

KIRBY CORP  
Form 10-K  
February 26, 2018

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

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Form 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2017

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file no. 1-7615

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Kirby Corporation  
(Exact name of registrant as specified in its charter)

Nevada	74-1884980
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
55 Waugh Drive, Suite 1000	
Houston, Texas	77007
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code:  
(713) 435-1000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock — \$.10 Par Value Per Share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:  
None

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Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

Emerging growth company

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If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  
No

The aggregate market value of common stock held by nonaffiliates of the registrant as of June 30, 2017, based on the closing sales price of such stock on the New York Stock Exchange on June 30, 2017, was \$3,511,931,000. For purposes of this computation, all executive officers, directors and 10% beneficial owners of the registrant are deemed to be affiliates. Such determination should not be deemed an admission that such executive officers, directors and 10% beneficial owners are affiliates.

As of February 23, 2018, 59,674,000 shares of common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The Company's definitive proxy statement in connection with the Annual Meeting of Stockholders to be held April 24, 2018, to be filed with the Commission pursuant to Regulation 14A, is incorporated by reference into Part III of this report.

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KIRBY CORPORATION

2017 FORM 10-K

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PART I

Item 1. Business

THE COMPANY

Kirby Corporation (the “Company”) is the nation’s largest domestic tank barge operator, transporting bulk liquid products throughout the Mississippi River System, on the Gulf Intracoastal Waterway, coastwise along all three United States coasts, and in Alaska and Hawaii. The Company transports petrochemicals, black oil, refined petroleum products and agricultural chemicals by tank barge. The Company also operates five offshore dry-bulk barges, five offshore tugboats and one docking tugboat transporting dry-bulk commodities in the United States coastal trade. Through its distribution and services segment, the Company provides after-market service and parts for engines, transmissions, reduction gears, and related equipment used in oilfield services, marine, mining, power generation, on-highway and other industrial applications. The Company also rents equipment including generators, fork lifts, pumps and compressors for use in a variety of industrial markets, and manufactures and remanufactures oilfield service equipment, including pressure pumping units, for the oilfield service and oil and gas operator and producer markets.

Unless the context otherwise requires, all references herein to the Company include the Company and its subsidiaries.

The Company’s principal executive office is located at 55 Waugh Drive, Suite 1000, Houston, Texas 77007, and its telephone number is (713) 435-1000. The Company’s mailing address is P.O. Box 1745, Houston, Texas 77251-1745.

Documents and Information Available on Web Site

The Internet address of the Company’s web site is <http://www.kirbycorp.com>. The Company makes available free of charge through its web site, all of its filings with the Securities and Exchange Commission (“SEC”), including its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, as soon as reasonably practicable after they are electronically filed with or furnished to the SEC.

The following documents are available on the Company’s web site in the Investor Relations section under Corporate Governance:

Audit Committee Charter

Compensation Committee Charter

Governance Committee Charter

Business Ethics Guidelines

Corporate Governance Guidelines

The Company is required to make prompt disclosure of any amendment to or waiver of any provision of its Business Ethics Guidelines that applies to any director or executive officer or to its chief executive officer, chief financial officer, chief accounting officer or controller or persons performing similar functions. The Company will make any such disclosure that may be necessary by posting the disclosure on its web site in the Investor Relations section under Corporate Governance.



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## BUSINESS AND PROPERTY

The Company, through its subsidiaries, conducts operations in two business segments: marine transportation and distribution and services.

The Company, through its marine transportation segment, is a provider of marine transportation services, operating tank barges and towing vessels transporting bulk liquid products throughout the Mississippi River System, on the Gulf Intracoastal Waterway, coastwise along all three United States coasts, and in Alaska and Hawaii. The Company transports petrochemicals, black oil, refined petroleum products and agricultural chemicals by tank barge. The Company operates offshore dry-bulk barge and tugboat units engaged in the offshore transportation of dry-bulk cargoes in the United States coastal trade. The segment is a provider of transportation services for its customers and, in almost all cases, does not assume ownership of the products that it transports. All of the Company's vessels operate under the United States flag and are qualified for domestic trade under the Jones Act.

The Company, through its distribution and services segment, sells genuine replacement parts, provides service mechanics to overhaul and repair engines, transmissions, reduction gears and related oilfield services equipment, rebuilds component parts or entire diesel engines, transmissions and reduction gears, and related equipment used in oilfield services, marine, mining, power generation, on-highway and other industrial applications. The Company also rents equipment including generators, fork lifts, pumps and compressors for use in a variety of industrial markets, and manufactures and remanufactures oilfield service equipment, including pressure pumping units, for the oilfield service and oil and gas operator and producer markets.

The Company and its marine transportation and distribution and services segments have approximately 5,775 employees, the large majority of whom are in the United States.

The following table sets forth by segment the revenues, operating profits and identifiable assets attributable to the principal activities of the Company for the years indicated (in thousands):

	2017	2016	2015
Revenues from unaffiliated customers:			
Marine transportation	\$1,324,106	\$1,471,893	\$1,663,090
Distribution and services	890,312	298,780	484,442
Consolidated revenues	\$2,214,418	\$1,770,673	\$2,147,532
Operating profits:			
Marine transportation	\$136,011	\$257,102	\$374,842
Distribution and services	86,585	3,186	18,921
General corporate expenses	(18,150 )	(14,966 )	(14,773 )
Impairment of long-lived assets	(105,712 )	—	—
Gain (loss) on disposition of assets	(4,487 )	(127 )	1,672
	94,247	245,195	380,662
Equity in earnings of affiliates	291	532	451
Other expense	(52 )	(291 )	(663 )
Interest expense	(21,472 )	(17,690 )	(18,738 )
Earnings before taxes on income	\$73,014	\$227,746	\$361,712
Identifiable assets:			
Marine transportation	\$3,485,099	\$3,613,951	\$3,444,785
Distribution and services	1,567,085	623,268	632,764
	5,052,184	4,237,219	4,077,549



