



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4628

March 15, 2017

Michael J. Hennigan
President and Chief Executive Officer
Sunoco Logistics Partners L.P.
3807 West Chester Pike
Newtown Square, PA 19073

**Re: Sunoco Logistics Partners L.P.
Amendment No. 4 to Registration Statement on Form S-4
Filed March 3, 2017
File No. 333-215183
Form 10-K for Fiscal Year Ended December 31, 2016
File No. 001-31219**

Dear Mr. Hennigan:

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. Unless we note otherwise, our references to prior comments are to comments in our February 28, 2017 letter.

Form 10-K for the Fiscal Year ended December 31, 2016

Please respond to these comments 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.

Financial Statements

Note 2 – Summary of Significant Accounting Policies, page 78

Inventories, page 80

1. We note your disclosure indicating that you utilize the LIFO method of accounting for inventories of crude oil, NGLs and refined products, and value such inventories at the lower of cost or market (LCM). However, although you report inventory impairments for 2014 and 2015 in Note 18 on page 100, you show a gain of \$170 million for 2016. In Note 6 on page 87, you disclose the cumulative adjustments for 2015 and 2016 as LCM reserves, and in MD&A on page 56 you explain that net income was \$332 million higher in 2016 compared to 2015 due to inventory adjustments resulting from changes in commodity prices.

Given that LCM adjustments should establish a new cost basis for inventories, as stated in FASB ASC 330-10-35-14 and SAB Topic 5:BB, tell us your rationale for booking inventory gains in excess of inventory losses recorded previously in the then current fiscal year, as appears to have occurred in the first and second quarters of 2015, and the second, third and fourth quarters of 2016. If any part of these adjustments relate to lower volumes of inventory, submit the analysis of changes to your LIFO inventory that correlate with the adjustments, and advise of the disclosure you would need to make to comply with SAB Topic 11:F. Please also explain why the inventory adjustments are not reported within cost of products sold.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration of the effective date of the pending registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jenifer Gallagher, Staff Accountant, at (202) 551-3706 or Karl Hiller, Accounting Branch Chief, at 202-551-3686 if you have questions regarding comments on the financial statements and related matters. Please contact Irene Barberena-Meissner, Staff Attorney, at (202) 551-6548 or me at (202) 551-3745 with any other questions.

Michael J. Hennigan
Sunoco Logistics Partners L.P.
March 15, 2017
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Sincerely,

/s/H. Roger Schwall

H. Roger Schwall
Assistant Director
Office of Natural Resources

cc: Lande A. Spottswood, Esq.
Vinson & Elkins LLP