



March 20, 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
Registration Statement on Form S-1
Filed February 7, 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 March 7, 2014, with respect to Registration Statement on Form S-1, File No. 333-193798, filed with the Commission on February 7, 2014 (the "**Registration Statement**").

Concurrently with the submission of this letter, we are filing through EDGAR Amendment No. 1 to the Registration Statement ("**Amendment No. 1**"). For your convenience, we will hand deliver three full copies of Amendment No. 1, as well as three copies of Amendment No. 1 marked to show all changes made since the initial filing of the Registration Statement. We are also concurrently providing certain information responsive to Comments 5 and 6 in a separate letter to the Staff (the "**Supplemental Letter**") pursuant to a confidential treatment request.

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. 1 unless otherwise specified.

General

- 1. We note a number of blank spaces throughout your registration statement for information that you are not entitled to omit under Rule 430A of Regulation C. Please allow us sufficient time to review your complete disclosure prior to any distribution of preliminary prospectuses. In addition, please be advised that you may not circulate copies of your prospectus until you have included an estimated price range and related information based on a bona fide estimate of the public offering within that range, as well as all other information required by the federal securities laws, except information you may exclude in reliance upon Rule 430A of Regulation C. When you complete the filing by filling in the blanks, please note that we may have additional comments.***

RESPONSE:

We acknowledge the Staff's comment and will include such information in a subsequent amendment to the Registration Statement as it becomes available.

- 2. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.***

RESPONSE:

We acknowledge the Staff's comment and will supplementally provide the Staff with (i) any written communications, as defined in Rule 405, that we will present to potential investors in reliance on Section 5(d) of the Securities Act of 1933, as amended (the "**Securities Act**"), with a future amendment to the Registration Statement and (ii) any research reports about us that are published or distributed in reliance on Section 2(a)(3) of the Securities Act added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating in the offering, in each case as such written communication or publication becomes available. To date, however, neither we nor the underwriters have engaged in any such communications or publications.

- 3. Prior to the effectiveness of the registration statement, please arrange to have FINRA call us or provide us with a letter***

indicating that FINRA has cleared your filing.

RESPONSE:

We acknowledge the Staff's comment and will arrange for FINRA to contact the Staff regarding the FINRA filing prior to the effectiveness of the Registration Statement.

4. *All exhibits are subject to our review. Accordingly, please file or submit all of your exhibits with your next amendment, or as soon as possible. Please note that we may have comments on the legal and tax opinions, underwriting agreement and amended and restated agreement of limited partnership, as well as other exhibits once they are filed. please understand that we will need adequate time to review these materials before accelerating effectiveness.*

RESPONSE:

We acknowledge the Staff's comment and have filed all exhibits that are currently available. We will file all remaining exhibits in a subsequent amendment to the Registration Statement as soon as they are available.

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5. *We note references throughout your prospectus to a third-party source, RigData for statistical, qualitative and comparative statements contained in your prospectus. Please provide copies of this source material to us, appropriately marked to highlight the sections relied upon and cross-referenced to your prospectus. Please also tell us whether this report is publicly available without cost or at a nominal expense to investors.*

RESPONSE:

We acknowledge the Staff's comment and have provided to the Staff the relevant source material to support the statistical, qualitative and comparative statements, marked to highlight the applicable supporting information, in the Supplemental Letter. Copies of the source report are available to investors from RigData for a nominal expense.

6. *Please disclose the basis for all your assertions about your competitive position within your industry. If you do not have appropriate independent support for a statement, please revise the language to make clear that this is your belief based upon your experience in the industry, if true. Please also provide independent supplemental materials, with appropriate markings and page references in your responses. The following are examples only to some of your competitive position assertions:*

- *"[t]he Marcellus Shale is characterized by consistent and predictable geology, high well recoveries relative to drilling and completion costs and significant hydrocarbon resources in place," page 3.*
- *"[o]ur assets are located in the rapidly developing liquids-rich southwestern core of the Marcellus Shale in northwest West Virginia and liquids-rich core of the Utica Shale in northwest West Virginia and liquids-rich core of the Utica Shale in southern Ohio, two of the premier North American shale plays," page 106.*
- *"[b]ased on forecasted production data, the Appalachian Basin is the second largest overall gas producer in the United States with approximately 12 Bcfe/d in 2013, a 21% increase over 2012," page 108.*
- *"[o]ver the past five years, the focus of many producers has shifted from the younger, shallower conventional sandstone and carbonate reservoirs to the older, deeper Marcellus Shale and the newly margin Utica Shale plays...," page 108.*
- *"[t]he Marcellus Shale accounted for over 9 Bcfe/d of the 2013 production, making it the largest United States gas field on a stand-alone basis, and the largest unconventional gas play in the world," page 108.*