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Investment in affiliates	1,890	2,622	2,090
General corporate assets	73,353	50,054	60,919
Consolidated assets	\$5,127,427	\$4,289,895	\$4,140,558

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## MARINE TRANSPORTATION

The marine transportation segment is primarily a provider of transportation services by tank barge for the inland and coastal markets. As of February 23, 2018, the equipment owned or operated by the marine transportation segment consisted of 998 inland tank barges with 22.0 million barrels of capacity, 302 inland towboats, 56 coastal tank barges with 5.4 million barrels of capacity, 53 coastal tugboats, five offshore dry-bulk cargo barges, five offshore tugboats and one docking tugboat, and includes 157 inland tank barges and 75 inland towboats added with the acquisition of Higman Marine, Inc. and affiliated companies (“Higman”) on February 14, 2018, with the following specifications and capacities:

Class of equipment	Number in class	Average age (in years)	Barrel capacities
Inland tank barges (owned and leased):			
Regular double hull:			
20,000 barrels and under	348	12.6	4,001,000
Over 20,000 barrels	593	11.2	17,085,000
Specialty double hull	57	39.5	888,000
Total inland tank barges	998	13.3	21,974,000
Inland towboats (owned and chartered):			
800 to 1300 horsepower	64	39.3	
1400 to 1900 horsepower	70	32.2	
2000 to 2400 horsepower	134	10.3	
2500 to 3200 horsepower	16	33.7	
3300 to 4800 horsepower	14	30.8	
Greater than 5000 horsepower	3	42.0	
Spot charters (chartered trip to trip)	1		
Total inland towboats	302	24.2	
Coastal tank barges (owned and leased):			
Double hull:			
30,000 barrels and under	3	19.2	65,000
50,000 to 70,000 barrels	11	14.6	560,000
80,000 to 90,000 barrels	20	13.2	1,663,000
100,000 to 110,000 barrels	6	11.5	630,000
120,000 to 150,000 barrels	7	21.9	898,000
Over 150,000 barrels	9	14.3	1,554,000
Total coastal tank barges	56	14.7	5,370,000
Coastal tugboats (owned and chartered):			
1000 to 1900 horsepower	4	29.5	
2000 to 2900 horsepower	2	38.6	
3000 to 3900 horsepower	10	36.8	
4000 to 4900 horsepower	14	20.3	
5000 to 6900 horsepower	13	17.8	
Greater than 7000 horsepower	10	13.3	
Total coastal tugboats	53	22.9	

Deadweight  
Tonnage

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Offshore dry-bulk cargo barges (owned)	5	23.1	96,000
Offshore tugboats and docking tugboat (owned and chartered)	6	28.6	

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The 302 inland towboats, 53 coastal tugboats, five offshore tugboats and one docking tugboat provide the power source and the 998 inland tank barges, 56 coastal tank barges and five offshore dry-bulk cargo barges provide the freight capacity for the marine transportation segment. When the power source and freight capacity are combined, the unit is called a tow. The Company's inland tows generally consist of one towboat and from one to 25 tank barges, depending upon the horsepower of the towboat, the river or canal capacity and conditions, and customer requirements. The Company's coastal and offshore tows primarily consist of one tugboat and one tank barge or dry-bulk cargo barge.

## Marine Transportation Industry Fundamentals

The United States inland waterway system, composed of a network of interconnected rivers and canals that serve the nation as water highways, is one of the world's most efficient transportation systems. The nation's inland waterways are vital to the United States distribution system, with over 1.1 billion short tons of cargo moved annually on United States shallow draft waterways. The inland waterway system extends approximately 26,000 miles, 12,000 miles of which are generally considered significant for domestic commerce, through 38 states, with 635 shallow draft ports. These navigable inland waterways link the United States heartland to the world.

The United States coastal waterway system consists of ports along the Atlantic, Gulf and Pacific coasts, as well as ports in Alaska, Hawaii and on the Great Lakes. Like the inland waterways, the coastal trade is vital to the United States distribution system, particularly the regional distribution of refined petroleum products from refineries and storage facilities to a variety of destinations, including other refineries, distribution terminals, power plants and ships. In addition to distribution directly from refineries and storage facilities, coastal tank barges are used frequently to distribute products from pipelines. Many coastal markets receive refined petroleum products principally from coastal tank barges. Smaller volumes of petrochemicals are distributed from Gulf Coast plants to end users and black oil, including crude oil and natural gas condensate, is distributed regionally from refineries and terminals along the United States coast to refineries, power plants and distribution terminals.

Based on cost and safety, barge transportation is often the most efficient and safest means of surface transportation of bulk commodities when compared with railroads and trucks. The cargo capacity of a 27,500 barrel inland tank barge is the equivalent of 46 railroad tank cars or 144 tractor-trailer tank trucks. A typical Company lower Mississippi River linehaul tow of 15 barges has the carrying capacity of approximately 216 railroad tank cars plus six locomotives, or approximately 1,050 tractor-trailer tank trucks. The Company's inland tank barge fleet capacity of 22.0 million barrels equates to approximately 36,800 railroad tank cars or approximately 115,000 tractor-trailer tank trucks. Furthermore, barging is much more energy efficient. One ton of bulk product can be carried 616 miles by inland barge on one gallon of fuel, compared with 478 miles by railcar or 150 miles by truck. In the coastal trade, the carrying capacity of a 100,000 barrel tank barge is the equivalent of approximately 165 railroad tank cars or approximately 525 tractor-trailer tank trucks. The Company's coastal tank barge fleet capacity of 5.4 million barrels equates to approximately 8,900 railroad tank cars or approximately 28,200 tractor-trailer tank trucks. Marine transportation generally involves less urban exposure than railroad or truck transportation and operates on a system with few crossing junctures and in areas relatively remote from population centers. These factors generally reduce both the number and impact of waterway incidents.

