



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

May 22, 2014

Via E-mail

Paul M. Rady
Chief Executive Officer
Antero Resources Midstream, LLC
1625 17th Street
Denver, Colorado 80202

**Re: Antero Resources Midstream LLC
Amendment No. 3 to Registration Statement on Form S-1
Filed May 19, 2014
File No. 333-193798**

Dear Mr. Rady:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

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

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.

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.

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.

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 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.

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.

Paul M. Rady
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Page 3

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.

You may contact Jarrett Torno, Staff Accountant, at (202) 551-3703 or Jim Allegretto, Senior Assistant Chief Accountant, at (202) 551-3849 if you have questions regarding comments on the financial statements and related matters. Please contact Jennifer López, Staff Attorney, at (202) 551-3792, Lilyanna Peyser, Special Counsel at (202) 551-3222 or me at (202) 551-3720 with any other questions.

Sincerely,

/s/ Lilyanna L. Peyser for

Mara L. Ransom
Assistant Director