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RESPONSE:

We acknowledge the Staff's comment and have provided to the Staff the independent supplemental materials with appropriate markings and page references to support the assertions about our competitive position in the industry in the Supplemental Letter. With respect to the statement characterizing the Utica Shale as one of the premier North American shale plays, we have revised our disclosure to reflect that this is management's belief. Please see pages 1, 89 and 109 of Amendment No. 1.

Industry and Market Data, page iv

7. *We note your statement that "neither we nor the underwriters have independently verified the accuracy or completeness of this information." Please delete such language, as it implies that you are not responsible for the accuracy of the information you elect to include in your prospectus.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to remove the statement. Please see page iv of Amendment No. 1.

Prospectus Summary, page 1

8. *Please revise the first sentence of the first paragraph of your summary to remove any implication that your summary does not address key aspects of your filing. Refer to Item 503(a) of Regulation S-K and the related instructions.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to remove the statement. Please see page 1 of Amendment No. 1.

9. *Please revise your disclosure to clarify that there are no assurances that you will benefit from your relationship with your sponsor.*

RESPONSE:

We acknowledge the Staff's comment and respectfully submit that, unlike other typical master limited partnerships, we believe that we have certain assurances that we will benefit from our relationship with Antero Resources Corporation ("**Antero**"). Specifically, Antero's acreage dedication to us, and long-term gathering and compression and fresh water distribution contracts with us, ensure that we will benefit from Antero's existing production and any future drilling activities. As a result, our business can be differentiated from other master limited partnerships that are dependent upon "drop-down" sales of assets from their sponsors (which may not ultimately occur). While we cannot guarantee that Antero's existing production will continue or that it will be able to execute on its drilling plan, we believe that we have adequately addressed the most significant risks applicable to Antero's business, and the indirect effect therefrom on us,

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in "Risk Factors." Nonetheless, we have revised the discussion of our relationship with Antero to include a cross-reference to the "Risk Factors" relating to Antero's business. Please see page 8.

10. *Please expand your disclosure in the "Risk Factor" section on page 10 to provide a brief description of the most significant risks that you face, including those related to your business, investing in your units and associated tax matters.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure beginning on pages 11 and 12 of Amendment No. 1.

11. *Please revise your disclosure to address your conversion from Antero Resources Midstream LLC to Antero Midstream Partners LP, including, if true, the fact that such conversion will occur prior to or contemporaneous with the listing and sale of the units of Antero Midstream Partners LP.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure on pages 9, 152, F-6, F-14 and F-27 of Amendment No. 1 to clarify that the contribution of the Predecessor and our conversion from a limited liability company to a limited partnership will occur in connection with the completion of the offering.

Overview, page 1

12. *You state here and elsewhere in the document that Antero's estimated net proved, probable and possible reserves were 7.6 Tcfe, 19.8 Tcfe and 7.5 Tcfe, respectively, as of December 31, 2013. Unless not practicable, please quantify the estimated net proved, probable and possible reserves associated with acreage dedicated to you.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to explicitly state the amount of Antero's net proved, probable and possible reserves associated with the acreage dedicated to us. Please see footnote 2 on page 3 of Amendment No. 1.

Emerging Growth Company Status, page 10

13. *We note your disclosure on page 10 that you intend to irrevocably opt out of the extended transition period for complying with new or revised accounting standards pursuant to Section 107 of the JOBS Act. However, this appears to conflict with your disclosure on page 41 where you disclose you intend to take advantage of the extended transition period. Please revise for consistency.*

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RESPONSE:

We acknowledge the Staff's comment and confirm our intention to irrevocably opt out of the extended transition period for complying with new or revised accounting standards pursuant to Section 107 of the JOBS Act. We have removed the risk factor disclosure on page 43 of Amendment No. 1 that suggested in error that we intend to take advantage of the extended transition period.