## Inland Tank Barge Industry

The Company operates within the United States inland tank barge industry, a diverse and independent mixture of approximately 40 large integrated transportation companies and small operators, as well as captive fleets owned by United States refining and petrochemical companies. The inland tank barge industry provides marine transportation of bulk liquid cargoes for customers and, in the case of captives, for their own account, throughout the Mississippi River and its tributaries and on the Gulf Intracoastal Waterway. The most significant markets in this industry include the transportation of petrochemicals, black oil, refined petroleum products and agricultural chemicals. The Company operates in each of these markets. The use of marine transportation by the petroleum and petrochemical industry is a

major reason for the location of United States refineries and petrochemical facilities on navigable inland waterways. Texas and Louisiana currently account for approximately 80% of the United States production of petrochemicals. Much of the United States farm belt is likewise situated with access to the inland waterway system, relying on marine transportation of farm products, including agricultural chemicals. The Company's principal distribution system encompasses the Gulf Intracoastal Waterway from Brownsville, Texas, to Port St. Joe, Florida, the Mississippi River System and the Houston Ship Channel. The Mississippi River System includes the Arkansas, Illinois, Missouri, Ohio, Red, Tennessee, Yazoo, Ouachita and Black Warrior Rivers and the Tennessee-Tombigbee Waterway.

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The number of tank barges that operate on the inland waterways of the United States declined from an estimated 4,200 in 1982 to 2,900 in 1993, remained relatively constant at 2,900 until 2002, decreased to 2,750 from 2002 through 2006, and then increased over the years to approximately 3,850 by the end of 2016 and an estimated 3,825 at the end of 2017. The Company believes the decrease from 4,200 in 1982 to 2,750 in 2006 primarily resulted from: the increasing age of the domestic tank barge fleet, resulting in scrapping; rates inadequate to justify new construction; a reduction in tax incentives, which previously encouraged speculative construction of new equipment; stringent operating standards to adequately cope with safety and environmental risk; the elimination of government regulations and programs supporting the many new small refineries and a proliferation of oil traders which created a strong demand for tank barge services; an increase in the average capacity per barge; and an increase in environmental regulations that mandate expensive equipment modification, which some owners were unwilling or unable to undertake given capital constraints and the age of their fleets. The cost of tank barge hull work for required periodic United States Coast Guard (“USCG”) certifications, as well as general safety and environmental concerns, force operators to periodically reassess their ability to recover maintenance costs. The increase from 2,750 in 2006 to approximately 3,850 by the end of 2016 primarily resulted from increased barge construction and deferred retirements due to strong demand and resulting capacity shortages. The decrease to 3,825 during 2017 was primarily due to industry overcapacity in the inland tank barge market, the result of reduced crude oil and natural gas condensate volumes to be moved by tank barge due to a decline in oil prices, a decline in domestic drilling and additional pipeline capacity, coupled with the large number of tank barges built during the last several years, many of which were for the movement of crude oil and natural gas condensate. The Company’s 998 inland tank barges represent approximately 26% of the industry’s 3,825 inland tank barges.

For 2015, the Company estimated that industry-wide 260 tank barges were placed in service and 60 tank barges were retired. For 2016, the Company estimated that industry-wide 100 tank barges were placed in service and 100 tank barges were retired. For 2017, the Company estimated that industry-wide 75 tank barges were placed in service and 100 tank barges were retired. During 2015, 2016 and 2017, the decline in industry-wide demand for the movement of crude oil and natural gas condensate, and the subsequent transfer of inland crude oil barges to other tank barge markets, created excess industry-wide tank barge capacity. As a result, the Company estimates that approximately 30 tank barges were ordered during 2017 for delivery throughout 2018 and many older tank barges will be retired, dependent on 2018 market conditions. The risk of a continued oversupply of tank barges may be mitigated by increased petrochemical, black oil and refined petroleum products volumes from increased production from current facilities, plant expansions or the opening of new facilities, and the fact that the inland tank barge industry has a mature fleet, with approximately 500 tank barges over 30 years old and approximately 250 of those over 40 years old, which may lead to retirement of older tank barges.

The average age of the nation’s inland tank barge fleet is approximately 16 years. Neither the Company, nor the industry, operates any single hull inland tank barges. Single hull tank barges were required by current federal law to either be retrofitted with double hulls or phased out of domestic service by December 31, 2014.

The Company’s inland marine transportation segment also owns a shifting operation and fleeting facility for dry cargo barges and tank barges on the Houston Ship Channel and in Freeport, Texas, and a shipyard for the building of inland towboats and providing routine maintenance on marine vessels. The Company also owns a two-thirds interest in Osprey Line, L.L.C. (“Osprey”), a transporter of project cargoes and cargo containers by barge on the United States inland waterway system.

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Coastal Tank Barge Industry

The Company also operates in the United States coastal tank barge industry, operating tank barges in the 195,000 barrel or less category. This market is composed of approximately 15 large integrated transportation companies and small operators. The 195,000 barrel or less category coastal tank barge industry primarily provides regional marine transportation distribution of bulk liquid cargoes along the United States' Atlantic, Gulf and Pacific coasts, in Alaska and Hawaii and, to a lesser extent, on the Great Lakes. Products transported are primarily refined petroleum products and black oil from refineries and storage facilities to a variety of destinations, including other refineries, distribution terminals, power plants and ships, the regional movement of crude oil and natural gas condensate to Gulf Coast, Northeast and West Coast refineries, and the movement of petrochemicals primarily from Gulf Coast petrochemical facilities to end users.

The number of coastal tank barges that operate in the 195,000 barrel or less category is approximately 290, of which the Company operates 56 or approximately 19%. The average age of the nation's coastal tank barge fleet is approximately 13 years. In the 2015 fourth quarter, the Company placed in service a new 185,000 barrel coastal articulated tank barge and tugboat unit ("ATB") and a second 185,000 barrel ATB was placed in service in the 2016 second quarter. During the 2016 fourth quarter, the Company placed in service a new 155,000 barrel ATB and a second 155,000 barrel ATB was placed in service in the 2017 third quarter. The Company also took delivery in December 2016 of a 35,000 barrel coastal petrochemical tank barge. The Company is aware of seven coastal ATBs under construction by competitors for delivery in 2018 and 2019. The coastal tank barge fleet is also mature, with approximately 20 tank barges over 30 years old. The number of older tank barges, coupled with low industry-wide utilization levels, may lead to the retirement of older tank barges.

