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January 19, 2007

Via EDGAR and FACSIMILE

Mr. H. Christopher Owings
Assistant Director
Division of Corporation Finance
Securities and Exchange Commission
Mail Stop 3561
100 F Street, N.E.
Washington, D.C. 20549-7010

**Re: Targa Resources Partners LP
Registration Statement on Form S-1
Filed November 16, 2006
File No. 333-138747**

Dear Mr. Owings:

Targa Resources Partners LP (the “Partnership” or “we”) is filing today, via EDGAR, Amendment No. 3 (“Amendment No. 3”) to the above referenced registration statement on Form S-1 (the “Registration Statement”).

Set forth below are the Partnership’s responses to the comments and requests for additional information contained in the letter from the staff of the Division of Corporation Finance (the “Staff”) of the Securities and Exchange Commission (the “Commission”) dated January 17, 2007. For your convenience, the exact text of the comments provided by the Staff has been included in italicized type preceding each response in the order presented in the comment letter. Each response below has been prepared and is being provided by the Partnership, which has authorized us to respond to the Staff’s comments on its behalf. Unless the context otherwise requires, all references to page numbers in the responses to the Staff’s comments correspond to the pages in Amendment No. 3 that the Partnership is filing today via EDGAR.

Summary, page 1

- 1. We reissue comment 4 in our letter dated December 15, 2006. Please remove the Strategies and Competitive Strengths sections.*

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Response: We have replaced the Strategies and Competitive Strengths sections in the Summary with a cross-reference to these sections under Business.

2. *We have reviewed your response to comment 5 in our letter dated December 15, 2006. Please provide all the required disclosures of Item 10(e) in each instance that a non-GAAP measure is presented rather than a cross-reference to "Summary- Non-GAAP Financial Measures."*

Response: The Registration Statement has been revised as requested. Please see pages 2, 3, 15,16, 45, 48, 49, 66, 74 and 75.

Non-GAAP Financial Measures, page 14

3. *We have reviewed your revised disclosure and response to prior comment 13 in our letter dated December 15, 2006. Since you are excluding recurring charges from the non-GAAP performance measure operating margin, you must meet the burden of demonstrating the usefulness of this measure. In doing so, please separately address each of the disclosure bullet points in question 8 of the Staff's Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures (non-GAAP FAQ) for each non-GAAP measure presented. Please refer to question 8 of the non-GAAP FAQ and tell us why you believe this is a useful measure.*

Response: We have reviewed question 8 of the Staff's Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures and have addressed the five categories of disclosure recommended by the item. Please see pages 2, 3, 15,16, 45, 48, 49, 66, 74 and 75..

Risk Factors, page 16

4. *We note your response to comment 14 in our letter dated December 15, 2006. The revised risk factor beginning at the bottom of page 18 and continuing on to page 19 still appears lengthy and should be further shortened to concisely disclose the material risk.*

Response: We have shortened the risk factor to focus on the specific risks. Please see page 19 and 20.

Business, page 85

Strategies, page 85

5. We note the response to 23 in our letter dated December 15, 2006. Please further expand your disclosure to more fully discuss the factors that you state you will consider. For example, please more fully discuss the specific economic characteristics that you deem favorable or unfavorable, the regions where you intend to acquire assets and your financing plans, including the various sources of capital you intend to pursue.

Response: The Registration Statement has been revised as requested. Please see page 91.

Overview of Forth Worth Basin/Bend Arch., page 95

6. We note your response to comment 25 in our letter dated December 15, 2006, where you refer to reports obtained from W.D. Von Gonten & Company. We are unclear whether all of the statistical data and conclusory statements included in this section were obtained from these reports. If so, please revise to clearly indicate that this is the case. If not, please revise to disclose the source(s) of all statistical data or similar types of disclosure here in this section and throughout your prospectus as necessary.

Response: The Registration Statement has been revised as requested. Please see pages 100, 101 and 102.

Executive Compensation, page 110

7. We note your response to comment 28 in our letter dated December 15, 2006. Please update the prospectus to include the disclosure required by Item 402 of Regulation S-K.

Response: The Registration Statement has been revised as requested. Please see Compensation Discussion and Analysis beginning on page 115.

Exhibit Index

8. Please revise the exhibit index to indicate that the confidential portions of the exhibit have been filed separately with the Commission. See Rule 406(b) under the Securities Act of 1933.

Response: The Registration Statement has been revised as requested. Please see page II-2 and the Exhibit Index.

Please direct any questions or comments regarding the foregoing or with respect to Amendment No. 3 to David P. Oelman of Vinson & Elkins L.L.P. at (713) 758-3708.

Very truly yours,

VINSON & ELKINS L.L.P.

By: /s/ David P. Oelman

David P. Oelman

cc: Jeffrey J. McParland
Paul W. Chung