may vary between LIBOR plus 1.60% and LIBOR plus 2.25%, depending on asset coverage ratios. Based on current asset coverage ratios, the interest rate would be equal to the one-month LIBOR plus 1.60%. The Company will pay a fee equal to a rate of 0.30% on any unused amounts of the Credit Facility. Currently, the Company has no borrowings under the Credit Facility.

A copy of the new credit agreement is available on the Company's website at www.kaynefunds.com/kyn/other-material-documents.

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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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