UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2017

Or

TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from _____ to _____

Commission file number 1-7615

KIRBY 401(k) PLAN

Kirby Corporation 55 Waugh Drive, Suite 1000 Houston, Texas 77007

KIRBY 401(k) PLAN

Index to Financial Statements and Supplemental Schedules

	Page
Report of Independent Registered Public Accounting Firm	1
Statements of Net Assets Available for Benefits (Modified Cash Basis) – December 31, 2017 and 2016	2
<u>Statements of Net Assets Available for Benefits (Modified Casil Basis) – December 51, 2017 and 2010</u>	2
Statements of Changes in Net Assets Available for Benefits (Modified Cash Basis) – Years ended December 31, 2017 and 2016	3
Notes to Financial Statements (Modified Cash Basis)	4
Supplemental Schedules	
Schedule I - Schedule H, Part IV, Line 4i – Schedule of Assets (Held at End of Year) (Modified Cash Basis) – as of December 31, 2017	13
Supplemental schedules, other than listed above, are omitted because of the absence of the conditions under which they are required.	

Report of Independent Registered Public Accounting Firm

To the Plan Administrator and Plan Participants Kirby 401(k) Plan

Opinion on the Financial Statements

We have audited the accompanying statements of net assets available for benefits (modified cash basis) of the Kirby 401(k) Plan (the Plan) as of December 31, 2017 and 2016, and the related statement of changes in net assets available for benefits (modified cash basis) for the years then ended, and the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2017 and 2016, and the changes in net assets available for benefits for the year ended December 31, 2017, on the basis of accounting described in Note 2.

Report on Supplementary Information

The supplementary information in the accompanying schedules of schedule of assets (held at end of year) (modified cash basis) as of December 31, 2017 has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplementary information is the responsibility of Plan management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information in the accompanying schedules, we evaluated whether the supplementary information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information in the accompanying schedules is fairly stated in all material respects in relation to the financial statements as a whole.

Basis for Opinion

These financial statements are the responsibility of Plan management. Our responsibility is to express an opinion on these financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Plan in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Plan is not required to have, nor were we engaged to perform, and audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Weaver and Tidwell, L.L.P.

WEAVER AND TIDWELL, L.L.P.

We have served as the Plan's auditor since 2016. Houston, Texas June 28, 2018

KIRBY 401(k) PLAN Statements of Net Assets Available for Benefits (Modified Cash Basis) December 31, 2017 and 2016

	2017	2016
Assets:		
Investments, at fair value	\$ 525,478,448	\$ 374,201,330
Notes receivable from participants	24,586,992	21,168,587
Other receivables	497,998	159,111
Total assets	550,563,438	395,529,028
Liabilities:		
Other liabilities		
Total liabilities		
Net assets available for benefits	\$ 550,563,438	\$ 395,529,028

See accompanying notes to financial statements.

KIRBY 401(k) PLAN

Statements of Changes in Net Assets Available for Benefits

(Modified Cash Basis) Years Ended December 31, 2017 and 2016

	2017	2016
Additions to net assets attributed to:		
Contributions from participants	\$ 21,468,161	\$ 21,830,705
Contributions from employer, net of forfeitures	12,650,485	13,564,807
Rollover contributions	6,664,552	3,434,421
Dividend and other income	13,748,077	6,491,288
Interest income from participants' notes receivable	950,941	854,428
Net appreciation in fair value of investments	42,088,581	24,252,276
Total additions, net	97,570,797	70,427,925
Deductions from net assets attributed to:		
Benefits paid to participants	47,852,648	44,317,269
Investment counselor fees and other	175,722	174,144
Total deductions	48,028,370	44,491,413
Transfer of investments to the plan from the Stewart & Stevenson 401(k) Plan (note 1)	105,491,983	
Net increase	155,034,410	25,936,512
Net assets available for benefits, beginning of year	395,529,028	369,592,516
Net assets available for benefits, end of year	\$ 550,563,438	\$ 395,529,028

See accompanying notes to financial statements.