Summary Historical and Pro Forma Financial and Operating Data, page 16

14. *In several instances throughout your registration statement you make reference to your Predecessor. Each use of the term does not appear entirely consistent. This includes, but is not limited to page 16 where you refer to Antero's midstream business as your Predecessor and on page F-2, where you define Antero Resources Midstream LLC as your Predecessor. Please tell us and revise throughout the registration statement to clearly define what you consider to constitute your "Predecessor". Please also differentiate what you mean when you use the term "Contributed assets" versus "Predecessor".*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to clarify that (i) the term "Predecessor" refers to Antero's midstream business and assets that will be contributed to Antero Resources Midstream LLC in connection with the closing of the offering, (ii) the term "Midstream Operating" refers to the entity that will own Antero's midstream assets and business at the time of its contribution to us in connection with the completion of the offering and (iii) the term "Antero Midstream" refers to the registrant entity that will result from the conversion of Antero Resources Midstream LLC into a limited partnership and to which Midstream Operating will be contributed. In order to simplify the disclosure, we have deleted the separate references to the term "Contributed Assets." Please see, for example, pages v, 9, 13 and F-2.

15. *On page v, your disclosure suggests that Midstream Operating will own substantially all of Antero's midstream assets immediately prior to the completion of the offering. In the second sentence on page 16 you indicate that you "present the historical financial statements of the midstream business and assets contributed to us by Antero." Additionally, in the third sentence on page F-2, you state the Contributed Assets "were held by Antero Resources Midstream Operating LLC ('Midstream Operating')." These disclosures do not appear to consistently convey the timing of the transfer of the Contributed Asset to Midstream Operating. Furthermore, in the fourth paragraph on page F-14, you state that Midstream Operating "holds the Contributed Assets." Please tell us if the Contributed Assets have been contributed to Midstream Operating, or if no such transfers have taken place, please tell us expected timing of the transfer (e.g. prior to effectiveness, subsequent to effectiveness but before closing, etc.) and revise such statements for consistency throughout the registration statement. If you intend for your statements to be accurate as of the effective date of the registration statement, please advise and revise to be consistent with this objective.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to clarify that (i) Midstream Operating will own Antero's midstream assets and business at the time of the completion of the offering and (ii) Midstream Operating will be contributed to the registrant in connection with the completion of the offering. This is consistent with the fact that Antero has not yet contributed the midstream assets and business to Midstream Operating, but will do so prior to the completion of the offering. Please see, for example, pages v, 9 and F-2.

16. *We note no placeholder for pro forma EPS information either here or within selected financial data on page 84. Please explain or confirm that you will include pro forma EPS information in these sections once it is available to you. Please also provide a footnote explaining why earnings per share for the historical periods has been omitted.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to include a placeholder for pro forma earnings per unit and a footnote explaining why earnings per unit has been omitted for historical periods. Please see pages 18, 19, 86 and F-7.

17. *You state in the third paragraph on page 16 that a reader should read the unaudited pro forma financial statements and notes thereto for a description of the pro forma adjustments. However, we note the December 31, 2012 pro forma balance sheet data on page 17 does not appear to be included in your pro forma financial statements on pages F-1 through F-8. Please revise your statement to be more indicative of the relevance of the pro forma adjustments to the specific item(s) of pro forma data .*

RESPONSE:

We acknowledge the Staff's comment and advise the Staff that we have revised "Summary—Summary Historical and Pro Forma Financial and Operation Data" and "Selected Historical and Pro Forma Financial and Operating Data" to include only pro forma balance sheet data as of December 31, 2013, which is consistent with the pro forma financial statements included elsewhere in the prospectus. Accordingly, we do not believe any further revisions to the statement are necessary. Please see pages 19 and F-5 of Amendment No. 1.

Risk Factors, page 19

Risks Inherent in an Investment in Us, page 32

18. *We note your risk disclosure related to the election of the extended accounting transition period on page 41, within which you disclose the requirement related to the extended transition period for any new or revised accounting standards and make reference to new or revised accounting standards that may be issued by the Public Company Accounting Oversight Board. Please explain your intent of this reference or revise if reference to a different standard setting body was intended.*

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RESPONSE:

We acknowledge the Staff's comment and advise the Staff that we intend to irrevocably opt out of the extended transition period for complying with new or revised accounting standards pursuant to Section 107 of the JOBS Act. We have removed the risk factor on page 43 of Amendment No. 1 that suggested in error that we intend to take advantage of the extended transition period.

There is no existing market for our common units, and a trading market..., page 39

19. *Please expand the risk factor summary on your prospectus cover page to include a summary of this risk factor. Please refer to Section II.A.3.a of Securities Act Release 333-6900 (June 17, 1991).*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to reference this risk factor on the cover page of our prospectus in Amendment No. 1.

