



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

February 1, 2011

Via Fax & U.S. Mail

Mr. Terrence P. Gill
Chief Financial Officer
One Tower Center Boulevard, 17th Floor
East Brunswick, New Jersey 08816

Re: K-Sea Transportation Partners LP
Form 10-K for the fiscal year ended June 30, 2010
Filed September 13, 2010
File No. 001-31920

Dear Mr. Gill:

We have reviewed your filing and have the following comments. Unless otherwise indicated, we think you should revise your document in future filings 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.

Please respond to confirm that such comments will be complied with, or, if certain of the comments are deemed inappropriate, advise the staff of your reason. Your response should be submitted in electronic form, under the label "corresp" with a copy to the staff. Please respond within ten (10) business days.

Form 10-K for the Year Ended June 30, 2010

Relationship with KA First Reserve LLC, page 102

1. We note from the discussion on page 102 of the Company's Annual Report on Form 10-K that in connection with the purchase of Series A Preferred Units, KA First Reserve, LLC entered into a Director Designation Agreement with the Partnerships' general partner which entitles it to certain board representation rights with respect to the K-Sea General Partner LLC board for so long as it owns certain percentages of the company's outstanding common units. As these board representation rights appear to provide KA First Reserve, LLC with significant influence with respect to the Company's operations, please revise the notes to the Partnerships' financial statements in future filings to disclose the significant terms of this agreement and the related board representation rights.

Notes to the Financial Statements

Note 1. Basis of Presentation, page F-9

2. We note your disclosure that in May 2009, the Partnership issued 49,775 limited partner units to the general partner in lieu of \$1,244 in cash distributions and in August 2009 the Partnership issued 49,908 limited partner units to the general partner in lieu of \$1,248 in cash distributions. Please explain to us, and disclose in the notes to the financial statements in future filings, how you determined the value of the limited partner units. If you determined that the value was based on "fair value," please explain how "fair value" was determined or calculated.

Note 2. Summary of Significant Accounting Policies

– Vessels and Equipment – including Changes in Accounting Estimates, page F-12

3. We note your disclosure that included in vessels and equipment are drydocking expenditures that are capitalized and amortized over three years based on regulatory drydocking requirements. Also, you disclose that drydocking activities include, but are not limited to, the inspection, refurbishment and replacement of steel, engine components, tail shafts, mooring equipment and other parts of the vessel. Please tell us and expand your disclosure in the notes to the financial statements in future filings to provide a detailed description of the types of drydocking costs included on the balance sheet and an affirmative statement that the types of costs deferred are consistent in all periods presented. If the types of costs deferred are not consistent, provide a discussion of any changes in types of costs deferred.

– Net Income Per Unit, page F-16

4. We note that in the table showing the calculation of the allocation of net income between the general partner and limited partners, distributions paid is disclosed as \$44,592, \$53,819, and \$8,727 for the years ended June 30, 2010, 2009 and 2008, respectively. Please tell us how you determined or calculated this amount and explain to us how the amount corresponds to the amount of cash distributions to partners as presented on the

statement of cash flows. Your response should clearly explain why the amounts of distributions paid as disclosed on page F-16 does not agree to the amounts reflected in the statements of cash flows for the respective periods.

Note 7. Financing
– Preferred Unit Investment, page F-38

5. We note that in connection with the Series A Preferred Unit investment, KA First Reserve LLC has also been granted the right to acquire a 35% interest in the entity that owns the Partnership's incentive distribution rights. Please tell us and disclose in future filings, the amount, if any, that KA First Reserve LLC must pay to acquire the 35% interest. Also, please tell us how you determined this purchase price. If KA First Reserve LLC does not need to provide any additional consideration for exercising this right to acquire the 35% interest, please tell us how you accounted for the granting of this right in connection with the sale of the preferred units.

Note 9. Fair Value Measurements, page F-40

6. We note that your disclosure includes a table summarizing assets and liabilities that are measured at fair value on a recurring basis at June 30, 2010. Please revise future filings to include the required fair value information for each period for which a balance sheet is included. See guidance at ASC 820-10-50-2.

Note 11. Long-Term Incentive Plan, page F-43

7. We note from the disclosure on page F-43 that the Partnership estimated that forfeitures of restricted units would be zero for purposes of estimating the fair value of its restricted stock units. Please explain in detail why you believe your treatment is appropriate and in accordance with the guidance in ASC 718-10-30-11. In this regard, we note from the disclosure in Note 11 that 2,910 units were forfeited during the fiscal year ended June 30, 2010. Please advise or revise as appropriate.

Note 14. Quarterly Results of Operations, page F-50

8. Please revise future filings to discuss the nature of any unusual or infrequent items that impacted your quarterly results of operations for the various periods presented, such as the impairments of assets and goodwill. Refer to the requirements outlined in Item 302(a)(3) of Regulation S-K.

Mr. Terrence P. Gill
K-Sea Transportation Partners LP
February 1, 2011
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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes 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 filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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.

You may contact Claire Erlanger at (202) 551-3301 if you have questions regarding comments on the financial statements and related matters. Please me at (202) 551-3813 with any other questions.

Sincerely,

Linda Cvrkel
Branch Chief

Via facsimile
(732) 565-3699