



DIVISION OF
CORPORATION FINANCE

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

June 10, 2016

Gary R. Heminger
Chairman and Chief Executive Officer
MPLX LP
200 E. Hardin Street
Findlay, OH 45840

Re: MPLX LP
Registration Statement on Form S-3
Filed May 16, 2016
File No. 333-211397
Form 10-K for Fiscal Year Ended December 31, 2015
Filed February 26, 2016
Form 10-Q for Fiscal Quarter Ended March 31, 2016
Filed May 2, 2016
Form 8-K
Filed April 28, 2016
File No. 001-35714

Dear Mr. Heminger:

We have limited our review of your registration statement to those issues we have addressed in our comments. We have also reviewed your periodic filings and have 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 comments on your periodic filings within ten business days by providing the requested information or advise us as soon as possible when you will respond. 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.

Registration Statement on Form S-3

General

1. This letter includes comments relating to your Exchange Act filings and disclosures. Once we indicate that we have no further comments in that regard, you will be in a position to request accelerated effectiveness for your Form S-3 registration statement.

Form 10-K for Fiscal Year Ended December 31, 2015

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 71

Non-GAAP Financial Information, page 72

2. We note that your reconciliations of Adjusted EBITDA and Distributable Cash Flow ("DCF") for the fiscal year ending December 31, 2015 include adjustments labeled "MarkWest's pre-merger EBITDA" and "MarkWest undistributed DCF," respectively, for the period from October 1, 2015 through December 3, 2015. Please expand your disclosure to further explain what these pre-merger adjustments represent and why the amounts are limited to the period from October 1, 2015 through December 3, 2015.

Form 10-Q for Fiscal Quarter Ended March 31, 2016

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 37

Critical Accounting Estimates, page 56

Impairment of Goodwill, page 57

3. We note the impairment charge recognized in the quarterly period ended March 31, 2016 does not relate to your Marcellus reporting unit within the Gathering and Processing segment; however, you disclose the sensitivity of the fair value of this reporting unit to a 0.5% increase in the discount rate assumption, which would have resulted in additional impairment of over \$400 million. Please expand your disclosures to address the following items:
 - the percentage by which fair value exceeded carrying value as of the date of the most recent test;
 - the amount of goodwill allocated to the reporting unit; and
 - a description of potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions.

Form 8-K filed April 28, 2016

Exhibit 99.1

4. You present, discuss, and analyze certain non-GAAP measures in the bullet points presented in bold font in the headlines to your earnings release for the quarter ending March 31, 2016 and as part of the disclosure therein without providing equally prominent presentation, discussion, or analysis of comparable GAAP measures. In addition, equally prominent descriptive characterizations of the comparable GAAP measures are not

provided. This presentation appears inconsistent with the updated Compliance and Disclosure Interpretations issued on May 17, 2016, specifically Question 102.10. Please review this guidance when preparing your next earnings release.

Closing Comments

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Gary R. Heminger
MPLX LP
June 10, 2016
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You may contact Wei Lu, Staff Accountant, at (202) 551-3725, or Shannon Buskirk, Staff Accountant, at (202) 551-3717, if you have questions regarding comments on the financial statements and related matters. Please contact Anuja A. Majmudar, Attorney-Advisor, at (202) 551-3844, or me at (202) 551-3642 with any other questions.

Sincerely,

/s/ Loan Lauren P. Nguyen

Loan Lauren P. Nguyen
Legal Branch Chief
Office of Natural Resources