Our Cash Distribution Policy and Restrictions on Distributions

Unaudited Pro Forma Cash Available for Distribution for the Twelve-Month Period Ended September 30, 2013, page 55

Estimated Cash Available for Distribution for the Twelve-Month Period Ending March 31, 2015, page 58

20. *Please tell us what periods you plan to present for both your historical unaudited pro forma cash available for distribution and estimated future cash available for distribution disclosures currently provided on pages 55, and 58, respectively, when updating of your Predecessor's financial statements are necessary to comply with Rule 3-01 of Regulation S-X. Please note that this registration statement should have included historical unaudited pro forma cash available for distribution for the twelve months ended December 31, 2012. In any event, please also disclose 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 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.*

RESPONSE:

We acknowledge the Staff's comment and advise the Staff that the historical financial statements included in Amendment No. 1 have been updated to include financial information as of and for the year ended December 31, 2013 and, accordingly, we have revised Amendment No. 1 to include unaudited pro forma cash available for distribution for the twelve-month period ended December 31, 2013. We continue to present estimated cash available for distribution for the twelve-month period ending March 31, 2015. If in a future amendment to the Registration

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Statement estimated cash available for distribution is presented for the twelve-month period ending June 30, 2015, we will similarly update the unaudited pro forma cash available for distribution to cover the twelve-month period ended March 31, 2014.

In addition, we 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. 1 is required.

21. *We note you refer to the subtotal at the bottom of page 59 as the "Minimum Estimated Cash Available for Distribution." Please explain why this amount represents your minimum estimated cash available for distribution as opposed to your best estimate of cash available for distribution.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to remove the reference to "minimum." Please see pages 61 and 70 of Amendment No. 1.

22. *We have read your assumptions regarding capital expenditures for expansion versus maintenance on pages 66 and 67. Please*

discuss how you estimated maintenance capital expenditures of \$22.9 million or the updated amount if a new estimate of future cash available for distribution is included in your next amendment. Please be detailed in your description of how you developed this estimate including the specific type(s) of maintenance capital expenditures encompassed in your estimate considering the relative age of such assets. Additionally, please provide a bridge between the narrative description of the additions of gathering pipeline, compression stations and buried and surface pipeline to the estimated dollar amount of expansion capital expenditures for the twelve-month period ending March 31, 2015.

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to include a detailed discussion of how we estimated the amount of maintenance capital expenditures. In addition, we have revised our disclosure to provide a bridge between the narrative descriptions and the amount of expansion capital expenditures. Please see page 69 of Amendment No. 1.

How We Make Distributions To Our Partners, page 69

23. *It is difficult to gain an overall understanding of the ramifications of the characterization of a distribution based on current disclosure. To the extent practicable, please supplement the discussion with a diagram or other pictorial representation that illustrates the ramifications depending upon whether a distribution*

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is made out of operating surplus, operating surplus, as adjusted, or capital surplus and whether the distribution is made during or after the subordination period or upon liquidation. A decision tree schematic of the potential path a distribution may take depending upon its characterization may be one method of illustrating the narrative contained under this heading. To the extent hypothetical examples can be used to better explain the concepts contain in this section, such as the hypothetical example given on page 78 in the event a reset occurs, they should be utilized to enhance investor understandability of this section.

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to include an overview of the distribution mechanics and implications. In addition, we have revised our disclosure to further clarify that adjusted operating surplus is intended to serve as a proxy for the amount of operating surplus that was "earned" (rather than, for example, borrowed) during the relevant distribution period. We believe these additions help supplement investors' understanding of how the distribution provisions in our partnership agreement work. Please see page 71 of Amendment No. 1. However, we respectfully submit that, given the low likelihood of distributions from capital surplus or distributions in liquidation (consistent with our existing disclosure), additional discussion of the mechanics of distributions from capital surplus or distributions upon liquidation would not provide investors with any additional meaningful information.

Manner of Adjustments for Gain, page 80

Manner of Adjustments for Losses, page 81

24. *Please advise whether the discussion of gains and losses upon liquidation is intended to portray how such items will be allocated to the capital accounts of the respective interest holders. If so, please explain to us the economic rational of losses upon liquidation reducing the subordinated units and common units capital accounts prior to reduction of the general partner's capital account. In this regard, advise whether the general partner is anticipated to have any positive capital associated with their capital account upon contribution of the assets.*

RESPONSE:

We acknowledge the Staff's comment and confirm that the discussion of gains and losses upon liquidation is intended to portray how such items will be allocated to the capital accounts of the respective interest holders. Because the general partner interest will be non-economic and the general partner will not make any contribution to the partnership, the general partner's capital account will initially have a zero balance. Accordingly, we do not expect that any reduction in the general partner's capital account will be necessary. However, to the extent that the general partner acquires a capital account balance in spite of its interest being non-economic, we believe that reducing that account balance first is justified.

