



September 18, 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. 5 to Registration Statement on Form S-1  
Filed August 21, 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 September 5, 2014, with respect to Amendment No. 5 to the Registration Statement on Form S-1, File No. 333-193798, filed with the Commission on August 21, 2014 (the "**Registration Statement**").

Concurrently with the submission of this letter, we are filing through EDGAR Amendment No. 6 to the Registration Statement ("**Amendment No. 6**"). For your convenience, we will hand deliver three full copies of Amendment No. 6, as well as three copies of Amendment No. 6 marked to show all changes made since the filing of Amendment No. 5 to the Registration Statement.

In addition, we would note for the Staff the removal of the fresh water distribution services from our business as described in Amendment No. 6. As a result of the moratorium instituted by the Internal Revenue Service, we have been unable to obtain a ruling regarding whether or not income from fresh water distribution services is qualifying income for federal income tax purposes. Because we have not received sufficient assurances about when the moratorium will be lifted or when we may ultimately be able to obtain a ruling, and because our ability to ultimately obtain a ruling is not certain, we and our sponsors determined that it was advisable to proceed at this time without including fresh water distribution services.

Though the removal of fresh water distribution services reduces our pro forma and estimated forecast cash available for distribution, it does not affect our expected liquidity or ability to fund our obligations or make distributions to our unitholders (albeit at a relatively lower minimum quarterly distribution rate). Accordingly, we believe that the removal of fresh water distribution services simplifies rather than complicates the descriptions of our business and historical and expected financial and operating results.

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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. 6 unless otherwise specified.

**Unaudited Pro Forma Cash Available for Distribution for the Twelve-Month Period Ended June 30, 2014, page 57**

1. ***We note your disclosure on page 58 of unaudited pro forma cash available for distribution for the 12 month period ended June 30, 2014. Please revise to also include unaudited pro forma cash available for distribution for your most recently completed fiscal year.***

**RESPONSE:**

We acknowledge the Staff's comment and have revised the disclosure to include unaudited pro forma cash available for distribution for the year ended December 31, 2013. Please see page 58 of Amendment No. 6.

2. ***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 there are no 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 omitted period was included. Accordingly, we do not believe any additional disclosure in Amendment No. 6 is required.

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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: 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)

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