Antero Resources Midstream Management LLC 1615 Wynkoop Street Denver, Colorado 80202

April 17, 2017

VIA EDGAR

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Attn: Mara L. Ransom, Assistant Director Office of Consumer Products

Re: Antero Resources Midstream Management LLC Registration Statement on Form S-1 Filed March 28, 2017 File No. 333-216975

Ladies and Gentlemen:

Set forth below are the responses of Antero Resources Midstream Management LLC (the "Company," "we" or "us") 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 April 13, 2017, with respect to the Company's registration statement on Form S-1 filed with the Commission on March 28, 2017 (the "Registration Statement"). Concurrently with the submission of this letter, we are filing through EDGAR a revised registration statement on Form S-1/A (the "Amended Registration Statement"). For your convenience, we will hand-deliver three full copies of the Amended Registration Statement, as well as three copies of the Amended Registration Statement marked to show all changes to the Registration Statement.

For the convenience of the Staff, we have reproduced the Staff's comments in bold, italicized text and have followed each comment with the Company's response. All references to page numbers and captions correspond to the Amended Registration Statement unless otherwise specified.

Organizational Structure

Management, page 15

- 1. Please provide the following information to clarify the company's assessment of the power criterion in accordance with ASC 810-10-25-38 with respect to Antero Midstream Partners LP:
 - We note from your responses your determination that the most significant activities of Antero Midstream are "capital investment decisions and long-term growth projects associated with its gathering, compression and water systems." Please explain to us in greater detail the individual decisions you identified that relate to the capital investment and long-term growth activities. In addition, explain to us your consideration of decisions related to operation of existing systems and to financing activities in evaluating whether they represent ones that most significantly impact the economic performance of the Antero Midstream.
 - With respect to your analysis of the power criterion in ASC 810-10-25-38A(a), please identify for us the party that makes the decision or controls the individual activities or groups of activities discussed above. Tell us how you considered the contractual obligations to develop assets in accordance with the agreements with Antero Resources. Address the contractual decision making role of Antero Resources, AMP GP, and the shared officers and directors as well as the ability of AMGP or Antero Resources to select, confirm, and replace the shared officers and directors within your analysis to determine which party has the ultimate ability to control each of the activities or groups of activities identified
 - To the extent that the individual activities identified are directed by multiple parties, please describe to us how you consider which party has the power to direct the activities that most significantly impact the performance of Antero Midstream.

RESPONSE:

We acknowledge that various aspects of control over Antero Midstream are directed by Antero Resources, AMP GP and AMGP. However, as described in more detail below, the most significant decisions that impact Antero Midstream's economic performance are made by Antero Resources.

Antero Midstream was formed by Antero Resources for the specific purpose of providing gathering, compression and water

services to Antero Resources. Virtually all of Antero Midstream's assets service Antero Resources' wells in Antero Resources' operating areas. The key decisions that impact Antero Midstream's economic performance relate to:

- (i) capital investments in gathering, compression and water systems;
- (ii) financing those capital investments; and
- (iii) the operation of Antero Midstream's systems after they are constructed.

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ASC 810-10-25-38A states that although more than one reporting entity could have an obligation to absorb losses or receive benefits from a variable interest entity ("VIE"), only one reporting entity (if any) will have the power to direct the activities of the VIE that most significantly impact the VIE's economic performance. We have concluded that the most significant activity that affects the economic performance of Antero Midstream relates to the capital investment decisions that Antero Resources make, which in turn dictate the capital investments Antero Midstream must make to fulfill its long-term contractual obligations to Antero Resources. These capital investment decisions, which emanate from and are directed by Antero Resources, have a direct impact on Antero Midstream's operating performance because Antero Midstream's operating performance is almost entirely dependent on revenues received from, and capital investments contractually required by, Antero Resources under these long-term contractual arrangements. The following describes in more detail, and in chronological order, the power Antero Resources has over the economic activities of Antero Midstream.

Step One: Antero Resources makes capital investment decisions

To grow its natural gas, natural gas liquids and oil production business, Antero Resources develops short- and long-term drilling and development plans. Antero Resources frequently reviews and adjusts these plans based on industry and market conditions, availability of drilling and completion services, availability of transportation and other circumstances. These drilling and development plans are managed by Ward McNeilly, Senior Vice President Reserves, Planning and Midstream of Antero Resources. These plans set forth in detail the timing and location of wells to be drilled, as well as the gathering, compression and water systems required to gather Antero Resources' production from these wells and complete the wells drilled, respectively. More specifically, (i) Antero Resources' drilling plans determine the timing, location and capital required for Antero Midstream's investments in gathering and compression systems, and (ii) Antero Resources' well completion design and schedule determines the volume and location of water to be delivered by Antero Midstream, which in turn dictates the need for Antero Midstream to establish permanent versus temporary water lines and the size, location and need for water impoundments. Mr. McNeilly also holds the title of Senior Vice President Reserves, Planning and Midstream at Antero Midstream. In this role, he is responsible for implementing the build-out of midstream assets in order to support the above drilling and development plans of Antero Resources.

