Filed by Kirby Corporation pursuant to Rule 425 of the Securities Act of 1933 and deemed filed pursuant to Rule 14a-12 of the Securities Exchange Act of 1934

Subject Company: K-Sea Transportation Partners L.P.

Commission File No.: 1-31920

Forward Looking Statements

Statements in these materials that are "forward-looking statements" are based on current expectations and assumptions that are subject to risks and uncertainties. Actual results could differ materially due to factors such as:

- Kirby's ability to achieve the synergies, efficiencies and value creation contemplated by the proposed transaction;
- Kirby's ability to promptly and effectively integrate the businesses of Kirby and K-Sea;
- · the time required to consummate the proposed transaction and any necessary actions to obtain required regulatory approvals;
- the diversion of management time on transaction-related issues;
- competition in the markets served by K-Sea or Kirby;
- unanticipated tax consequences of the transaction; and
- the possibility that the transaction will not close because of the failure to satisfy the closing conditions or other reasons.

A discussion of additional risk factors that may cause results to differ materially from those described in the forward-looking statements or that may otherwise affect Kirby's businesses is included under "Item 1A. Risk Factors" in Kirby's Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on February 25, 2011, and in subsequent reports on Forms 10-Q and 8-K and other filings made with the SEC by Kirby.

Forward-looking statements are based on currently available information and Kirby does not undertake any duty to update any forward-looking statement to reflect actual results or changes in Kirby's expectations.

Important Information about the Merger and Additional Information

This communication does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval. The proposed merger transaction involving Kirby Corporation and K-Sea Transportation Partners L.P. will be submitted to the unitholders of K-Sea for their consideration. In connection with the proposed merger, Kirby will file with the Securities and Exchange Commission a registration statement on Form S-4 that will include a proxy statement of K-Sea and a prospectus of Kirby. The definitive proxy statement/prospectus will be mailed to the unitholders of K-Sea. **INVESTORS AND**

SECURITY HOLDERS OF K-SEA ARE URGED TO READ THE REGISTRATION STATEMENT AND THE PROXY STATEMENT/PROSPECTUS AND OTHER MATERIALS REGARDING THE PROPOSED MERGER CAREFULLY AND IN THEIR ENTIRETY WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT KIRBY, K-SEA AND THE PROPOSED MERGER.

Investors and security holders may obtain a free copy of the registration statement and the proxy statement/prospectus when they become available and other documents filed with the SEC by Kirby and K-Sea through the SEC's website at www.sec.gov. Free copies of the registration statement and the proxy statement/prospectus (when available) and other documents filed with the SEC can also be obtained from Kirby's website at www.kirbycorp.com.

Kirby and its directors and executive officers and certain other persons may be deemed to be participants in the solicitation of proxies with respect to the proposed merger. Information regarding Kirby's directors and executive officers is available in its Annual Report on Form 10-K for the year ended December 31, 2010, which was filed with the SEC on February 25, 2011, and its proxy statement for its 2010 annual meeting of shareholders, which was filed with the SEC on March 10, 2010. Other information regarding the participants in the proxy solicitation, and a description of their direct and indirect interests, will be contained in the proxy statement/prospectus and other relevant materials to be filed with the SEC when they become available.

The following information appears in Kirby Corporation's 2010 annual report to its shareholders (the "Annual Report"), which is available at www.kirbycorp.com.

Excerpt from letter to Kirby Corporation's shareholders from Joseph H. Pyne, Kirby Corporation's Chief Executive Officer (page 3 of the Annual Report):

In March 2011, we announced the signing of an agreement to acquire K-Sea Transportation Partners L.P., an operator of tank barges and towing vessels participating in the transportation of refined petroleum products in the U.S. coastwise trade. The total value of the consideration is approximately \$600 million, before post-closing adjustments and fees, and will consist of cash and Kirby common stock. K-Sea's fleet, consisting of 58 offshore tank barges with 3.8 million barrels of capacity and 63 tugboats, transports refined petroleum products along the U.S. East, West and Gulf Coasts, and in Alaska and Hawaii. This pending acquisition is discussed in more detail on page 8.

Discussion regarding the pending acquisition of K-Sea Transportation Partners L.P. (page 8 of the Annual Report):

On March 13, 2011, we announced the signing of an agreement to acquire K-Sea Transportation Partners L.P., an operator of tank barges and tugboats participating in the coastwise transportation primarily of refined petroleum products in the U.S. The total value of the transaction is approximately \$600 million, before post-closing adjustments and fees, and will consist of cash, Kirby common stock and the refinancing of K-Sea debt. K-Sea's fleet, consisting of 58 tank barges with a capacity of 3.8 million barrels and 63 tugboats, operates along the East Coast, West Coast and Gulf Coast of the U.S., as well as in Alaska and Hawaii. K-Sea's tank barge fleet, 54 of which are doubled hulled, has an average age of approximately nine years and is one of the youngest fleets in the coastwise trade. K-Sea's customers include major oil companies and refiners, many of which are current Kirby customers for inland tank barge services. Headquartered in East Brunswick, New Jersey, K-Sea has major operating facilities in New York, Philadelphia, Norfolk, Seattle and Honolulu. The acquisition of K-Sea is a great foundation from which to expand our liquid transportation business into the U.S. Jones Act coastwise trade by extending Kirby's tank barge service to our customers with U.S. coastwise transportation requirements.

Under the terms of the agreement, the total value of the transaction is approximately \$600 million, consisting of \$335 million for K-Sea's equity and the refinancing of \$265 million of K-Sea debt. K-Sea's common and preferred unitholders will receive \$8.15 per unit in consideration in the form of cash and Kirby common stock. K-Sea's common unitholders will have the election to receive for each common unit either \$8.15 in cash or \$4.075 in cash and 0.0734 of a share of Kirby common stock. K-Sea's preferred unitholders will receive for each preferred unit \$4.075 in cash and 0.0734 of a share of Kirby common stock. K-Sea's general partner will receive \$8.15 in cash for each general partner unit and \$18 million in cash for its incentive distribution rights. The closing of the transaction is expected to occur in June or July 2011.