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Management's Discussion & Analysis, page 87

Capital Requirements, page 97

25. *You indicate that you estimate your maintenance and expansion capital expenditures will total approximately \$621.7 million. Please reconcile this amount to the total of expansion and maintenance capital expenditures on page 59.*

RESPONSE:

We acknowledge the Staff's comment and have revised the disclosure on page 100 to be consistent with the amount disclosed on page 68.

Debt Agreements and Contractual Obligations, page 97

26. *It appears you will be familiar with the terms of your new credit facility prior to the closing of this offering. If true, upon learning the terms of your new credit facility, please update to include the material terms of the agreement, including the financial covenants you must satisfy prior to making cash distributions. In this regard, we note your statement that “[y]our new revolving credit facility also is expected to contain covenants requiring [you] to maintain certain financial ratios.”*

RESPONSE:

We acknowledge the Staff's comment and confirm that, once determined, we will describe the material terms of our new credit facility, including the financial covenants we must satisfy prior to making cash distributions, in a subsequent amendment to the Registration Statement.

Security Ownership of Certain Beneficial Owners and Management, page 131

27. *Please disclose, by footnote or otherwise, the natural person(s) who have investment and/or voting power over the shares owned by Antero Resources Midstream Management LLC. Please refer to Question 140.02 of our Regulation S-K Compliance and Disclosure Interpretations, located at our website.*

RESPONSE:

We acknowledge the Staff's comment and respectively submit that Question 140.02 of the Staff's Regulation S-K Compliance and Disclosure Interpretations applies only to selling security holders. Because Antero Resources Midstream Management LLC is not selling any securities in this offering (and, in fact, will not hold any common or subordinated units), we do not believe that such disclosure is required.

Certain Relationships and Related Transactions, page 133

Services Agreement, page 135

28. *Please provide the approximate estimated amount that you will incur as part of your service agreements. In this regard, we note your disclosure in this section that you will provide “reimbursement of its direct expenses and an allocation of its indirect expenses,” and your disclosure on page 34 that “[t]here is no limit on the amount of expenses for which our general partner and its affiliates may be reimbursed under the services agreement.”*

RESPONSE:

We acknowledge the Staff's comment and respectfully submit that the services agreement is not expected to result in our incurring any additional amounts of expense. Rather, because we will not have any employees and will be reliant upon Antero for our operations, the services agreement will provide the mechanism by which we will reimburse Antero for its direct and indirect expenses incurred in running our business. Accordingly, the amount of expenses that we expect to incur, as disclosed under “Our Cash Distribution Policy and Restrictions on Distributions—Estimated Cash Available for Distribution for the Twelve-Month Period Ending March 31, 2015” is already reflective of the amounts that would be due to Antero under the services agreement (as well as any amounts due to our general partner under our partnership agreement and any amounts that we incur directly for our own account). As a result, we do not believe any additional disclosure is necessary.

The Partnership Agreement, page 149

Applicable Law; Forum, Venue and Jurisdiction, page 152

29. *Please tell us what consideration you have given to including risk factor disclosure about the impact of the exclusive forum provision on investors.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to include a risk factor regarding the exclusive forum provision. Please see pages 37-38 of Amendment No. 1.

Index to Financial Statements, page F-1

30. *Your reference to Antero Midstream Partners LP as of December 31, 2013 appears to be incorrect. Please advise or revise.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to refer to “Antero Resources Midstream LLC.” Please

Unaudited Pro Forma Financial Statements of Antero Midstream Partners LP

Unaudited Pro Forma Statement of Operations For the Nine Months Ended September 30, 2013, page F-4