Competition in the Tank Barge Industry

The tank barge industry remains very competitive. Competition in this business has historically been based primarily on price; however, most of the industry's customers, through an increased emphasis on safety, the environment, quality and a trend toward a "single source" supply of services, are more frequently requiring that their supplier of tank barge services have the capability to handle a variety of tank barge requirements. These requirements include distribution capability throughout the inland waterway system and coastal markets, with high levels of flexibility, safety, environmental responsibility and financial responsibility, as well as adequate insurance and high quality of service consistent with the customer's own operational standards.

In the inland markets, the Company's direct competitors are primarily noncaptive inland tank barge operators. "Captive" fleets are owned by major oil and petrochemical companies which occasionally compete in the inland tank barge market, but primarily transport cargoes for their own account. The Company is the largest inland tank barge carrier, both in terms of number of barges and total fleet barrel capacity. The Company's inland tank barge fleet has grown from 71 tank barges in 1988 to 998 tank barges as of February 23, 2018, or approximately 26% of the estimated total number of domestic inland tank barges.

In the coastal markets, the Company's direct competitors are the operators of United States tank barges in the 195,000 barrels or less category. Coastal tank barges in the 195,000 barrels or less category have the ability to enter the large majority of coastal ports. Ocean-going tank barges and United States product tankers in the 300,000 barrels plus category, excluding the fleet of large tankers dedicated to Alaska crude oil transportation, primarily move large volumes of refined petroleum products within the Gulf of Mexico with occasional movements from the Gulf Coast to the East Coast, along the West Coast and from Texas and Louisiana to Florida. There are approximately 50 such vessels and, because of their size, their access to ports is limited by terminal size and draft restrictions.

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While the Company competes primarily with other tank barge companies, it also competes with companies who operate refined product and petrochemical pipelines, railroad tank cars and tractor-trailer tank trucks. As noted above, the Company believes that both inland and coastal marine transportation of bulk liquid products enjoy a substantial cost advantage over railroad and truck transportation. The Company believes that refined product and crude oil pipelines, although often a less expensive form of transportation than inland and coastal tank barges, are not as adaptable to diverse products and are generally limited to fixed point-to-point distribution of commodities in high volumes over extended periods of time.

### Products Transported

The Company transports petrochemicals, black oil, refined petroleum products and agricultural chemicals by tank barge throughout the Mississippi River System, on the Gulf Intracoastal Waterway, coastwise along all three United States coasts and in Alaska and Hawaii. During 2017, the Company's inland marine transportation operation moved over 42 million tons of liquid cargo on the United States inland waterway system.

**Petrochemicals.** Bulk liquid petrochemicals transported include such products as benzene, styrene, methanol, acrylonitrile, xylene, naphtha and caustic soda, all consumed in the production of paper, fiber and plastics. Pressurized products, including butadiene, isobutane, propylene, butane and propane, all requiring pressurized conditions to remain in stable liquid form, are transported in pressure barges. The transportation of petrochemical products represented 56% of the segment's 2017 revenues. Customers shipping these products are petrochemical and refining companies.

**Black Oil.** Black oil transported includes such products as residual fuel oil, No. 6 fuel oil, coker feedstock, vacuum gas oil, asphalt, carbon black feedstock, crude oil, natural gas condensate and ship bunkers (engine fuel). Such products represented 23% of the segment's 2017 revenues. Black oil customers are refining companies, marketers and end users that require the transportation of black oil between refineries and storage terminals, to refineries and to power plants. Ship bunker customers are oil companies and oil traders in the bunkering business.

**Refined Petroleum Products.** Refined petroleum products transported include the various blends of finished gasoline, gasoline blendstocks, jet fuel, No. 2 oil, heating oil and diesel fuel, and represented 17% of the segment's 2017 revenues. The Company also classifies ethanol in the refined petroleum products category. Customers are oil and refining companies, marketers and ethanol producers.

**Agricultural Chemicals.** Agricultural chemicals transported represented 4% of the segment's 2017 revenues. Agricultural chemicals include anhydrous ammonia and nitrogen-based liquid fertilizer, as well as industrial ammonia. Agricultural chemical customers consist mainly of domestic and foreign producers of such products.

### Demand Drivers in the Tank Barge Industry

Demand for tank barge transportation services is driven by the production volumes of the bulk liquid commodities transported by barge. Marine transportation demand for the segment's four primary commodity groups, petrochemicals, black oil, refined petroleum products and agricultural chemicals, is based on differing circumstances. While the demand drivers of each commodity are different, the Company has the flexibility in certain cases of re-allocating inland equipment and coastal equipment among the petrochemical, refined petroleum products and crude oil markets as needed.

Bulk petrochemical volumes have historically tracked the general domestic economy and correlate to the United States Gross Domestic Product. The United States petrochemical industry continues to see strong production levels for both domestic consumption and exports. Low priced domestic natural gas, a basic feedstock for the United States petrochemical industry, has provided the industry with a competitive advantage against foreign petrochemical



producers. As a result, United States petrochemical production has remained stable during 2017, 2016 and 2015, thereby producing increased marine transportation volumes of basic petrochemicals to both domestic consumers and terminals for export destinations. Petrochemical products are used primarily in consumer non-durable and durable goods. From late 2010 through 2015, inland petrochemical tank barge utilization remained relatively stable in the 90% to 95% range. During 2016, utilization declined slightly to the high 80% range on average with periods of utilization in the low 80% range. During 2017, utilization ranged from the mid-80% to the low 90% range, reaching the mid-90% range in the late third quarter from the impact of Hurricanes Harvey and Irma, and in the low to mid-90% range during the fourth quarter as a result of a favorable pricing environment for customers' products, new petrochemical industry capacity that led to increased movements of petrochemicals, and the continued retirement of older barges from the segment's fleet. Coastal tank barge utilization for the transportation of petrochemicals during 2016 was in the low 90% range and for 2017 utilization ranged from the low 60% to low 80%.