(1) Description of Plan

(a) General

The Kirby 401(k) Plan (the Plan) is a defined contribution 401(k) plan for the benefit of employees of Kirby Corporation (the Company) and certain subsidiaries. Employees covered by collective bargaining agreements, the terms of which do not provide for participation in the Plan, are not eligible. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). Further information relating to the Plan's provisions is available in the Plan Document.

The Stewart and Stevenson LLC (S&S) 401(k) Savings Plan (the S&S Plan) was merged into the Plan, and all balances were transferred to the Plan effective December 7, 2017. Commencing December 1, 2017, former S&S Plan participants are subject to the same plan provisions as the Plan participants.

(b) Administration of the Plan

The general administration of the Plan is the responsibility of the Company (the plan administrator). The plan administrator has broad powers regarding the operation and administration of the Plan and receives no compensation for service to the Plan. Bank of America, N.A. (Bank of America) is the trustee of the Plan.

(c) Contributions

Each employee is eligible to join the Plan as of the first pay period following completion of three months of service and the attainment of age 18 unless specified otherwise by a collective bargaining agreement. Prior to July 1, 2015, the Plan provided for basic employee pretax contributions to the Plan of up to 3% of covered compensation as defined, and for additional employee pretax contributions to the Plan of up to 3% of covered compensation as defined, and for additional employee pretax contributions to the Plan of up to 17% of covered compensation subject to the provisions of the Internal Revenue Code of 1986, as amended (the Code). Effective July 1, 2015, the Plan was amended to allow Non-Highly Compensated Employees, as defined by the Internal Revenue Service ("IRS"), to contribute up to 47% of covered compensation. Additional employee pretax contributions to the Plan up to 47% of covered compensation are allowed under certain collective bargaining agreements. Participants age 50 or older during the Plan year may also elect to make a "catch-up" contribution, subject to certain IRS limits (\$6,000 in 2017 and 2016). Effective December 1, 2017, the Plan was amended to allow for participants to also designate some of their contributions as after tax contributions to a Roth 401(k) option. The Company contributes matching employer contributions. Each participant directs his or her contributions and the Company's matching contributions between the investment funds offered by the Plan, including Company common stock.

Vessel based employees of Kirby Offshore Marine, LLC ("KOM") whose employment is covered by collective bargaining agreements receive a non-discretionary employer match and may receive a discretionary employer contribution based on the terms of the applicable collective bargaining agreement.

4

(Continued)

The Plan allows the employer, at its discretion, to make an additional discretionary employer contribution for eligible employees equal to 5% of the employees covered compensation, as defined by the Plan. Eligible employees are employees of United Holdings, LLC ("United") and employees of KOM assigned the classification of Vessel Employee as determined by the Company. On March 29, 2018, the Company made a discretionary contribution of \$5,109,075 to the Plan for eligible United and KOM employees for the 2017 Plan year. On March 31, 2017, the Company made a discretionary contribution of \$4,218,878 to the Plan for eligible KOM employees for the 2016 Plan year. No discretionary contribution for eligible United employees was made for the 2016 Plan year.

On April 12, 2017, the Company amended its defined benefit plan for its inland vessel personnel and shore based tankermen, employed by Kirby Inland Marine, LP (KIM), to cease all benefit accruals for periods after May 31, 2017 for certain participants. Participants grandfathered and not impacted were those, as of the close of business on May 31, 2017, who either (a) had completed 15 years of pension service or (b) had attained age 50 and completed 10 years of pension service. Participants non-grandfathered are eligible to receive discretionary 401(k) plan contributions. On March 29, 2018, the Company made a discretionary contribution of \$2,562,613 to the Plan for eligible KIM employees for the 2017 Plan year.

The Plan allows the use of forfeited amounts to offset future employer matching contributions. Forfeitures from non-vested accounts of \$732,437 and \$738,176 were used to reduce the Plan's matching contributions in 2017 and 2016, respectively.

All employees hired or rehired are automatically enrolled at a 3% pretax contribution rate, unless otherwise elected by the participant. In addition, participants may contribute amounts representing rollovers from other qualified plans or from an individual retirement account.

