



July 11, 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. 3 to Registration Statement on Form S-1
Filed May 19, 2014
File No. 333-193798**

Ladies and Gentlemen:

Set forth below are the responses 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 May 22, 2014, with respect to Amendment No. 3 to Registration Statement on Form S-1, File No. 333-193798, filed with the Commission on May 19, 2014 (the "**Registration Statement**").

Concurrently with the submission of this letter, we are filing through EDGAR Amendment No. 4 to the Registration Statement ("**Amendment No. 4**"). For your convenience, we will hand deliver three full copies of Amendment No. 4, as well as three copies of Amendment No. 4 marked to show all changes made since the filing of Amendment No. 3 to the Registration Statement.

For your convenience, each 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. 4 unless otherwise specified.

Summary Historical and Pro Forma Financial and Operating Data, page 18

Gathering and Compression, page 5

- 1. We note your inclusion of pro forma balance sheet financial information as of December 31, 2013 on pages 19 and 88. As pro forma balance sheet data is presented on page F-6 as of March 31, 2014, please tell us your basis for including supplemental December 31, 2013 amounts on pages 19 and 88. Refer to Rule 11-02(b)(6) of Regulation S-X.*

RESPONSE:

We acknowledge the Staff's comment and advise that the pro forma balance sheet information as of December 31, 2013 has been removed. Please see pages 19 and 88.

Capitalization, page 52

- 2. You disclose on page F-3, as well as in footnote (1) to your capitalization table that your Predecessor entered into a midstream credit facility on February 28, 2014, which was amended on May 5, 2014. You define your Predecessor on page v as Antero's midstream business and assets to be contributed to Midstream Operating prior to the closing of the offering. Please tell us whether your Predecessor, as it is defined, a distinct legal entity within the midstream business and assets, or another party altogether entered into the credit facility, and revise as necessary to clarify.*

RESPONSE:

We acknowledge the Staff's comment and advise that Antero Midstream LLC (i.e., "Midstream Operating") entered into the midstream credit facility. We have revised the Registration Statement to clarify this point. Please see pages 13, 51, 52, 94, 97, 105, 196 and F-3.

Our Cash Distribution Policy and Restrictions on Distributions, page 55

Estimated Cash Available for Distribution for the Twelve-Month Period Ending June 30, 2015, page 61

- 3. As you have included updated periods for your historical unaudited pro forma cash available for distribution and estimated*

future cash available for distribution, please confirm whether there are any events that have occurred or are expected to occur during the period after the end of the historical pro forma period and the beginning of the projected pro forma period that would cause the omitted period to materially change the results of the projected or historical period if such period was included.

RESPONSE:

We acknowledge the Staff's comment and confirm that no events have occurred or are expected to occur during the period after the end of the historical pro forma period and the beginning of the projected pro forma period that would cause the omitted period to materially change the results of the projected or historical period if such period was included.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 90

Liquidity and Capital Resources, page 102

Contractual Obligations, page 105

4. *You disclose within footnote (1) to your contractual obligations table that you have not included future commitment fees, interest expense or other fees on your revolving credit facility because the revolving loans are floating rate instruments and you cannot determine with accuracy the timing of future loan advances, repayments or future interest rates to be charged. To the extent estimated interest and commitment fees are*

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material cash commitments, please revise to include them along with any assumptions you have made with respect to the interest rate in developing the estimate. You may include your disclosure in a footnote to this table provided that you use the same periods seen in the table.

RESPONSE:

We acknowledge the Staff's comment and note that we have revised footnote (1) to the contractual obligations table to include our estimate of annual interest expense and commitment fees based on the \$80 million of outstanding borrowings as of March 31, 2014 as well as our assumptions regarding the interest rate and commitment fee under the new revolving credit facility. Please see page 105.

Index to Financial Statements, page F-1

5. *Please update the financial statements of Antero Resources Midstream LLC to comply with Rule 3-01 of Regulation S-X.*

RESPONSE:

We acknowledge the Staff's comment and advise the Staff that we have updated the financial statement of Antero Resources Midstream LLC. Please see pages F-1 and F-40 to F-42.

Unaudited Financial Statements of Antero Resources Midstream LLC Predecessor

Notes Accompanying the Financial Statements, page F-13

Note 6 — Stock-Based Compensation, page F-19

6. *You disclose Antero's stock-based compensation expense for the year ended March 31, 2014 on page F-19, including \$28,689 thousand of profits interest awards. We further note your disclosure on page F-21 under the "Profit Interests Awards" section that expense associated with those awards was \$28.7 million for the three months ended March 31, 2014, and that \$365 million was recognized for vested profit interests through December 31, 2013. Please tell us if the period referenced on page F-19 only represents the three months ended March 31, 2014, or explain why you have included expense for the year ended March 31, 2014.*

RESPONSE:

We acknowledge the Staff's comment and advise that the period referenced only represents the three months ended March 31, 2014. We have revised the Registration Statement accordingly. Please see page F-19.

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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 Matthew R. Pacey of Vinson & Elkins L.L.P. at (713) 758-4786.

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: Jim Allegretto (Securities and Exchange Commission)
Jarrett Torno (Securities and Exchange Commission)
Jennifer López (Securities and Exchange Commission)
Lilyanna Peyser (Securities and Exchange Commission)
David P. Oelman (Vinson & Elkins L.L.P.)
Matthew R. Pacey (Vinson & Elkins L.L.P.)
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Alvyn A. Schopp (Antero Resources Midstream LLC)