



DIVISION OF
CORPORATION FINANCE

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

June 1, 2011

Via E-Mail

Michael Wilder
General Counsel
Marathon Petroleum Corporation
539 South Main Street
Findlay, Ohio 45840-3229

**Re: Marathon Petroleum Corporation
Amendment No. 5 to Form 10-12B
Filed May 26, 2011
File No. 1-35054**

Dear Mr. Wilder:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ A.N. Parker

Anne Nguyen Parker
Branch Chief

cc: Ted Paris, Esq.