Unaudited Pro Forma Statement of Operations, page F-5

31. *We note your inclusion of pro forma adjustments to interest expense on page F-4 and F-5, which you describe in footnote (a) as being related to your new revolving credit facility and estimated interest expense, among other related items. Please explain to us in detail how you determined that this adjustment and amount of interest expense is factually supportable and objectively determinable as required by Rule 11-02(b)(6) of Regulation S-X. Your response should discuss any commitments, agreements or draft agreements that specify the amount and terms of the revolving credit facility, or whether, and when, you expect these amounts and terms will be specified in an agreement prior to your request for effectiveness. Additionally, please show us in detail how you calculated the amount of additional interest expense that would have been incurred and tell us the interest rate utilized. If the interest rate is variable, please indicate the base rate plus the premium. Generally, pro forma interest rates should be based on either your current interest rate or the interest rate for which you have a commitment. To the extent you conclude the amount of debt and/or the interest rate are not factually supportable and are not appropriate to include on the face of the pro forma financial statements, please calculate your pro forma assumed interest expense based on the parent's borrowing costs and disclose your quantified estimate of the cost of replacement financing, the assumptions behind your quantified estimates, and any relevant interest rate sensitivity information within the footnotes to your pro forma financial statements.*

RESPONSE:

We acknowledge the Staff's comment and respectfully submit our belief that the pro forma adjustment to interest expense is appropriate, factually supportable, and objectively determinable. Because the net proceeds of the offering will be distributed to Antero, we have assumed that distribution would have happened as of the beginning of the periods presented and that the Predecessor would therefore have borrowed to finance its operating costs and capital expenditures for the period covered in the Predecessor financial statements. Because we do not yet know the terms of the new revolving credit facility, we used Antero's current rate under its revolving credit facility to calculate pro forma interest expense. That rate is generally LIBOR plus a spread ranging from 1.50% to 2.50%, depending on the percent of the borrowing base that is used. As a result, we used a rate of 1.866% to calculate pro forma interest expense.

When we enter into the new revolving credit facility, we will provide appropriate disclosure in a future amendment to the Registration Statement.

32. *Please disclose why you allocated pro forma net income to the common and the subordinated units on pages F-4 and F-5 on a 50/50 basis. It is unclear in the*

document how the economic interests of the common and subordinated units will be divided upon creation of the limited partnership. Specifically, please summarize the applicable portion of the partnership agreement that specifies how net income/losses are to be allocated to the capital accounts of common and subordinated interests. In this regard, tell us whether you consider the subordinated unit class to meet the definition of a participating security under ASC 260-10-20 and the reason(s) for your conclusion. Please be detailed on this last point.

RESPONSE:

We acknowledge the Staff's comment and respectfully note that, as a general matter, our partnership agreement will provide that operating income will be allocated pro rata based on unit ownership. This allocation is subject to a number of special allocation exceptions, but we do not expect any of those exceptions to be relevant on a pro forma basis or in connection with the offering. Because we expect that the economic interests in the partnership will be split equally between common and subordinated units upon conversion to a limited partnership and prior to the offering, we allocated pro forma net income to the common and subordinated units on a 50/50 basis.

We consider that the subordinated units meet the definition of a participating security as defined by ASC 260-10-20 as:

“A security that may participate in undistributed earnings with common stock, whether that participation is conditioned upon the occurrence of a specified event or not. The form of such participation does not have to be a dividend— that is, any form of participation in undistributed earnings would constitute participation by that security, regardless of whether the payment to the security holder was referred to as a dividend.”

Subordinated units are entitled to participate in distributions after the minimum quarterly distribution has been paid in respect of all outstanding common units (plus any arrearages in respect of the payment of the minimum quarterly distribution). The subordinated units will not accrue arrearages. We intend (i) to calculate net income per unit using the two class method in accordance with the guidance of ASC 260-10-45-59A through ASC 260-10-45-60B and to treat the subordinated units as a class of common stock with different

dividend rates from those of another class of common stock but without prior or senior rights and (ii) to disclose net income per unit for both common units and subordinated units.

Unaudited Pro Forma Balance Sheet, page F-6

Notes to Unaudited Pro Forma Financial Statements

2. Pro Forma Adjustments, page F-7

33. *Reference is made to footnote (d). Please explain in detail, and disclose in summary, the basis for how you allocated the residual net investment to the common,*

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subordinated and general partner interest upon the conversion discussed in the footnote. Please summarize for us any relevant provisions from the partnership agreement that governs how the initial allocations to capital accounts are to be made. Please supplementally advise whether the capital accounts related to common units purchased in the offering versus those issued upon formation differ in amount.

RESPONSE:

We acknowledge the Staff's comment and note that the allocation between common, subordinated and general partner interest will be based on the capital account balances of the categories. Because the number of common units and subordinated units will be equivalent prior to the offering, and the general partner interest is non-economic, the amount is split evenly between the common units and subordinated units. We have revised the disclosure in Amendment No. 1 to more specifically reflect this fact. Please see page F-7.

