Mail Stop 3561

July 12, 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. 1 to Registration Statement on Form S-1

Filed June 21, 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 Please be as detailed as necessary in your unnecessary. 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. **Prospectus Cover Page** 1. We reissue comment 3 in our letter dated May 26, 2005. While noting your response, we continue to believe that the expected distribution rate is not appropriate for cover page disclosure. Instead, the disclosure should appear in the summary, where currently it already does. Artwork 2. We reissue comment 5 in our letter dated May 26, 2005. Please remove the defined term "NGL" from your artwork. Enterprise GP Holdings L.P., page 1 3. Please refer to comment 9 in our letter dated May 26, 2005. We note the changes you have made in your disclosure. Please revise to more clearly describe the distribution thresholds and the fact that they are capped. Our Cash Distribution Policy and Restrictions on Distributions, page 41 4. We are still reviewing your response and revisions made in this section to address comment 16 in our letter dated May 26, 2005. We may have further comments upon the completion of our review. Notes to Consolidated Financial Statements, page F-30 5. We note your response to comment 29 of our letter dated May 26, 2005. However, it seems your consolidated subsidiary, GulfTerra, accounts for certain of its operations in accordance with SFAS 71 and

discloses related information. Please tell us why you do not

account for your interest in GulfTerra in a similar manner. To the extent that you do, please indicate this in your notes to financial statements and disclose your regulatory assets and regulatory liabilities for all periods presented. If any portion of your regulatory asset balance includes amounts on which you do no earn а current return, disclose the nature and amounts of each of these assets and the remaining recovery period associated with each of them. **** 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 Enterprise GP Holdings L.P. July 12, 2005 Page 3