(d) Benefits

Benefits payments are made to participants upon retirement or termination of employment (or to the beneficiary in the event of death) and are in the form of lump sum or installment distribution payments. A participant may request a loan for up to the lesser of 50% of the participant's vested interest or \$50,000, less the participant's highest outstanding loan balance during the preceding 12 months. Loans typically bear interest at prime rate plus 1%. Interest rates ranged from 4.25% to 10.25% at December 31, 2017. Loans outstanding at December 31, 2017 mature from January 9, 2018 through September 18, 2035. Loans outstanding upon a participant's termination of employment are considered deemed distributions if not repaid and are deducted from the participant's account balance prior to distribution. These amounts are taxed to the participant in the year of the participant's termination. Active participants who qualify for an in-service withdrawal after attaining 59½ years of age may be paid their benefits in a single sum cash payment or rollover as soon as administratively possible.

(Continued)

The Plan requires automatic distribution of participant accounts upon termination without the participant's consent of amounts less than \$5,000 and greater than \$1,000. If the participant does not elect to have the amount paid directly to an eligible retirement plan or receive a distribution directly, then the Plan will pay the distribution to an individual retirement plan designated by the Plan administrator. Amounts less than \$1,000 are paid directly to participants upon termination.

(e) Vesting

Participants are 100% vested in their participant contributions and rollovers, if any. Employer contributions are subject to a six-year vesting schedule. The vesting schedule of employer contributions for employees covered by collective bargaining agreements are specified by that particular agreement. Forfeitures in the amount of \$137,741 and \$119,112 as of December 31, 2017 and 2016, respectively, were available to offset future employer contributions or plan administrative expenses at the discretion of the Company.

(f) Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to terminate the Plan subject to the provisions of ERISA. In the event of termination, the amounts credited to the accounts of participants will be distributed to the participants after payment of expenses for distribution and liquidation.

(g) Participant Accounts

Under the Plan, each participant's account is credited with the participant's contribution, the Company's matching contribution, and an allocation of investment income (loss), net of administrative expenses. Investment income (loss) is allocated daily to participants. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

(h) Administrative Expenses

All administrative expenses, unless paid by the Company at its discretion, are paid by the Plan.

(i) Revenue Sharing

The agreement between Bank of America and the Plan includes a revenue sharing arrangement whereby Bank of America receives investment related revenue generated by Plan assets invested in mutual fund holdings sponsored by an affiliate of Bank of America. These deposits are included in dividend and other income in the statement of changes in net assets available for benefits. The funds can be used to pay plan expenses or be allocated to participants. Income from revenue sharing was \$52,026 and \$32,350 as of December 31, 2017 and 2016, respectively.

(Continued)



(2) Summary of Significant Accounting Policies

(a) Basis of Presentation

The accompanying financial statements have been prepared on the modified cash basis, which is a comprehensive basis of accounting other than U.S. generally accepted accounting principles, and is an acceptable method of reporting under Department of Labor regulations. The modified cash basis of accounting utilizes the cash basis of accounting while carrying investments at fair value and recording investment income (loss) on the accrual basis. Consequently, contributions are recognized when received rather than when earned, and expenses are recognized when paid rather than when the obligation is incurred. As of December 31, 2017, \$234,000 of employee contributions had not been remitted to the trust and \$305,468 of employer contributions were not remitted to the trust for the 2017 Plan year. As of December 31, 2016, \$227,502 of employee contributions had not been remitted to the trust and \$110,966 of employer contributions were not remitted to the trust and \$110,966 of employer contributions were not remitted to the trust and \$110,966 of employer contributions were not remitted to the trust and \$110,966 of employer contributions were not remitted to the trust and \$110,966 of employer contributions were not remitted to the trust and \$110,966 of employer contributions were not remitted to the trust and \$110,966 of employer 31, 2016, excess deferrals of \$133 were held by the trust and distributed to participants subsequent to year end. Under U.S. generally accepted accounting principles, these amounts would have been reflected as accounts receivable and accounts payable, respectively.

Certain other receivables and liabilities are recorded in the statements of net assets available for benefits to reflect the accrued income, pending settlements and other transactions.

