

Mail Stop 3561

August 9, 2005

Richard H. Bachman, Executive Vice President
Enterprise GP Holdings L.P.
2727 North Loop West, Suite 101
Houston, TX 77008-1044

Re: Enterprise GP Holdings L.P.
Amendment No. 2 to Registration Statement on Form S-1
Filed July 22, 2005
File No. 333-124320

Dear Mr. Bachman:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Table of Contents, page i

1. Please delete the last paragraph of this disclosure on page iv. The new disclosure you have added constitutes an inappropriate disclaimer.

Estimated Cash Available to Pay Distributions Based Upon Estimated Consolidated Adjusted EBITDA, page 45

Footnote (d), page 46

2. Please clarify that the estimated proceeds from equity issuances of Enterprise Products Partners is net of the amount that you would be required to invest to maintain your current percentage ownership. If otherwise, please explain.

Unaudited Pro Forma Consolidated Available Cash, page 49

3. Your adjustment to add back the impact of net increases in working capital to arrive at Consolidated Adjusted EBITDA is not subsequently reflected as a reduction in arriving at cash available for distributions. If you assume that working capital does not require cash over time or that you can otherwise avoid the use of cash through discretionary management of working capital, please clarify.

Assumptions and Considerations, page 53

4. We note that your 2nd quarter 2005 earnings release identified shortfalls in your operational performance objectives. Please

address how these shortfalls will be overcome and, if necessary, please revise your estimates of EBITDA for the twelve months ending June 30, 2006 to reflect these operational difficulties or tell us why a revision is unnecessary.

5. We note your Estimated Consolidated Adjusted EBITDA for the twelve months ending June 30, 2006 of \$1,079 million is \$141 million greater than your Pro Forma Consolidated Adjusted EBITDA for the 12 months ended December 31, 2004 and \$105.6 million greater than your Pro Forma Consolidated Adjusted EBITDA for the 12 months ended March 31, 2005. Please revise your discussion to include the following:

* Expand your discussion of commodity prices and volumes to quantify the effects of such assumptions for both your pro forma historical periods and for the estimated 12 months ending June 30, 2006.

* We note that you expect to reduce your general and administrative costs by integrating the operations of Enterprise Products Partners and Gulf Terra. Please expand your discussion to include the specific plans and their expected impact. For example, if you plan to reduce headcount in specific departments, disclose this plan and quantify the amount of expected savings for each specific plan.

* Although you have identified significant items which are expected to contribute to your estimated consolidated adjusted EBITDA for the 12 months ending June 30, 2006, we believe that you should provide an overview of all items expected to contribute to your estimated increase over this period. You may aggregate individually insignificant items but we believe that the total of all highlighted items should be presented to explain the total increase expected over this period.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact John Cannarella, Staff Accountant, at (202) 551-3337 or in his absence, William Choi, Accounting Branch Chief, at (202) 551-3716 if you have questions regarding comments on the financial statements and related matters. Please contact Scott Anderegg, Staff Attorney, at (202) 551-3342, David Mittelman, Legal Branch Chief, at (202) 551-3214 or me at (202) 551-3720 with any other questions.

Sincerely,

H. Christopher Owings
Assistant Director

cc: Michael P. Finch
Vinson & Elkins, LLP
Via Fax (713) 615-5282

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Richard H. Bachman
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