The midstream-related project costs embedded in Antero Resources' consolidated capital plans are then extracted, and, as set forth below, Antero Midstream determines how to finance these capital projects. Also as set forth below, once financing for these projects has been obtained, Mr. McNeilly, in his management role at Antero Midstream, along with other members of Antero Midstream management, oversees the construction of these assets.

Step Two: AMP GP and, to a lesser extent, AMGP oversee Antero Midstream's financing plans

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AMP GP, in its capacity as general partner of Antero Midstream, has oversight authority over decisions related to how to finance Antero Midstream's capital budget. Glen Warren, President and CFO of Antero Resources and President of Antero Midstream, and Michael Kennedy, SVP Finance of Antero Resources and Chief Financial Officer of Antero Midstream, make recommendations to the board of AMP GP with respect to Antero Midstream's capital financing decisions. Day-to-day financing decisions of Antero Midstream are made by Messrs. Warren and Kennedy in their roles as officers of Antero Midstream.

Because of the long-term contractual obligations between Antero Resources and Antero Midstream, the directors of AMP GP and AMGP are effectively limited in their ability to determine how Antero Midstream invests capital and makes other operational decisions. Instead, AMP GP and AMGP focus on how to finance the capital budget that Antero Resources establishes for Antero Midstream and also determine the distributions that will be made to their respective shareholders and unitholders. These decisions have significantly less of an impact on Antero Midstream's economic performance than the capital investment decisions that are driven solely by Antero Resources.

Step Three: Operating decisions made by Antero Midstream are driven by Antero Resources' drilling and development plans

The day-to-day operating decisions related to Antero Midstream's expenditures and construction of the gathering and compression and water systems are over seen by Mr. McNeilly in his role as Senior Vice President Reserves, Planning and Midstream of Antero Midstream. The key decisions with respect to the specification of the systems are generally driven by industry standards based on the designed throughput of the systems. A significant portion of the construction of Antero Midstream's assets is based on fixed price contracts, and the day-to-day management of those construction projects consists primarily of contractor oversight, which does not have a significant impact on Antero Midstream's economic performance.

Once the *gathering and compression systems* are installed, the day-to-day operating decisions required to keep the systems operating are relatively ministerial in nature, and those decisions are made by lower-level employees of Antero Resources who are seconded to Antero Midstream.

The key decisions that relate to the operation of the *water systems* are driven by Antero Resources' water needs for its well completion activities. As described above, the amount of water required, the rate at which that water should be delivered, the location of the water delivery and the decisions regarding whether to use permanent or temporary water lines are based on Antero Resources' drilling and development plans.

Decisions by Antero Resources to curtail or increase production impact Antero Midstream's operations directly. For example, if Antero Resources decides to curtail production in a certain region, that decision will result in Antero Midstream shutting

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down compressor stations on its systems, thus directly impacting Antero Midstream's revenues and economic performance.

Under the secondment agreement between Antero Resources and Antero Midstream, Antero Midstream has the right to terminate the secondment arrangement with any Antero Resources employee providing services to Antero Midstream; however, this removal right applies only with respect to work being performed by those employees on behalf of Antero Midstream. As such, Antero Midstream's removal right is effectively limited to matters relating to the oversight and implementation of construction and other operational decisions that are perfunctory in nature and limited as discussed above. While AMP GP and Antero Midstream have certain rights to remove individuals from their positions as an officer of, or secondee to, Antero Midstream, the decisions made by any individual selected as a replacement would still have significantly less of an impact on Antero Midstream's economic performance than the capital investment decisions that are driven by Antero Resources.

Significance and Economic Impact

Under the long-term contractual arrangements between Antero Resources and Antero Midstream, Antero Midstream earns fees based on the volumes of oil and gas that flow through Antero Midstream's systems. Decreases in Antero Resources' production result in a corresponding decrease in revenue to Antero Midstream for all of the assets that Antero Resources contributed to Antero Midstream prior to Antero Midstream's initial public offering. Decreases in throughput levels on assets installed subsequent to Antero Midstream's initial public offering also result in decreased revenue to Antero Midstream.

Antero Midstream's current water system serves Antero Resources' completion program. Decisions by Antero Resources on well completion design and the timing of well completions directly impact Antero Midstream's revenue. The number of wells and amount of water that Antero Resources requests for delivery in each of its well completions determine how much water Antero Midstream will ultimately pump and thereby drive Antero Midstream's volume based fees that it earns as revenue from its water business.

Because of Antero Resources' growth plans over the next five years and the long term nature of the agreements, Antero Midstream does not anticipate being able to provide services to customers other than Antero for the foreseeable future other than services that are incidental, immaterial and within Antero Resources' operating areas.

Because the capital investment decisions are the decisions that most significantly impact the economic performance of Antero Midstream, Antero Resources is the primary beneficiary of Antero Midstream. Through its existing long-term contractual agreements with Antero Midstream, Antero Resources has the ability to direct the capital investment decisions, which have a direct and significant impact on Antero Midstream's operating performance. This is consistent with the fact that the Antero Midstream business is designed and operated primarily to

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serve Antero Resources.