Certain reclassifications have been made to prior year presentation to conform to current year presentation.

(b) Use of Estimates

The preparation of financial statements requires Plan management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and disclosure of contingent assets and liabilities, and changes therein. Actual results could differ from those estimates.

(c) Investment Valuation and Income Recognition

Investments are reported at fair value. Purchases and sales of investments are recorded on a trade date basis. Net appreciation in fair value of investments includes realized gains and losses on investments sold during the year as well as net appreciation of the investments held at the end of the year. Interest and dividend income is accrued in the period earned.

The Plan invests in investment contracts through The Invesco Stable Value Retirement Fund which is a common trust fund that primarily invests in guaranteed investment contracts ("GICs") and synthetic GICs and is presented at fair value as of December 31, 2017 and 2016.

(d) Notes Receivable from Participants

Notes receivable from participants represent loans that are recorded at their unpaid principal balance plus any accrued but unpaid interest.

(Continued)

(e) Benefit Payments

Payments to participants are recorded as the benefits are paid.

(3) Investments and Investment Options

Each participant has the right to direct his or her contributions and the Company's matching contributions, once remitted, among the investment funds offered by the Plan. Descriptions of the Plan's investment fund options are included in the summary plan description provided to all eligible employees.

Participants may direct their investment contributions to the following investment funds: Invesco Stable Value Retirement Fund CL1, Blackrock Russell 2000 Fund, Northern Trust Collective Aggregate Bond Index Fund, Northern Trust Collective All Country World ex-US Index Fund TR2, Northern Trust Collective S&P 500 Index Fund L1, American Beacon Small Cap Value Fund, American Bond Fund of America Class R-6, Blackrock Global Allocation Fund, ClearBridge Small Cap Growth Fund, Delaware Value Fund, Harbor International Fund, Active Multi-Manager Emerging Markets Equity Fund, Principal Investors Global Real Estate Securities Fund (Class I Shares), Prudential Jennison Large Cap Growth Fund, T. Rowe Price Retirement 2010 Fund, T. Rowe Price Retirement 2015 Fund, T. Rowe Price Retirement 2020 Fund, T. Rowe Price Retirement 2030 Fund, T. Rowe Price Retirement 2030 Fund, T. Rowe Price Retirement 2055 Fund and Company common stock.

Effective June 1, 2017, an amendment to the Plan reduced the Company common stock investment limit to 25% of each participant's portfolio. The new limit, which formerly was 50%, is applied when participants direct the investment of future contributions and rebalances their entire portfolio.

Stable Value Trust

The Plan invests in the Invesco Stable Value Trust ("Stable Value Trust") which is a collective trust that has entered into benefit-responsive guaranteed investment contracts and wrapper contracts with various financial institutions. The financial institutions maintain the contributions in investment contracts. The contracts are credited with earnings on the underlying investments and charged for participant withdrawals and administrative expenses.

The guaranteed investment contracts held by the Stable Value Trust are fully benefit-responsive, therefore contract value is the relevant measurement attribute for that portion of the investment. Contract value, as reported to the Plan by the manager of the Stable Value Trust, represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value. Therefore, contract value of the guaranteed investment contracts held by the Stable Value Trust is considered fair value.

There are no reserves against contract value for credit risk of the contract issuers or otherwise. The crediting interest rate is based on a formula agreed upon with the issuers.

(Continued)

Certain events limit the ability of the Plan to transact at contract value with the wrap issuer. However, the Plan's management is not aware of the occurrence or likely occurrence of any such events, which would limit the Plan's ability to transact at contract value with participants. The issuer may terminate a wrap contract for cause at any time.

(4) Concentration of Investments

The Plan's investment in shares of Company common stock represents 8% and 12% of total assets as of December 31, 2017 and 2016, respectively. The Company is engaged in marine transportation and diesel engine services.

(5) Voting Rights

Each shareholder is entitled to exercise voting rights attributable to the shares of Company common stock allocated to his or her account and is notified by the trustee prior to the time that such rights are to be exercised. The trustee is instructed by the Plan to vote all non-voted participant shares according to Board of Director recommendations. During 2017 and 2016, the Plan purchased all shares of Company common stock in the open market.

