Michael J. Knesek Senior Vice President, Controller and Principal Accounting Officer EPE Holdings, LLC 1100 Louisiana Street 10th Floor Houston, Texas 77002

Re: Enterprise GP Holdings L.P.
Form 10-K for the Fiscal Year Ended December 31, 2008
Filed March 2, 2009
Current Report on Form 8-K
Filed April 21, 2009
File No. 001-32610

Dear Mr. Knesek:

We have reviewed your filing and have the following comments. You should comply with these comments in all future filings, as applicable. Please confirm in writing that you will do so, and also explain to us in sufficient detail for an understanding of the disclosure how you intend to comply by providing us with your proposed revisions. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. 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 filings. 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.

Annual Report on Form 10-K for the Fiscal Year Ended December 31, 2008

Items 1 and 2. Business and Properties, page 3

Financial Information by Business Segment, page 4

1. We reviewed Note 4 of the Notes to Consolidated Financial Statements included under Item 8 of your Form 10-K. Please disclose total assets for each segment for each of the last three fiscal years as opposed to the last two fiscal years. Refer to Item 101(b) of Regulation S-K.

Enterprise Products Partners, page 6

Major customers, page 13

2. You disclose that Enterprise Products Partners' largest customer was LyondellBasell Industries and its affiliates ("LBI"), which accounted for nearly 10% of the consolidated revenues of Enterprise Products Partners. Since Enterprise Products Partners revenue accounted for over 60% of your revenues in 2008, please disclose whether you expect LBI's bankruptcy filing to have a material adverse effect on your revenues, results of operations or financial condition or the revenues, results of operations or financial condition of Enterprise Products Partners.

Item 1A. Risk Factors, page 29

3. In the second paragraph under this heading you state that "[t]he following section lists some, but not all, of the key risk factors that may have a direct impact on [your] business, financial position, results of operations and cash flows." All material risks should be described. If risks are not deemed material, you should not reference them. Please revise or advise under this heading and elsewhere in your Form 10-K as appropriate, including under the heading "Risks Relating to the MLP Entities' Business" on page 38.

Item 10. Directors, Executive Officers and Corporate Governance, page 103

Corporate Governance, page 103

Code of Conduct and Ethics and Corporate Governance Guidelines, page 103

4. Under this heading you state that EPE Holdings has adopted a "Code of Ethical Conduct for Senior Financial Officers and Managers" that applies to the CEO, CFO, principal accounting officer and senior financial and other managers and

that investors can access this Code of Ethical Conduct for Senior Financial Officers and Managers through your Internet website at www.enterprisegp.com. We were unable to locate a copy of the Code of Ethical Conduct for Senior Financial Officers and Managers on your website. Please revise or advise.

Item 13. Certain Relationships and Related Transactions, and Director ..., page 122

Certain Relationships and Related Transactions, page 122

Relationship with EPCO and affiliates, page 122

EPCO Administrative Services Agreement, page 123

5. In the lead-in paragraph to your summary compensation table on page 109, you disclose that "[c]ompensation paid or awarded by [you] with respect to [your] Named Executive Officers reflects only that portion of compensation paid by EPCO allocated to [you] pursuant to the ASA, including an allocation of a portion of the cost of EPCO's equity-based long-term incentive plans." In your description of the administrative services agreement under this heading, please disclose how compensation paid by EPCO, including the cost of EPCO's equity-based long-term incentive plans, is allocated under the administrative services agreement to you and your affiliates.

We also note that (1) Messrs. Fowler and Bachmann are named executive officers of Enterprise GP Holdings L.P., Enterprise Products Partners L.P. and Duncan Energy Partners L.P. and (2) Messrs. Creel and Teague are named executive officers of Enterprise GP Holdings L.P. and Enterprise Products Partners L.P. Please disclose how much time each of these named executive officers devotes to these businesses. Lastly, please also state, if true, that the portion of compensation paid by EPCO allocated to you pursuant to this agreement does not include any portion of the compensation allocated by EPCO to your consolidated subsidiaries.

Item 15. Exhibits and Financial Statement Schedules, page 131

6. Under this heading you disclose that the "agreements included as exhibits are included only to provide information to investors regarding their terms" and that the "agreements ... may contain representations, warranties and other provisions that were made, among other things, to provide the parties thereto with specified rights and obligations and to allocate risk among them, and such agreements should not be relied upon as constituting or providing any factual disclosures about [you], any other persons, any state of affairs or other matters." Please

revise to remove any potential implication that the referenced agreements do not constitute public disclosure under the federal securities laws.

7. We note that Lehman Commercial Paper Inc. is the syndication agent under your credit agreement. Please tell us what impact, if any, the filing for bankruptcy on September 15, 2008 by Lehman Brothers Holdings, Inc. has had on this agreement and your access to the full amount available thereunder.

Current Report on Form 8-K filed April 21, 2009

8. In this Form 8-K you disclosed that Enterprise Products Partners and TEPPCO announced that, effective April 16, 2009, their respective affiliates that were partners in the Texas Offshore Port System (TOPS) partnership dissociated from TOPS and forfeited their investments and combined two-thirds ownership interest in the partnership. Under the heading "Results of Operations—Investment in Enterprise Products Partners" on page 65 of your Form 10-K, you disclose in the fourth paragraph that "Enterprise Products Partners and TEPPCO have each guaranteed up to approximately \$700.0 million ...of the capital contribution obligations of their respective subsidiary parties in the join venture." With a view toward disclosure, please tell us whether you expect Enterprise Products Partners and TEPPCO to incur any liabilities in the future pursuant to these guarantees. We may have further comment.

With a view toward disclosure, please also tell us whether you expect the dissociation of the Enterprise Products Partners and TEPPCO affiliates to have a material adverse effect on your results of operations, financial condition or business strategy or the results of operation, financial condition or business strategy of Enterprise Products Partners or TEPPCO. In this regard, we note the disclosure in your risk factor "Enterprise Products Partners and TEPPCO recently announced their participation in the Texas Offshore Port System joint venture …" on page 38 of your 10-K, that the TOPS joint venture "is expected to represent an important investment for Enterprise Products Partners and TEPPCO, requiring an estimated combined \$1.2 billion in capital contributions from them (excluding capitalized interest)."

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of your disclosure to expedite our review. Please furnish a letter 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 responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in these filings to be certain that the filings include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Please contact Catherine Brown, Staff Attorney, at (202) 551-3513 or me at (202) 551-3720 with any questions you may have.

Sincerely,

H. Christopher Owings Assistant Director