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The demand for black oil, including ship bunkers, varies by type of product transported. Demand for transportation of residual oil, a heavy by-product of refining operations, varies with refinery utilization and usage of feedstocks. During the majority of 2015, inland black oil tank barge utilization remained strong, in the 90% to 95% range, due to strong demand driven by steady refinery production levels from major customers, and the export of diesel fuel and heavy fuel oil. With the decline in the price of crude oil in late 2014 and the low price throughout 2015 and 2016, movements by tank barge of crude oil and natural gas condensate were at reduced levels industry-wide. During 2015 and 2016, the Company and the industry were generally successful in moving barges from that trade to other markets. During 2016 and 2017, the Company continued to transport crude oil and natural gas condensate produced from the Eagle Ford and Permian Basin shale formations in Texas both along the Gulf Intracoastal Waterway with inland vessels and in the Gulf of Mexico with coastal equipment, and continued to transport Utica crude oil and natural gas condensate downriver from the Mid-Atlantic to the Gulf Coast, however, at reduced levels as certain of the product was transported by newly constructed pipelines. The decline in demand for crude oil and natural gas condensate movements and an industry-wide oversupply of inland tank barges resulted in a decline in inland black oil tank barge utilization in 2016 to the low-to-mid 80% range and in 2017 to the mid-80% to low 90% range for the first three quarters and low to mid-90% range for the fourth quarter. Coastal black oil tank barge utilization declined from the 90% to 95% range for the majority of 2015 to the low 80% range by the end of 2016, and the low 60% to low 80% range during 2017, partly attributable to the decrease in the movements of crude oil and natural gas condensate and to the continued industry-wide oversupply of tank barges in the coastal industry. Inland and coastal asphalt shipments are generally seasonal, with higher volumes shipped during April through November, months when weather allows for efficient road construction. The Company saw seasonally normal cessation of most operations in Alaska in the 2016 and 2017 first and fourth quarters.

Refined petroleum product volumes are driven by United States gasoline and diesel fuel consumption, principally vehicle usage, air travel and weather conditions. Volumes can also relate to gasoline inventory imbalances within the United States. Generally, gasoline and No. 2 oil are exported from the Gulf Coast where refining capacity exceeds demand. The Midwest is a net importer of such products. Volumes were also driven by diesel fuel transported to terminals along the Gulf Coast for export to South America. Ethanol, produced in the Midwest, is moved from the Midwest to Gulf Coast customers. In the coastal trade, tank barges are frequently used regionally to transport refined petroleum products from a coastal refinery or terminals served by pipelines to the end markets. Many coastal areas have access to refined petroleum products only by using marine transportation as the last link in the distribution chain. Coastal refined petroleum products tank barge utilization declined from the 90% to 95% range for the majority of 2015 to the low-to-mid 80% range for the majority of 2016, and declined throughout 2017 from a low 80% range in first quarter to the low 60% range in the fourth quarter, all predominately from the industry-wide oversupply of coastal tank barge capacity.

Demand for marine transportation of domestic and imported agricultural fertilizer is seasonal and directly related to domestic nitrogen-based liquid fertilizer consumption, driven by the production of corn, cotton and wheat. During periods of high natural gas prices, the manufacturing of nitrogen-based liquid fertilizer in the United States is curtailed. During these periods, imported products, which normally involve longer barge trips, replace the domestic products to meet Midwest and south Texas demands. Such products are delivered to the numerous small terminals and distributors throughout the United States farm belt.

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Marine Transportation Operations

The marine transportation segment operates a fleet of 998 inland tank barges and 302 inland towboats, as well as 56 coastal tank barges and 53 coastal tugboats. The segment also operates five offshore dry-bulk cargo barges, five offshore tugboats and one docking tugboat transporting dry-bulk commodities in United States coastal trade.

**Inland Operations.** The segment's inland operations are conducted through a wholly owned subsidiary, Kirby Inland Marine, LP ("Kirby Inland Marine"). Kirby Inland Marine's operations consist of the Canal, Linehaul and River fleets, as well as barge fleet services.

The Canal fleet transports petrochemical feedstocks, processed chemicals, pressurized products, black oil, and refined petroleum products along the Gulf Intracoastal Waterway, the Mississippi River below Baton Rouge, Louisiana, and the Houston Ship Channel. Petrochemical feedstocks and certain pressurized products are transported from one plant to another plant for further processing. Processed chemicals and certain pressurized products are moved to waterfront terminals and chemical plants. Black oil is transported to waterfront terminals and products such as No. 6 fuel oil are transported directly to the end users. Refined petroleum products are transported to waterfront terminals along the Gulf Intracoastal Waterway for distribution.

The Linehaul fleet transports petrochemical feedstocks, chemicals, agricultural chemicals and lube oils along the Gulf Intracoastal Waterway, Mississippi River and the Illinois and Ohio Rivers. Loaded tank barges are staged in the Baton Rouge area from Gulf Coast refineries and petrochemical plants, and are transported from Baton Rouge to waterfront terminals and plants on the Mississippi, Illinois and Ohio Rivers, and along the Gulf Intracoastal Waterway, on regularly scheduled linehaul tows. Barges are dropped off and picked up going up and down river.

The River fleet transports petrochemical feedstocks, chemicals, refined petroleum products, agricultural chemicals and black oil along the Mississippi River System above Baton Rouge. The River fleet operates unit tows, where a towboat and generally a dedicated group of barges operate on consecutive voyages between loading and discharge points. Petrochemical feedstocks and processed chemicals are transported to waterfront petrochemical and chemical plants, while black oil, refined petroleum products and agricultural chemicals are transported to waterfront terminals.

The inland transportation of petrochemical feedstocks, chemicals and pressurized products is generally consistent throughout the year. Transportation of refined petroleum products, certain black oil and agricultural chemicals is generally more seasonal. Movements of black oil, such as asphalt, generally increase in the spring through fall months. Movements of refined petroleum products, such as gasoline blends, generally increase during the summer driving season, while heating oil movements generally increase during the winter months. Movements of agricultural chemicals generally increase during the spring and fall planting seasons.