(6) Risk and Uncertainties

The Plan may invest in common trust funds, mutual funds and Company common stock. Investment securities are exposed to various risks, such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is probable that changes in the value of investment securities will occur in the near term.

The Plan may invest in securities with contractual cash flows, such as asset backed securities, collateralized mortgage obligations and commercial mortgage backed securities, including securities backed by subprime mortgage loans. The value, liquidity and related income of those securities are sensitive to changes in economic conditions, including real estate value, delinquencies or defaults, or both, and may be adversely affected by shifts in the market's perception of the issuers and changes in interest rates.

(7) Related Party Transactions

One of the Plan investment options includes shares of Company common stock managed by Bank of America. The Company is the plan sponsor and Bank of America is the trustee as defined by the Plan. Therefore, these transactions qualify as party-in-interest transactions. These transactions are covered by an exemption from the "prohibited transaction" provisions of ERISA and the Code.

The Plan has participant loans outstanding, which are secured solely by a portion of the participant's vested account balance, in accordance with the Plan Document.

(8) Federal Income Tax Status

The IRS has determined and informed the Company by a letter dated August 25, 2017, that the Plan and related trust are designed in accordance with applicable sections of the Internal Revenue Code (IRC).

The Plan is currently open to audit under the statute of limitations by the IRS for the 2014 through 2016 tax years. The Plan has not recognized any assets or liabilities related to uncertain tax positions as of December 31, 2017 and 2016.

(9) Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of net investment income in fair value of investments per the financial statements to the Form 5500:

	Years ended December 31			
		2017		2016
Net investment income in fair value of investments per the financial statements	\$	55,836,658	\$	30,743,564
Interest income from participants' notes receivable		950,941		854,428
Net investment income in fair value of investments per the Form 5500	\$	56,787,599	\$	31,597,992

(10) Fair Value Measurements

The accounting guidance for using fair value to measure certain assets and liabilities establishes a three tier value hierarchy, which prioritizes the inputs to valuation techniques used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted in active markets for identical assets or liabilities; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little, if any, market data exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing the asset or liability.

The following is a description of the valuation methodologies used for Plan's financial instruments and the classification of such instruments within the valuation hierarchy.

Mutual Funds

These instruments are public investment vehicles valued using the net asset value provided by the administrator of the fund. The net asset value price is quoted on an active market and is classified within Level 1 of the valuation hierarchy.

Company Common Stock

Company common stock is valued at the closing price listed by the New York Stock Exchange and is classified within Level 1 of the valuation hierarchy.

(Continued)



Common Trust Funds

These instruments are investment vehicles valued using the net asset value provided by the administrator of the fund. The net asset value is used as a practical expedient to determine fair value. Each collective trust provides for redemptions by the Plan at reported net asset values per share, with little to no advance notice requirement.

The methods described above may produce a fair value calculation that may not be indicative of net asset value or reflective of future fair values. Furthermore, while the Plan's valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

The following table summarizes the Plan's investment assets measured at fair value on a recurring basis at December 31, 2017:

	for Ic	Quoted Prices in Active Si Markets Ol for Identical Assets (Level 1) (Significant Unobservable Inputs (Level 3)	Total Fair Value
Mutual funds	\$	275,691,082	\$-	\$-	\$ 275,691,082
Company common stock		44,062,528			44,062,528
Total assets in the fair value hierarchy	\$	319,753,610	<u>\$ </u>	<u>\$</u>	319,753,610
Investments measured at net asset value:					
Common trust funds					205,724,838
Investments at fair value					\$ 525,478,448
					(C

KIRBY 401(k) PLAN

Notes to Financial Statements (Modified Cash Basis) December 31, 2017 and 2016

The following table summarizes the Plan's investment assets measured at fair value on a recurring basis at December 31, 2016:

