

Kayne Anderson MLP Investment CO

Form 4/A

November 27, 2007

**FORM 4****UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

Check this box  
if no longer  
subject to  
Section 16.  
Form 4 or  
Form 5  
obligations  
may continue.  
See Instruction  
1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF  
SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
Section 17(a) of the Public Utility Holding Company Act of 1935 or Section  
30(h) of the Investment Company Act of 1940

## OMB APPROVAL

OMB  
Number: 3235-0287  
Expires: January 31,  
2005  
Estimated average  
burden hours per  
response... 0.5

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
McCarthy Kevin S

(Last) (First) (Middle)

C/O KAYNE ANDERSON  
CAPITAL ADVISORS, LP, 1800  
AVENUE OF THE STARS,  
SECOND FLOOR

(Street)

LOS ANGELES, CA 90067

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading  
Symbol  
Kayne Anderson MLP Investment  
CO [KYN]

3. Date of Earliest Transaction  
(Month/Day/Year)  
11/26/2007

4. If Amendment, Date Original  
Filed(Month/Day/Year)  
11/27/2007

5. Relationship of Reporting Person(s) to  
Issuer

(Check all applicable)

☒ Director ☐ 10% Owner  
☒ Officer (give title below) ☐ Other (specify below)  
Chairman, President and CEO

6. Individual or Joint/Group Filing(Check  
Applicable Line)

☒ Form filed by One Reporting Person  
☐ Form filed by More than One Reporting  
Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of<br>Security<br>(Instr. 3) | 2. Transaction Date<br>(Month/Day/Year) | 2A. Deemed<br>Execution Date, if<br>any<br>(Month/Day/Year) | 3. Transaction<br>Code<br>(Instr. 8) | 4. Securities Acquired<br>(A) or Disposed of (D)<br>(Instr. 3, 4 and 5) | 5. Amount of<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 3 and 4) | 6. Ownership<br>Form: Direct<br>(D) or<br>Indirect (I)<br>(Instr. 4) | 7. Nature of<br>Ownership<br>(Instr. 4) |
|---------------------------------------|-----------------------------------------|-------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------|
| Common<br>Stock                       | 11/26/2007                              |                                                             | P                                    | 3,000                                                                   | A \$<br>26.84                                                                                                      | 31,000                                                               | D                                       |
| Common<br>Stock                       |                                         |                                                             |                                      |                                                                         | 5,000                                                                                                              | I                                                                    | By spouse.                              |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

**Persons who respond to the collection of  
information contained in this form are not  
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SEC 1474  
(9-02)

number.

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of<br>Derivative<br>Security<br>(Instr. 3) | 2. Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date, if<br>any<br>(Month/Day/Year) | 4. Transaction<br>Code<br>(Instr. 8) | 5. Number<br>of<br>Derivative<br>Securities<br>Acquired<br>(A) or<br>Disposed<br>of (D)<br>(Instr. 3,<br>4, and 5) | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) | 7. Title and<br>Amount of<br>Underlying<br>Securities<br>(Instr. 3 and 4) | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Nu<br>Deriv<br>Secur<br>Bene<br>Own<br>Follo<br>Repor<br>Trans<br>(Instr |
|-----------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------|
|                                                     |                                                                    |                                         |                                                             | Code                                 | V (A) (D)                                                                                                          | Date<br>Exercisable                                            | Expiration<br>Date                                                        | Title                                               | Amount<br>or<br>Number<br>of<br>Shares                                      |

## Reporting Owners

**Reporting Owner Name / Address****Relationships**

Director 10% Owner Officer Other

McCarthy Kevin S  
C/O KAYNE ANDERSON CAPITAL ADVISORS,  
LP  
1800 AVENUE OF THE STARS, SECOND FLOOR  
LOS ANGELES, CA 90067

X

Chairman, President and CEO

## Signatures

Kevin S.  
McCarthy 11/27/2007

\_\_Signature of  
Reporting Person

Date

## Explanation of Responses:

\* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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