Exhibit 3.4

AMENDMENT NO. 1 TO THE AGREEMENT OF LIMITED PARTNERSHIP OF ANTERO MIDSTREAM PARTNERS LP

This Amendment No. 1 (this "***Amendment***") to the Agreement of Limited Partnership of Antero Midstream Partners LP, a Delaware limited partnership (the "***Partnership***"), dated as of November 10, 2014 (the "***Partnership Agreement***"), is entered into effective as of February 23, 2016, by Antero Resources Midstream Management LLC, a Delaware limited liability company (the "***General Partner***"), as the general partner of the Partnership, on behalf of itself and the Limited Partners of the Partnership. Capitalized terms used but not defined herein are used as defined in the Partnership Agreement.

RECITALS

WHEREAS, Section 1.1 of the Partnership Agreement currently provides in error that the "Third Target Distribution" initially means $0.2250 per Unit per Quarter;

WHEREAS, in order to conform to the correct value for the Third Target Distribution as set forth in the Registration Statement, the General Partner deems it in the best interest of the Partnership and the Limited Partners to amend the Partnership Agreement to provide that the "Third Target Distribution" means $0.2550 per Unit per Quarter in order to conform to the description thereof in the Registration Statement; and

WHEREAS, Section 13.1(d)(iv) of the Partnership Agreement provides that the General Partner has the authority to adopt amendments to the Partnership Agreement without the approval of any Partner to reflect, among other things, a change that the General Partner determines is required to effect the intent expressed in the Registration Statement, and the General Partner has determined that the amendment contemplated hereby is required to effect the intent expressed in the Registration Statement.

NOW, THEREFORE, it is hereby agreed as follows:

Section 1.Amendment.

The definition of "Third Target Distribution" in Section 1.1 of the Partnership Agreement is hereby amended and restated to read in its entirety as follows:

> "*Third Target Distribution*" means $0.2550 per Unit per Quarter (or, with respect to periods of less than a full fiscal quarter, it means the product of such amount multiplied by a fraction of which the numerator is the number of days in such period, and the denominator is the total number of days in such fiscal quarter), subject to adjustment in accordance with Section 5.10, Section 6.6 and Section 6.9.

Exhibit 3.4

Section 2.Ratification of Partnership Agreement. Except as expressly modified and amended herein, all of the terms and conditions of the Partnership Agreement shall remain in full force and effect.

Section 3.Governing Law. This Amendment shall be construed in accordance with and governed by the laws of the State of Delaware, without regard to the principles of conflicts of law.

(Signature Page Follows)

Exhibit 3.4

IN WITNESS WHEREOF, this Amendment has been executed as of February 23, 2016.

GENERAL PARTNER:

ANTERO RESOURCES MIDSTREAM MANAGEMENT LLC

By: /s/ Alvyn A. Schopp
Name: Alvyn A. Schopp
Title: Chief Administrative Officer, Senior Regional Vice President and Treasurer

Signature Page to Amendment No. 1 to Agreement of Limited Partnership of Antero Midstream Partners LP