The marine transportation inland operation moves and handles a broad range of sophisticated cargoes. To meet the specific requirements of the cargoes transported, the inland tank barges may be equipped with self-contained heating systems, high-capacity pumps, pressurized tanks, refrigeration units, stainless steel tanks, aluminum tanks or specialty coated tanks. Of the 998 inland tank barges currently operated, 783 are petrochemical and refined petroleum products barges, 139 are black oil barges, 61 are pressure barges, 10 are refrigerated anhydrous ammonia barges and five are specialty barges. Of the 998 inland tank barges, 967 are owned by the Company and 31 are leased.

The fleet of 302 inland towboats ranges from 800 to 5200 horsepower. Of the 302 inland towboats, 229 are owned by the Company and 73 are chartered. Towboats in the 800 to 2100 horsepower classes provide power for barges used by the Canal and Linehaul fleets on the Gulf Intracoastal Waterway and the Houston Ship Channel. Towboats in the 1400 to 3200 horsepower classes provide power for both the River and Linehaul fleets on the Gulf Intracoastal Waterway and the Mississippi River System. Towboats above 3600 horsepower are typically used on the Mississippi River System to move River fleet unit tows and provide Linehaul fleet towing. Based on the capabilities of the individual

towboats used in the Mississippi River System, the tows range in size from 10,000 to 30,000 tons.

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Marine transportation services for inland movements are conducted under long-term contracts, typically ranging from one to five years, some of which have renewal options, with customers with whom the Company has traditionally had long-standing relationships, as well as under spot contracts. During the first nine months of 2016 and all of 2015, approximately 80% of the inland marine transportation revenues were under term contracts and 20% were spot contract revenues. During the 2016 fourth quarter and all of 2017, approximately 75% of inland marine transportation revenues were under term contracts and 25% were spot contract revenues.

All of the Company's inland tank barges used in the transportation of bulk liquid products are of double hull construction and, where applicable, are capable of controlling vapor emissions during loading and discharging operations in compliance with occupational health and safety regulations and air quality regulations.

The Company is one of the few inland tank barge operators with the ability to offer to its customers' distribution capabilities throughout the Mississippi River System and the Gulf Intracoastal Waterway. Such capabilities offer economies of scale resulting from the ability to match tank barges, towboats, products and destinations more efficiently.

Through the Company's proprietary vessel management computer system, the fleet of barges and towboats is dispatched from a centralized dispatch at the corporate office. The towboats are equipped with satellite positioning and communication systems that automatically transmit the location of the towboat to the Company's customer service department located in its corporate office. Electronic orders are communicated to the vessel personnel with reports of towing activities communicated electronically back to the customer service department. The electronic interface between the customer service department and the vessel personnel enables more effective matching of customer needs to barge capabilities, thereby maximizing utilization of the tank barge and towboat fleet. The Company's customers are able to access information concerning the movement of their cargoes, including barge locations, through the Company's web site.

Kirby Inland Marine operates the largest commercial tank barge fleet service (temporary barge storage facilities) in numerous ports, including Houston, Corpus Christi, Freeport and Orange, Texas, Baton Rouge, Covington and New Orleans, Louisiana, Mobile, Alabama and Greenville, Mississippi. Included in the fleet service is a shifting operation and fleet service for dry cargo barges and tank barges on the Houston Ship Channel and in Freeport, Texas. Kirby Inland Marine provides service for its own barges, as well as outside customers, transferring barges within the areas noted, as well as fleet barges.

Kirby Inland Marine also provides shore-based barge tankermen to the Company and third parties. Services to the Company and third parties cover the Gulf Coast, mid-Mississippi Valley, and the Ohio River Valley.

San Jac Marine, Inc. ("San Jac"), a subsidiary of Kirby Inland Marine, owns and operates a shipyard in Channelview, Texas used to build marine vessels for both inland and coastal applications, and provide maintenance and repair services. Kirby Inland Marine is building inland towboats and performing routine maintenance and repairs at the shipyard.

The Company owns a two-thirds interest in Osprey, which transports project cargoes and cargo containers by barge on the United States inland waterway system.

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Coastal Operations. The segment's coastal operations are conducted through wholly owned subsidiaries, Kirby Offshore Marine, LLC ("Kirby Offshore Marine") and Kirby Ocean Transport Company ("Kirby Ocean Transport").

Kirby Offshore Marine provides marine transportation of refined petroleum products, petrochemicals and black oil in coastal regions of the United States. The coastal operations consist of the Atlantic and Pacific Divisions.

The Atlantic Division primarily operates along the eastern seaboard of the United States and along the Gulf Coast. The Atlantic Division vessels call on coastal states from Maine to Texas, servicing refineries, storage terminals and power plants. The Atlantic Division also operates equipment, to a lesser extent, in the Eastern Canadian provinces. The tank barges operating in the Atlantic Division are in the 10,000 to 194,000 barrel capacity range and coastal tugboats in the 2400 to 10000 horsepower range, transporting primarily refined petroleum products, petrochemicals and black oil.

The Pacific Division primarily operates along the Pacific Coast of the United States, servicing refineries and storage terminals from Southern California to Washington State, throughout Alaska, including Dutch Harbor, Cook Inlet and the Alaska River Systems, and from California to Hawaii. The Pacific Division's fleet consists of tank barges in the 52,000 to 194,000 barrel capacity range and tugboats in the 1000 to 11000 horsepower range, transporting primarily refined petroleum products.

The Pacific Division also services local petroleum retailers and oil companies distributing refined petroleum products and black oil between the Hawaiian Islands and provides other services to the local maritime community. The Hawaii fleet consists of tank barges in the 53,000 to 86,000 barrel capacity range and tugboats in the 1000 to 5000 horsepower range, transporting refined petroleum products for local and regional customers, black oil to power generation customers and delivering bunker fuel to ships. The Hawaii fleet also provides service docking, standby tug assistance and line handling to vessels using the Single Point Mooring installation at Barbers Point, Oahu, a facility for large tankers to safely load and discharge their cargos through an offshore buoy and submerged pipeline without entering the port.

