

March 17, 2017

Securities and Exchange Commission
100 F. Street, N.E.
Washington, D.C. 20549

**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**

This letter sets forth the responses of Sunoco Logistics Partners L.P. (the “Partnership”) to the comments provided by the staff (the “Staff”) of the Securities and Exchange Commission (the “Commission”) in its comment letter dated March 15, 2017 (the “Comment Letter”) with respect to Amendment No. 4 to the Partnership’s Registration Statement on Form S-4 (the “Registration Statement”) and the Partnership’s Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (the “Form 10-K”). For your convenience, we have repeated each comment of the Staff exactly as given in the Comment Letter and set forth below each such comment is our response.

Staff Comments

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

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.

Response: We respectfully acknowledge the Staff's comments. As noted by the Staff, the Partnership's crude oil, natural gas liquids ("NGLs") and refined products inventories are valued at the lower of cost or market, with inventory costs determined using the LIFO method of accounting. The inventory balances held by the Partnership represent the volumes necessary to execute its commodity acquisition and marketing strategies. These inventories are held in the various logistical assets utilized by the Partnership to transport purchased volumes to the ultimate sales destination. Due to the operational nature of the assets utilized to transport and store these commodities, the physical units of inventory held by the Partnership at the end of a reporting period are transported and sold in the subsequent period. The volume is then replaced within the subsequent period in order to allow the various logistical assets to continue operating at the desired level. An example of this would include the minimum inventory requirement that the Partnership is required to maintain to ship volumes through a pipeline. Despite the fact that the total volume held within the pipeline may remain constant, the physical units at the end of an accounting period are the first volumes to be sold in the subsequent period and are replaced with new volumes in order to maintain the minimum requirement.

As part of the quarterly financial reporting process, the Partnership compares its LIFO inventory balances recorded for each of its commodity pools against current market prices of the respective inventories. To the extent the LIFO inventory balance exceeds current market prices for the respective commodity pool, a lower of cost or market reserve is recorded. When accounting for the established reserves in subsequent periods, the Partnership considered the SEC Staff Accounting Bulletin Topic 5.L, LIFO Inventory Practices and Section 6 of the American Institute of Certified Public Accountants Issues Paper "Identification and Discussion of Certain Financial Accounting and Reporting Issues Concerning LIFO Inventories" (the "AICPA Issues Paper"). Specifically, sections 6-26 through 6-31 of the AICPA Issues Paper concluded that after a company disposes of the physical units of inventory for which the reserves were provided, it should reverse the reserve. The reserve at the end of the year should be based on a new lower of cost or market computation. Because the physical units of inventory are sold and replaced, the Partnership applies the guidance from section 6-31 of the AICPA Issues Paper and reverses the reserve previously recorded and calculates a new lower of cost or market reserve at the end of each period.

As of December 31, 2014, 2015 and 2016, the Partnership's lower of cost or market reserves on its inventory balances totaled \$258 million, \$420 million and \$250 million, respectively. The net changes of \$162 million of expense in 2015 and \$170 million of gain in 2016 resulted in the \$332 million variance in net income disclosed in the Partnership's MD&A section of the Form 10-K. The impact of the lower of cost or market reserves, and subsequent reserve adjustments, have been separately disclosed as "Impairment charges and other matters" within the Partnership's

Consolidated Statements of Comprehensive Income to provide the reader with increased transparency to the impact of lower of cost or market reserve adjustments. Inventory volumes during these periods have increased when compared to the prior year balances. Any decreases in volumes experienced during the interim periods of 2015 and 2016 were deemed to be temporary and were expected to be replaced by the end of the annual reporting period. Since overall inventory volumes increased in the periods in question, the Partnership did not record or disclose any LIFO liquidations in accordance with FASB ASC 270-10-45-6 and SAB Topic 11:F. To the extent inventory volumes decrease in a subsequent period, the impact of a LIFO liquidation would be recorded within cost of products sold and disclosed within the Partnership's filings.

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Please contact the undersigned if you have any questions or comments with respect to these responses to your comments.

Sincerely,

/s/ Peter J. Gvazdauskas

Peter J. Gvazdauskas

Chief Financial Officer and Treasurer

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