Under our partnership agreement, all units (common and subordinated, including the common units issued in the offering) will begin with the same per unit capital account equal to the price per unit that the public will pay in the offering. Because the general partner interest will be non-economic and the general partner will not contribute any assets, the general partner's capital account will initially have a zero balance.

3. Pro Forma Net Income Per Limited Partner Unit, page F-8

34. *Please tell us the significance of your statement in the first paragraph of footnote 3 on page F-8 that for the purposes of the calculation you have assumed the minimum quarterly distribution was made to all unitholders during the period presented. Please tell us why you believe this assumption is appropriate in light of the pro forma results and whether pro forma net income per common and subordinated unit would change if the minimum quarterly distribution could not be met for all unitholders. If so, then such assumption may not be consistent with the pro forma results.*

RESPONSE:

We acknowledge the Staff's comment and note that the statement regarding the assumption relates to the fact that our partnership agreement will provide that, if the minimum quarterly distribution is not paid on all common and subordinated units, there could be a special allocation of income to the common unitholders. As a result, the net income per common unit could be higher than the net income per subordinated unit.

We believe that the assumption is appropriate, however, because of the disconnect between the pro forma period and the forecasted twelve-month period ending March 31, 2015, the latter of which forms the basis for the calculation of the minimum quarterly distribution. Specifically, the minimum quarterly distribution under our partnership agreement is not intended to be reflective of amounts that we could (or would) have distributed to our unitholders on a historical or pro forma basis if the offering had taken place in the past. Accordingly, without making the assumption regarding the payment of the minimum quarterly distribution, our pro

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forma earnings per unit disclosure would not be comparable to our related disclosures in the future, when we believe that we will be able to pay the minimum quarterly distribution on all of our common and subordinated units.

Antero Resources Midstream LLC Predecessor

35. *Please update the financial statements of your Predecessor as necessary to comply with Rule 3-01 of Regulation S-X.*

RESPONSE:

We acknowledge the Staff's comment and have updated the financial statements of our Predecessor to comply with Rule 3-01 of Regulation S-X. Please see the financial statements beginning on page F-10 in Amendment No. 1.

Balance Sheets, page F-10

36. *Please revise or confirm the accrued liabilities line item does not require disaggregation pursuant to Rule 5-02.20 of Regulation S-X.*

RESPONSE:

We acknowledge the Staff's comment and have revised the Predecessor balance sheets and related disclosure to disaggregate accrued liabilities pursuant to Rule 5-02.20 of Regulation S-X. Please see page F-10 of Amendment No. 1.

Notes Accompanying the Financial Statements

Note 2 — Summary of Significant Accounting Policies

Revenue Recognition, page F-15

Use of Estimates, page F-15

37. *Please tell us and, revise to provide a more robust revenue recognition policy that addresses each of your significant revenue streams and any significant estimates made, if any, by you. To the extent you believe additional disclosure is not warranted, please tell us why. In this regard, a supplemental description of the physical process behind providing gathering, compression and water distribution services correlated with the points along that timeline in which you recognize revenue related to each service would be helpful to our understanding. In this regard, explain to us what estimates and assumption management formulated that affect revenues as stated in Use of Estimates.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to provide a more robust revenue recognition policy further addressing our significant revenue streams. This

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includes a supplemental description of the physical process behind providing gathering, compression and fresh water distribution services and the points along the process for which we recognize revenue. For the historical predecessor financial statements, we have utilized actual meter readings and volumes in the calculation of revenues and accounts receivable-affiliate. Due to the anticipated timing of the release of future financial statements, we anticipate the use of estimated or preliminary volumes in the calculation of accrued revenue estimates. Please see page F-15 of Amendment No. 1.

38. *Please describe any services you provide and fees you receive for transmission of natural gas as indicated in Revenue Recognition. In this regard, please explain to us the physical point at which the "contributed assets" first receive natural gas, which we assume is the wellhead, and the exit point(s) of such gas from the contributed assets. Please clarify our understanding as to whether any transmission of gas is involved during the gathering process or how any transportation fees are derived from gathering activities. On this point, page 62 suggests you receive a price per Mcf that varies based on PSI.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to only discuss gathering of natural gas. Our Predecessor has not historically provided separate transportation or transmission of natural gas. Please see page F-15.