The coastal transportation of refined petroleum products and black oil is impacted by seasonality, partially dependent on the area of operations. Operations along the West Coast and in Alaska have been subject to more seasonal variations in demand than the operations along the East Coast and Gulf Coast regions. Seasonality generally does not impact the Hawaiian market. Movements of refined petroleum products such as various blends of gasoline are strongest during the summer driving season while heating oil generally increases during the winter months.

The coastal fleet consists of 56 tank barges with 5.4 million barrels of capacity, primarily transporting refined petroleum products, black oil and petrochemicals. The Company owns 49 of the coastal tank barges and seven are leased. Of the 56 coastal tank barges currently operating, 37 are refined petroleum products and petrochemical barges and 19 are black oil barges. The Company operates 53 coastal tugboats ranging from 1000 to 11000 horsepower, of which 48 are owned by the Company and five are chartered.

Coastal marine transportation services are conducted under long-term contracts, primarily one year or longer, some of which have renewal options, for customers with which the Company has traditionally had long-standing relationships, as well as under spot contracts. During the 2015 second half, 2016 and 2017, approximately 80% of the coastal marine transportation revenues were under term contracts and 20% were spot contract revenues. For the 2015 first half, approximately 85% of coastal marine transportation revenues were under term contract and 15% were spot contract revenues.

Kirby Offshore Marine also operates a fleet of two offshore dry-bulk barge and tugboat units involved in the transportation of sugar and other dry products between Florida and East Coast ports. These vessels primarily operate under contracts of affreightment that are typically one year or less in length.



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Kirby Ocean Transport owns and operates a fleet of three offshore dry-bulk barges, three offshore tugboats and one docking tugboat. Kirby Ocean Transport operates primarily under term contracts of affreightment, including a contract that expires in 2020 with Duke Energy Florida (“DEF”) to transport coal across the Gulf of Mexico to DEF’s power generation facility at Crystal River, Florida.

Kirby Ocean Transport is also engaged in the transportation of coal, fertilizer, sugar and other bulk cargoes on a short-term basis between domestic ports and occasionally the transportation of grain from domestic ports to ports primarily in the Caribbean Basin.

## Contracts and Customers

Marine transportation inland and coastal services are conducted under term contracts, typically ranging from one to five years, some of which have renewal options, for customers with whom the Company has traditionally had long-standing relationships, as well as under spot contracts. The majority of the marine transportation contracts with its customers are for terms of one year. Most have been customers of the Company’s marine transportation segment for many years and management anticipates continued relationships; however, there is no assurance that any individual contract will be renewed.

A term contract is an agreement with a specific customer to transport cargo from a designated origin to a designated destination at a set rate (affreightment) or at a daily rate (time charter). The rate may or may not include escalation provisions to recover changes in specific costs such as fuel. Time charters, which insulate the Company from revenue fluctuations caused by weather and navigational delays and temporary market declines, represented approximately 49% of the marine transportation’s inland revenues under term contracts during 2017, 52% of revenue under term contracts during 2016 and 55% of the revenue under term contracts during 2015. A spot contract is an agreement with a customer to move cargo from a specific origin to a designated destination for a rate negotiated at the time the cargo movement takes place. Spot contract rates are at the current “market” rate and are subject to market volatility. The Company typically maintains a higher mix of term contracts to spot contracts to provide the Company with a more predictable revenue stream while maintaining spot market exposure to take advantage of new business opportunities and existing customers’ peak demands. During the first nine months of 2016 and all of 2015, approximately 80% of the inland marine transportation revenues were under term contracts and 20% were spot contract revenues. During the 2016 fourth quarter and all of 2017, approximately 75% of inland marine transportation revenues were under term contracts and 25% were spot contract revenues. Coastal time charters represented approximately 85% of the marine transportation coastal revenues under term contracts in 2017 and 2016, as compared to 90% in 2015.

No single customer of the marine transportation segment accounted for 10% of the Company’s revenues in 2017, 2016 and 2015.

## Employees

The Company’s marine transportation segment has approximately 3,225 employees, of which approximately 2,500 are vessel crew members. None of the segment’s inland operations are subject to collective bargaining agreements. The segment’s coastal operations include approximately 750 vessel employees some of which are subject to collective bargaining agreements in certain geographic areas. Approximately 300 Kirby Offshore Marine vessel crew members employed in the Atlantic Division are subject to a collective bargaining agreement with the Richmond Terrace Bargaining Unit that expired on December 31, 2016. This collective bargaining agreement was extended to August 31, 2018 and is currently subject to ongoing negotiations. In addition, approximately 120 Penn Maritime, Inc. vessel crew members are represented by the Seafarers International Union under a collective bargaining agreement in effect through April 2018.

## Properties



The principal offices of Kirby Inland Marine, Kirby Offshore Marine, Kirby Ocean Transport and Osprey are located in Houston, Texas, in three facilities under leases that expire in July 2021, December 2025 and December 2027. Kirby Inland Marine's operating locations are on the Mississippi River at Baton Rouge and New Orleans, Louisiana, and Greenville, Mississippi, three locations in Houston, Texas, on or near the Houston Ship Channel, one in Mobile, Alabama, one in Miami, Florida, one in Covington, Louisiana, one in Corpus Christi, Texas, and one in Orange, Texas. The New Orleans, Houston and Orange facilities are owned by the Company, and the Baton Rouge, Corpus Christi, Covington, Greenville, Miami and Mobile facilities are leased. Kirby Offshore Marine's operating facilities are located in Staten Island, New York, Seattle, Washington and Honolulu, Hawaii. All of Kirby Offshore Marine's operating facilities are leased, including piers and wharf facilities and office and warehouse space. San Jac's operating location is near the Houston Ship Channel.

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Governmental Regulations

General. The Company's marine transportation operations are subject to regulation by the USCG, federal laws, state laws and certain international conventions.

