MLP Investment Company

## Kayne Anderson MLP Investment Company Provides Unaudited Balance Sheet Information and Announces its Net Asset Value and Asset Coverage Ratios at May 31, 2009

Houston, TX – June 3, 2009 – Kayne Anderson MLP Investment Company (the "Company") (NYSE: KYN) today provided a summary unaudited balance sheet and announced its net asset value and asset coverage ratios under the Investment Company Act of 1940 (the "1940 Act") as of May 31, 2009.

As of May 31, 2009, the Company's net assets were \$764 million and its net asset value per share was \$17.04. As of May 31, 2009, the Company's asset coverage ratio under the 1940 Act with respect to senior securities representing indebtedness was 376% and the Company's asset coverage ratio under the 1940 Act with respect to total leverage (debt and preferred stock) was 302%.

| (Unaudited)                           |               |  |  |  |
|---------------------------------------|---------------|--|--|--|
|                                       | (in millions) |  |  |  |
| Investments                           | \$ 1,103.7    |  |  |  |
| Repurchase agreements and cash        | 38.5          |  |  |  |
| Deposits                              | 1.1           |  |  |  |
| Net deferred tax asset <sup>(1)</sup> | 13.9          |  |  |  |
| Accrued income                        | 1.4           |  |  |  |
| Receivable for securities sold        | 3.6           |  |  |  |
| Other assets                          | 2.4           |  |  |  |
| Total assets                          | 1,164.6       |  |  |  |
| Short-term borrowings                 | -             |  |  |  |
| Senior notes                          | 304.0         |  |  |  |
| Preferred stock                       | 75.0          |  |  |  |
| Total leverage                        | 379.0         |  |  |  |
|                                       |               |  |  |  |
| Payable for securities purchased      | 8.3           |  |  |  |
| Other liabilities                     | 13.6          |  |  |  |
| Total liabilities                     | 21.9          |  |  |  |
| Net assets                            | \$ 763.7      |  |  |  |

## Kayne Anderson MLP Investment Company Balance Sheet

May 31, 2009 (Unaudited)

44.8 million common shares currently outstanding

(1) The Company had no valuation allowance at May 31, 2009

Long-term investments were comprised of Midstream MLPs (64%), General Partner MLPs (13%), MLP Affiliates (10%), Propane MLPs (7%), Shipping MLPs (3%), Coal MLPs (1%), Upstream MLPs (1%) and Other MLPs (1%).

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The Company's ten largest holdings by issuer at May 31, 2009 were:

|     |   | Units/Par (\$)<br>(in thousands) | Amount<br>(\$ millions) | Long-Term |
|-----|---|----------------------------------|-------------------------|-----------|
| 1.  | Plains All American Pipeline, L.P. (Midstream MLP)      | 2,876                            | 127.4                   | 11.5%     |
| 2.  | Enterprise Products Partners L.P. (Midstream MLP)       | 3,773                            | 98.1                    | 8.9%      |
| 3.  | Energy Transfer Partners, L.P. (Midstream MLP)          | 2,231                            | 94.4                    | 8.6%      |
| 4.  | Kinder Morgan Management, LLC (MLP Affiliate)           | 1,866                            | 83.8                    | 7.6%      |
| 5.  | Inergy, L.P. (Propane MLP)                              | 3,163                            | 80.3                    | 7.3%      |
| 6.  | Magellan Midstream Holdings, L.P. (General Partner MLP) | 2,916                            | 61.3                    | 5.6%      |
| 7.  | Copano Energy Partners, L.L.C. (Midstream MLP)          | 3,553 / \$2,200                  | 58.2                    | 5.3%      |
| 8.  | Markwest Energy Partners, L.P. (Midstream MLP)          | 2,526 / \$6,295                  | 50.6                    | 4.6%      |
| 9.  | Enbridge Energy Partners L.P. (Midstream MLP)           | 1,201                            | 48.5                    | 4.4%      |
| 10. | Energy Transfer Equity, L.P. (Midstream MLP)            | 1,609                            | 42.3                    | 3.8%      |
|     |   |                                  |                         |           |

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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SOURCE: Kayne Anderson MLP Investment Company