As described on page 139, the gathering agreement with Antero provides for a fixed fee per Mcf for gathering services. However, that fee is subject to future adjustment based on the Consumer Price Index. The disclosure on page 62 in the prospectus in the initial filing of the Registration Statement relates to our assumption of the impact of that adjustment — 1.5% — during the forecasted twelve-month period ending March 31, 2015. The gathering agreement with Antero does not provide for any adjustments based on PSI.

Property and Equipment, page F-15

39. *Please explain or revise to clarify what you refer to as a substantial overhaul costs on page F-16, and the period over which such costs are depreciated. Please explain to us whether and how these costs extend the life, increase the capacity or improve the utility of the property or equipment.*

RESPONSE:

We acknowledge the Staff's comment and have revised our disclosure to exclude the reference to substantial overhaul costs that are capitalized and depreciated. Please see page F-15.

40. *Given the majority of your gathering pipelines are recently constructed and your parent's wells recently drilled, please explain in detail how you determined a 20 year useful life was appropriate for depreciation of gathering pipelines. While we assume your estimate is based in-part on your 20-year dedications from Antero, please ensure*

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your response addresses the extent to which such useful life estimates and method considered, among other factors, the length of time natural gas reserves under dedication are expected to be depleted. In this regard, we note your statement that you cannot predict when production from existing reserves in the fields you operate will cease. Please provide a similar justification for the useful lives of water distribution systems. On this point, please provide a more targeted description of water distribution assets with a 20 year life versus those with a 5 year life along with related carrying values.

RESPONSE:

We depreciate underground gas gathering and water distribution pipelines over a useful life of 20 years. While our agreements with Antero provide for a term of 20 years, that was not the sole determinative factor in estimating the useful lives of the assets. On an overall average basis, the life of the natural gas fields associated with our gathering assets could be as long as 40 years; however, we expect that this life will vary by well and areas within the fields and that the life of individual pipeline assets could be much shorter than 40 years. Additionally, we expect that after 20 years, it is possible that lines could require increased repair and maintenance, or even replacement. We have reviewed the relevant useful lives used by other industry participants and believe that the 20-year life used in our depreciation calculations is consistent with industry practices.

We use a five-year useful life for our above-ground temporary water distribution pipelines. We believe that the nature of the use of these temporary systems will make them more susceptible to wear and tear and the requirement to replace them likely after five years of use, and therefore we believe the five-year depreciable life is appropriate.

We have revised our disclosure to provide a more targeted description of the useful lives of our water distribution assets accordingly. Please see page F-16.

Note 3 — Transactions with Affiliates, page F-18

41. *We note you make reference to revenues and the allocation of costs within this footnote. Please tell us whether, and if so what amount, of accounts payable or accrued liabilities presented on your balance sheets are due to affiliates. To the extent any amounts were due to affiliates, please tell us what consideration was given to disclosure.*

RESPONSE:

We acknowledge the Staff's comment and we note that all accounts payable, accrued liabilities and accrued capital balances are due to third parties. All operations of the Predecessor are funded by Antero; therefore, third party balances are managed and paid under Antero's centralized cash management program. For comparability purposes, we believe it is appropriate to present these balances as accounts payable, accrued liabilities and accrued capital to third

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parties. In the future, after the Predecessor is contributed to the Company, the Company will fund its own operations and pay all third party balances.

We have revised our disclosure to provide further clarity on this point. Please see page F-18.

Note 6 — Commitments and Contingencies, page F-21

42. *Please supplementally explain the significance of the "Credit Facility" to the predecessor's operations that necessitates disclosure. In this regard, please advise the extent to which the predecessor had access to the facility. To the extent the predecessor had no ability to directly utilize the facility you should make that clear in the disclosure.*

RESPONSE:

We acknowledge the Staff's comment and note that, prior to the contribution to the Company in connection with the completion of the offering, the midstream assets and business that make up the Predecessor will be owned by Antero or one of its wholly-owned subsidiaries. Accordingly, borrowings under the Credit Facility were available with respect to the Predecessor to the same extent as any of Antero's other assets.

On February 28, 2014, Antero and the Predecessor entered into a separate credit facility (as a subset of the Credit Facility) applicable only to the midstream assets and business. Please see, for example, the disclosure beginning at the bottom of page 100 of Amendment No. 1.

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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/ Glenn C. Warren, Jr.

Name: Glenn 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.)
Ryan J. Maieron (Latham & Watkins LLP)
Alvyn A. Schopp (Antero Resources Midstream LLC)