

October 29, 2014

Mara L. Ransom Assistant Director United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549-3561

Re: Antero Resources Midstream LLC

Amendment No. 8 to Registration Statement on Form S-1

Filed on October 27, 2014 File No. 333-193798

Ms. Ransom:

Set forth below is the response of Antero Resources Midstream LLC (the "Company," "we," "us" or "our") to comments received from the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") by letter dated October 28, 2014, with respect to the Company's Registration Statement on Form S-1, File No. 333-193798 (the "Registration Statement") filed on October 27, 2014.

Concurrently with the submission of this letter, we are filing through EDGAR Amendment No. 9 to the Registration Statement ("*Amendment No. 9*"). For your convenience, we will hand deliver three full copies of Amendment No. 9, as well as three copies of Amendment No. 9 marked to show all changes made since the filing of Amendment No. 8 to the Registration Statement.

For your convenience, the response is prefaced by the exact text of the Staff's corresponding comment in bold, italicized text. All references to page numbers and captions correspond to Amendment No. 9 unless otherwise specified.

Dilution, page 54

1. We note your revisions in response to comment 1 from our letter dated October 24, 2014. Please refer to the table showing the consideration contributed to you by Antero and by the purchasers of common units in this offering as seen on page 55, and explain to us why you did not apply the concept in our prior comment to your calculation of Antero's effective cash contribution to you. In this regard, the predecessor's net tangible book value already reduced Antero's effective cash contribution by the amount of debt recorded on the predecessor's books. It is unclear to us why repayment of the previously recorded debt would reduce Antero's effective cash contribution again. As indicated in comment 6 from our letter dated October 17, 2014, it appears that Antero's effective cash contribution would be the predecessor's net tangible book value less the cash distribution to Antero recorded as a reduction to equity in your pro forma balance sheet. Please advise or revise.

RESPONSE:

We acknowledge the Staff's comment and have revised the table showing the consideration contributed to us to reflect the amount contributed by Antero as the predecessor's net tangible book value less the cash distribution to Antero recorded as a reduction to equity in our pro forma balance sheet. Please see page 55.

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Please direct any questions that you have with respect to the foregoing or if any additional supplemental information is required by the Staff, please contact W. Matthew Strock of Vinson & Elkins L.L.P. at (713) 758-3452.

Very truly yours,

ANTERO RESOURCES MIDSTREAM, LLC

By: /s/ Glen C. Warren, Jr.

Name: Glen C. Warren, Jr.

Title: President, Chief Financial Officer and Secretary

Enclosures

cc: Jennifer Thompson (Securities and Exchange Commission)

Jim Allegretto (Securities and Exchange Commission)

Jarrett Torno (Securities and Exchange Commission)

Jennifer López (Securities and Exchange Commission)

Lilyanna Peyser (Securities and Exchange Commission)

Mike Rosenwasser (Vinson & Elkins L.L.P.)

David P. Oelman (Vinson & Elkins L.L.P.)

Matthew Strock (Vinson & Elkins L.L.P.)

Ryan J. Maierson (Latham & Watkins LLP)

Alvyn A. Schopp (Antero Resources Midstream LLC)