



May 16, 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. 2 to Registration Statement on Form S-1
Filed April 17, 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 2, 2014, with respect to Amendment No. 2 to Registration Statement on Form S-1, File No. 333-193798, filed with the Commission on April 17, 2014 (the "*Registration Statement*").

Concurrently with the submission of this letter, we are filing through EDGAR Amendment No. 3 to the Registration Statement ("*Amendment No. 3*"). For your convenience, we will hand deliver three full copies of Amendment No. 3, as well as three copies of Amendment No. 3 marked to show all changes made since the filing of Amendment No. 2 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. 3 unless otherwise specified.

Our Existing Assets and Growth Projects, page 5

Gathering and Compression, page 5

- 1. We note your response to comment 2 in our letter dated April 8, 2014. Despite owning and operating condensate gathering pipelines during the year ended December 31, 2013, we note no discussion of these assets within MD&A or your financial statements and footnotes. Specifically, we note no discussion within revenue recognition on page F-14 or within your table of operating statistics presented on page 94. If this is due to immateriality, please provide us with the total revenue generated for condensate gathering pipelines during the periods presented. If not, please explain or revise your financial statements, footnotes and MD&A to address these operations.*

RESPONSE:

We acknowledge the Staff's comment and respectfully note that the Company did not begin providing condensate gathering services until April 2014. As a result, we do not believe any discussion of condensate gathering services was necessary within MD&A or the financial statements and footnotes. However, the Registration Statement has been revised to reflect the starting date of such operations, which will be reflected in future periods. Please see pages 1 and 90.

Our Cash Distribution Policy and Restrictions on Distributions, page 54

Estimated Cash Available for Distribution for the Twelve-Month Period Ending March 31, 2015, page 60

- 2. We note your response to comment 5 in our letter dated April 8, 2014. You state that you are basing the classification of capital expenditures as maintenance or expansion based on a dollar allocation methodology, and that no projects in your forecast period are exclusively expansion or maintenance capital expenditures. As such, it is our understanding that capital expenditures in the forecast period contain elements of both maintenance and capital expenditures. If our understanding is incorrect, please advise. Otherwise, please explain in detail how you developed your estimate of \$18.2 million and \$5.5 million of maintenance capital expenditures. Please also explain your dollar allocation methodology and tell us if this is a systematic method that you plan to apply in the future.*

RESPONSE:

We acknowledge the Staff's comment and confirm the Staff's understanding that capital expenditures in the forecast period contain elements of both maintenance and expansion capital expenditures. The Registration Statement has been revised to provide

additional detail regarding the methodologies employed to estimate the portion of the Company's capital expenditures characterized as maintenance capital expenditures during the forecast period. Please see pages 69, 70 and 71. We believe that these dollar allocation methodologies are systematic and confirm that we plan to apply similar methodologies in the future.

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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.)
Ryan J. Maierson (Latham & Watkins LLP)
Alvyn A. Schopp (Antero Resources Midstream LLC)

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