

Kayne Anderson Midstream/Energy Fund, Inc. (NYSE: KMF)

Section 19(a) Notification of Sources of Distribution

Distribution Record Date August 22, 2019

Monthly Distribution Amount per Share \$0.075

The following table sets forth the estimated amounts of the current distribution, payable August 30, 2019, and the cumulative distributions paid this fiscal year to date from the following sources: net investment income, net realized short-term capital gains, net realized long-term capital gains and return of capital. All amounts are expressed per common share.

| | Estimated Sources of Distributions | | | % Breakdown of the | |
|---------------------------------------|------------------------------------|----------------|-----------------------|-----------------------|------|
| | (\$) Current | % Breakdown | (\$) Total Cumulative | Total Cumulative | |
| | Distribution | of the Current | Distributions for the | Distributions for the | |
| | | Distribution | Fiscal Year to Date | Fiscal Year to Date | |
| Net Investment Income | \$ - | 0% | \$ - | - | 0% |
| Net Realized Short-Term Capital Gains | - | 0% | - | - | 0% |
| Net Realized Long-Term Capital Gains | - | 0% | - | - | 0% |
| Return of Capital | 0.075 | 100% | 0.700 | - | 100% |
| Total (per common share) | \$ 0.075 | 100% | \$ 0.700 | - | 100% |

Average annual total return (in relation to NAV) for the 5 years ended 7/31/19 -12.5%
Annualized current distribution rate expressed as a percentage of NAV as of 7/31/19 6.9%

Cumulative total return (in relation to NAV) for the fiscal year through 7/31/19 9.7%
Cumulative fiscal year distributions as a percentage of NAV as of 7/31/19 5.4%

You should not draw any conclusions about KMF's investment performance from the amount of this distribution.

The Fund estimates that it has distributed more than its income and capital gains; therefore, a portion of your distribution may be return of capital. A return of capital may occur, for example, when some or all of the money that you invested in the Fund is paid back to you. A return of capital distribution does not necessarily reflect the Fund's investment performance and should not be confused with 'yield' or 'income'.

The amounts and sources of distributions reported are only estimates and are not being provided for tax reporting purposes. The actual amounts and sources of the amounts for tax reporting purposes will depend upon KMF's investment experience during the remainder of its fiscal year and may be subject to changes based on tax regulations. You will receive a Form 1099-DIV for the calendar year that will tell you how to report these distributions for federal income tax purposes.

Please consult your tax adviser with any specific questions regarding your individual circumstances.