

KAYNE ANDERSON MLP INVESTMENT COMPANY ANNOUNCES ITS NET ASSET VALUE AND ASSET COVERAGE RATIOS AT SEPTEMBER 30, 2008

HOUSTON, TX – October 1, 2008 – Kayne Anderson MLP Investment Company (the “Company”) (NYSE: KYN) today announced its net asset value and asset coverage ratios under the Investment Company Act of 1940 (“the 1940 Act”) as of September 30, 2008.

As of close of business September 30, 2008, the Company’s net assets were \$892 million and its net asset value per share was \$20.33, based on 43.9 million shares outstanding. As of September 30, 2008, the Company’s asset coverage ratio under the 1940 Act with respect to senior securities representing indebtedness was 315% and the Company’s asset coverage ratio under the 1940 Act with respect to preferred stock was 270%. “We are pleased that we have been able to maintain our asset coverage ratios and liquidity in time of unprecedented volatility in the sector. As of September 30, 2008, the Company also had approximately \$60 million in cash and cash equivalents that could be used to further reduce indebtedness if needed” stated Kevin McCarthy, CEO of the Company.

As of September 30, 2008, the Company’s total assets were \$1.5 billion and long-term investments were \$1.4 billion. Long-term investments were comprised of Midstream MLPs (69%), MLP Affiliates (10%), Upstream MLPs (5%), Propane MLPs (5%), General Partner MLPs (5%), Coal MLPs (5%), Shipping MLPs and Other (1%).

The Company’s ten largest holdings by issuer at September 30, 2008 were:

	September 30, 2008		
	Units (in thousands)	Amount (\$ Millions)	Percent of Long- Term Investments
1. Energy Transfer Partners, L.P. (Midstream MLP)	3,514	129.4	9.5%
2. Plains All American Pipeline, L.P. (Midstream MLP)	3,092	122.5	9.0%
3. Kinder Morgan Management, LLC (MLP Affiliate)	2,401	118.2	8.6%
4. Enterprise Products Partners L.P. (Midstream MLP)	4,516	116.4	8.5%
5. Magellan Midstream Partners, L.P. (Midstream MLP)	3,076	99.7	7.3%
6. Copano Energy Partners, L.L.C. (Midstream MLP)	3,587	87.6	6.4%
7. Inergy, L.P. (Propane MLP)	2,883	62.4	4.6%
8. Crosstex Energy, L.P. (Midstream MLP)	3,045	55.6	4.1%
9. MarkWest Energy Partners, L.P. (Midstream MLP)	2,190	55.4	4.1%
10. Enbridge Energy Partners L.P. (Midstream MLP)	1,312	52.2	3.8%

Contact:

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

Kayne Anderson MLP Investment Company
 877-657-3863

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.

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