Summary Historical Financial Data

Estimated Cash Available for Distribution Based upon Adjusted EBITDA of Antero Midstream

- 2. We have reviewed your revisions in response to comment 5, including the line item titled "Borrowings and retained cash flow to fund expansion capital expenditures" in the table on page 78, and have the following comments:
 - Please define "retained cash flow from operations." In doing so, tell us whether this represents cash flow generated in the twelve-month period ending June 30, 2018, cash flow generated during the six-month period ended June 30, 2017, estimated cash balance at June 30, 2017, or a different metric.
 - Based on your response to the above bullet point, please tell us why it is appropriate to include the \$129 million of retained cash used to partially fund your expansion capital expenditures as a cash inflow that is distinct from the cash generated from operations that is already included in Adjusted EBITDA.

- If "retained cash flow from operations" represents all or a portion of your estimated cash balance at June 30, 2017 resulting from cash flow generated from operations through such date, please address the following:
 - · Please present this cash inflow on a separate line item and provide investors with insight as to how that amount is derived and the assumptions surrounding the estimate.
 - Please tell us whether you established a cash reserve during the 6-month period ended June 30, 2017 to fund this portion of the capital expenditures, and if so, please disclose this and its impact on cash distributions during that period.

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure in the forecast section to clarify that the estimated \$580 million to fund Antero Midstream's expansion capital expenditures is expected to derive solely from borrowings under its revolving credit facility. Please see pages 78, 79 and 83 of the Amended Registration Statement. We have not revised the cash interest expense line of the forecast because it already reflected the anticipated interest expense associated with borrowing the full amount necessary to fund Antero Midstream's expansion capital expenditures during the forecast period.

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Antero Resources Midstream Management LLC Financial Statements for the Year Ended December 31, 2016

Note (2) Summary of Significant Accounting Policies

(c) Investment in Antero Midstream, page F-8

3. We note your response to comment 7. Given the apparent degree of judgment needed for a general partner's contractual control over a MLP to be overcome by other factors when performing a VIE consolidation analysis, please revise your disclosure to more specifically identify the significant judgments and assumptions underlying your conclusion that Antero Resources is the primary beneficiary of Antero Midstream. If the capital investment decisions and long-term growth projects of Antero Midstream are the activities that most significantly impact its economic performance, and if you concluded that Antero Resources rather than the general partner controls these activities and there is limited opportunity for long-term growth outside of the relationship with Antero Resources, you should explain this in more detail so that investors better understand why the general partner does not consolidate Antero Midstream. Include in these disclosures more detail of how the contracts in place between Antero Resources and Antero Midstream affect control. Additionally, please ensure that disclosures about the general partner's relationship to Antero Midstream outside of the financial statements also convey the unique practical constraints placed on the general partner's control over Antero Midstream to convey a consistent message to your investors that Antero Resources rather than the general partner has effective control over the activities that most significantly impact Antero Midstream's economic performance.

RESPONSE:

We acknowledge the Staff's comment and have revised the Amended Registration Statement accordingly. Please see pages F-8 and F-9.

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Please direct any questions or comments regarding this correspondence to our counsel, Ryan J. Maierson of Latham & Watkins LLP at (713) 546-7420.

Sincerely,

Antero Resources Midstream Management LLC

/s/ Glen C. Warren, Jr.

Name: Glen C. Warren, Jr.

Title: President, Chief Financial Officer and Secretary

Enclosures

cc: Alvyn A. Schopp, Antero Resources Midstream Management LLC Yvette K. Schultz, Antero Resources Midstream Management LLC William N. Finnegan IV, Latham & Watkins LLP Ryan J. Maierson, Latham & Watkins LLP David P. Oelman, Vinson & Elkins L.L.P.

Exhibit A

Pre-Reorganization Structure

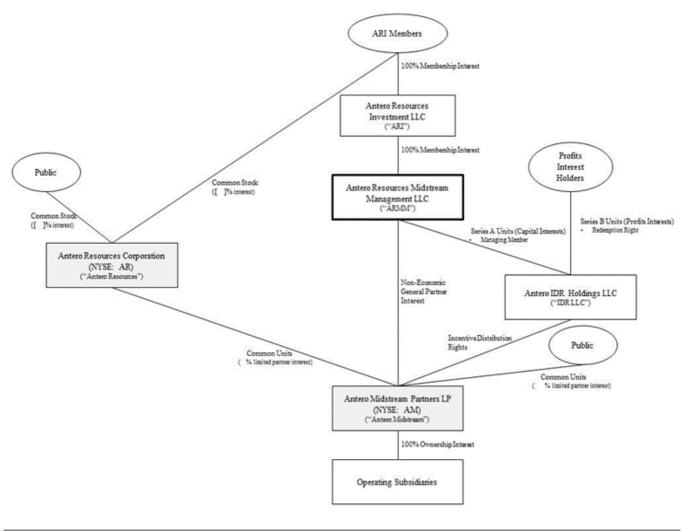


Exhibit B
Post-Reorganization Structure

