

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

September 5, 2014

Via E-mail
Paul M. Rady
Chief Executive Officer
Antero Resources Midstream, LLC
1615 Wynkoop Street
Denver, Colorado 80202

Re: Antero Resources Midstream LLC

Amendment No. 5 to Registration Statement on Form S-1

Filed August 21, 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.

<u>Unaudited Pro Forma Cash Available for Distribution for the Twelve-Month Period Ended June</u> 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.
- 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.

Paul M. Rady Antero Resources Midstream, LLC September 5, 2014 Page 2

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/ Jim Allegretto for

Mara L. Ransom Assistant Director