	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Significant Observable Unobservable Inputs Inputs (Level 2) (Level 3)		Total Fair Value
Mutual funds	\$	188,626,982	\$ -	\$-	\$ 188,626,982
Company common stock		47,468,422			47,468,422
Total assets in the fair value hierarchy	\$	236,095,404	<u>\$</u>	<u>\$</u> -	236,095,404
Investments measured at net asset value:					
Common trust funds					138,105,926
Investments at fair value					\$ 374,201,330
					(C

KIRBY 401(k) PLAN EIN 74-1884980, Plan # 004 Schedule H, Part IV, Line 4i – Schedule of Assets (Held at End of Year) (Modified Cash Basis) December 31, 2017

Identity of issue, borrower, lessor, or similar party	Description of asset	Current value	
Common trust funds:			
Invesco	Invesco Stable Value Retirement Fund	\$ 72,936,033	
Blackrock	Blackrock Russell 2000 Fund	21,780,103	
Northern Trust	Northern Trust Aggregate Bond Index Fund	14,597,907	
Northern Trust	Northern Trust All Country World ex-US Index Fund TR2	22,845,849	
Northern Trust	Northern Trust Collective S&P 500 Index Fund	73,564,946	
Total common trust funds		205,724,838	
Mutual Funds:			
American Beacon	American Beacon Small Cap Value Fund	25,198,108	
American Funds	American Funds Bond Fund of America	25,662,101	
Blackrock	Blackrock Global Allocation Fund	6,402,458	
Clearbridge	ClearBridge Small Cap Growth Fund	14,516,654	
Delaware	Delaware Value Fund	46,643,683	
Harbor	Harbor International Fund	28,994,463	
Northern Trust	Active Multi-Manager Emerging Markets Equity Fund	6,640,427	
Principal Investors	Principal Investors Global Real Estate Securities Fund (Class I		
•	Shares)	6,254,218	
Prudential Jennison	Prudential Jennison Large Cap Growth Fund	58,290,009	
T. Rowe Price	T. Rowe Price Retirement 2010 Fund	3,255,530	
T. Rowe Price	T. Rowe Price Retirement 2015 Fund	5,975,597	
T. Rowe Price	T. Rowe Price Retirement 2020 Fund	18,420,470	
T. Rowe Price	T. Rowe Price Retirement 2025 Fund	7,274,019	
T. Rowe Price	T. Rowe Price Retirement 2030 Fund	8,917,533	
T. Rowe Price	T. Rowe Price Retirement 2035 Fund	2,720,828	
T. Rowe Price	T. Rowe Price Retirement 2040 Fund	7,733,089	
T. Rowe Price	T. Rowe Price Retirement 2045 Fund	1,000,536	
T. Rowe Price	T. Rowe Price Retirement 2050 Fund	1,020,806	
T. Rowe Price	T. Rowe Price Retirement 2055 Fund	770,553	
Total mutual funds		275,691,082	
Common stock:			
*Kirby Corporation	Common stock	44,062,528	
*Participant loans	Interest rates ranging from 4.25% to 10.25% and maturity dates from January 9, 2018 to September 18, 2035	24,586,992	
Total assets (held at end of year)		\$ 550,065,440	

* Parties in interest to the Plan

See accompanying report of independent registered public accounting firm.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan administrator, which administers the Plan, has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

June 28, 2018

Kirby 401(k) Plan

BY: /s/ William G. Harvey

WILLIAM G. HARVEY Chairman of Kirby Corporation Administrative Committee

EXHIBIT INDEX

The following document is filed as part of this report.

Exhibit number	Description
<u>23</u>	Consent of Independent Registered Public Accounting Firm

Consent of Independent Registered Public Accounting Firm

The Plan Administrator Kirby 401(k) Plan:

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-129333 and 33-57625) pertaining to the Kirby 401(k) Plan of our report dated June 28, 2018, with respect to the statement of net assets available for benefits (modified cash basis), the related statement of changes in net assets available for benefits (modified cash basis) and supplemental schedule of assets (held at end of year) (modified cash basis) of the Kirby 401(k) Plan included in this Annual Report (Form 11-K) for the year ended December 31, 2017.

/s/ WEAVER AND TIDWELL, L.L.P.

Houston, Texas June 28, 2018