Via Edgar and U.S. Mail

December 9, 2010

Mr. Max A. Webb Assistant Director United States Securities and Exchange Commission Division of Corporation Finance 100 F Street N.E. Washington, D.C. 20549

Re: Kirby Corporation

Form 10-K for the Fiscal Year ended December 31, 2009 Filed February 26, 2010

File No. 001-07615

Dear Mr. Webb:

We have received your comment letter dated December 2, 2010 on our 2009 Form 10-K and below are our responses to your comments. Set forth below in italics are the comments made by the staff in your letter followed by our responses.

Form 10-K for the Fiscal Year Ended December 31, 2009

Item 5. Market for Registrant's Common Equity, page 22

1. We note your disclosure on page 43 regarding an "existing repurchase authorization" and in this section regarding the repurchase of 20,000 shares of common stock in November 2009. In future filings, please expand your disclosure to include the repurchase table and footnote disclosure required by Item 703 of Regulation S-K.

We confirm that this will be addressed in future filings.

Exhibits 31.1 and 31.2

2. We note that in the introductory language of paragraph 5 of the certifications required by Exchange Act Rule 13a-14(a) that in each certification the language "(or persons performing the equivalent functions)" has been deleted. In future filings, the certifications should be revised to track the language exactly as set forth in Item 601(b)(31) of Regulations S-K.

We confirm that this will be addressed in future filings.

In connection with responding to the staff's comments, we acknowledge 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 proceedings initiated by the Commission or any person under the federal securities laws of the United States.

Please call me at 713-435-1000 if you have any questions.

Sincerely,

/s/ David W. Grzebinski

David W. Grzebinski

Executive Vice President and Chief Financial Officer

cc: Joseph H. Pyne – Chairman, President and Chief Executive Officer