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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4628

July 16, 2018

Gary R. Heminger
Chairman of the Board and Chief Executive Officer
Marathon Petroleum Corporation
539 South Main Street
Findlay, OH 45840

Re: Marathon Petroleum Corporation
Amendment No. 1 to Registration Statement on Form S-4
Filed July 5, 2018
File No. 333-225244

Dear Mr. Heminger:

We have limited our review of your registration statement to those issues we have addressed in our 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. Our reference to prior comments is to comments in our June 25, 2018 letter.

Opinion of Barclays, MPC's Financial Advisor, page 92

Summary of the Financial Analyses of MPC's Financial Advisor, page 95

Expected Synergies Analysis, page 99

1. We note your revised disclosure in response to prior comment 7 that, for purposes of this analysis, Barclays deducted certain non-recurring one-time costs from the gross expected synergies. Please revise to quantify the expected pre-tax EBITDA synergies, capital expenditure synergies, and total synergies net of these costs for FY 2018 through 2022.

The Merger Agreement, page 152

Conditions to the Completion of the Merger, page 177

2. Although you list a tax opinion as "to be filed by amendment" as exhibit 8.1, you refer at page 187 to a "closing date opinion" and disclose at page 179 that receipt by Andeavor of the tax opinion is a waivable condition. Please confirm that you will recirculate a revised proxy statement/prospectus and resolicit Andeavor stockholders if this condition is waived and the change in tax consequences would be material. Refer to Section III.D.3 of Staff Legal Bulletin No. 19.

Closing Comments

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 Lisa Krestynick, Staff Attorney, at (202) 551-3056 or, in her absence, Timothy S. Levenberg, Special Counsel, at (202) 551-3707 with any other questions.

Sincerely,

/s/ John Reynolds

John Reynolds
Assistant Director
Office of Natural Resources

cc: Michael J. Solecki, Esq.
Jones Day