Most of the Company's tank barges are inspected by the USCG and carry certificates of inspection. The Company's inland and coastal towing vessels and coastal dry-bulk barges are not currently subject to USCG inspection requirements; however, federal regulations have been finalized that lay out new compliance options as well as new equipment, construction and operational requirements for towing vessels subjecting inland and coastal towing vessels to USCG inspection requirements. These regulations became effective July 20, 2016 and provide for the phase-in of certain requirements over time. Existing towing vessels have until July 20, 2018 to meet most of the requirements of the regulations, with additional timing for other portions of the regulations.

Most of the Company's coastal tugboats and coastal tank and dry-bulk barges are built to American Bureau of Shipping ("ABS") classification standards and are inspected periodically by ABS to maintain the vessels in class. The crews employed by the Company aboard vessels, including captains, pilots, engineers, tankermen and ordinary seamen, are licensed by the USCG.

The Company is required by various governmental agencies to obtain licenses, certificates and permits for its vessels depending upon such factors as the cargo transported, the waters in which the vessels operate and other factors. The Company is of the opinion that the Company's vessels have obtained and can maintain all required licenses, certificates and permits required by such governmental agencies for the foreseeable future.

The Company believes that additional security and environmental related regulations could be imposed on the marine industry in the form of contingency planning requirements. Generally, the Company endorses the anticipated additional regulations and believes it is currently operating to standards at least equal to anticipated additional regulations.

Jones Act. The Jones Act is a federal cabotage law that restricts domestic marine transportation in the United States to vessels built and registered in the United States, manned by United States citizens, and owned and operated by United States citizens. For a corporation to qualify as United States citizens for the purpose of domestic trade, it is to be 75% owned and controlled by United States citizens. The Company monitors citizenship and meets the requirements of the Jones Act for its vessels.

Compliance with United States ownership requirements of the Jones Act is important to the operations of the Company, and the loss of Jones Act status could have a material negative effect on the Company. The Company monitors the citizenship of its employees and stockholders.

User Taxes. Federal legislation requires that inland marine transportation companies pay a user tax based on propulsion fuel used by vessels engaged in trade along the inland waterways that are maintained by the United States Army Corps of Engineers. Such user taxes are designed to help defray the costs associated with replacing major components of the inland waterway system, such as locks and dams. A significant portion of the inland waterways on which the Company's vessels operate is maintained by the Army Corps of Engineers.

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The Company presently pays a federal fuel user tax of 29.1 cents per gallon consisting of a .1 cent per gallon leaking underground storage tank tax and 29 cents per gallon waterways user tax. The waterways user tax rate increased from 20 to 29 cents per gallon of fuel effective April 1, 2015.

**Security Requirements.** The Maritime Transportation Security Act of 2002 requires, among other things, submission to and approval by the USCG of vessel and waterfront facility security plans (“VSP” and “FSP”, respectively). The Company’s VSP and FSP have been approved and the Company is operating in compliance with the plans for all of its vessels and facilities that are subject to the requirements.

### Environmental Regulations

The Company’s operations are affected by various regulations and legislation enacted for protection of the environment by the United States government, as well as many coastal and inland waterway states and international jurisdictions to the extent that the Company’s vessels transit in international waters. Government regulations require the Company to obtain permits, licenses and certificates for the operation of its vessels. Failure to maintain necessary permits or approvals could require the Company to incur costs or temporarily suspend operation of one or more of its vessels.

**Water Pollution Regulations.** The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977 (“Clean Water Act”), the Comprehensive Environmental Response, Compensation and Liability Act of 1981 (“CERCLA”) and the Oil Pollution Act of 1990 (“OPA”) impose strict prohibitions against the discharge of oil and its derivatives or hazardous substances into the navigable waters of the United States. These acts impose civil and criminal penalties for any prohibited discharges and impose substantial strict liability for cleanup of these discharges and any associated damages. Certain states also have water pollution laws that prohibit discharges into waters that traverse the state or adjoin the state, and impose civil and criminal penalties and liabilities similar in nature to those imposed under federal laws.

The OPA and various state laws of similar intent substantially increased over historic levels the statutory liability of owners and operators of vessels for oil spills, both in terms of limit of liability and scope of damages.

One of the most important requirements under the OPA was that all newly constructed tank barges engaged in the transportation of oil and petroleum in the United States be double hulled, and all existing single hull tank barges be either retrofitted with double hulls or phased out of domestic service by December 31, 2014.

The Company manages its exposure to losses from potential discharges of pollutants through the use of well-maintained and equipped vessels, through safety, training and environmental programs, and through the Company’s insurance program. There can be no assurance, however, that any new regulations or requirements or any discharge of pollutants by the Company will not have an adverse effect on the Company.

**Clean Water Act.** The United States Environmental Protection Agency (“EPA”) regulates the discharge of ballast water and other substances in United States waters under the Clean Water Act. Effective February 6, 2009, EPA regulations required vessels 79 feet in length or longer to comply with a Vessel General Permit authorizing ballast water discharges and other discharges incidental to the operation of the vessels. The EPA regulations also imposed technology and water quality based effluent limits for certain types of discharges and established specific inspection, monitoring, recordkeeping and reporting requirements for vessels to ensure effluent limitations are met. The Vessel General Permit is effective from December 19, 2013 to December 18, 2018. The Company maintains Vessel General Permits and has established recordkeeping and reporting procedures in compliance with these obligations.

The USCG adopted regulations on ballast water management treatment systems establishing a standard for the allowable concentration of living organisms in certain vessel ballast water discharged in waters of the United States

under the National Invasive Species Act. The regulations include requirements for the installation of engineering equipment to treat ballast water by establishing an approval process for ballast water management systems (“BWMS”). The BWMS implementation was suspended until December 2016 at which time the USCG approved manufacturers’ systems that met the regulatory discharge standard equivalent to the International Maritime Organization’s D-2 standard. The phase-in schedule for those existing vessels requiring a system to install ballast water treatment management systems is dependent on vessel build date, ballast water capacity, and drydock schedule. Compliance with the ballast water treatment regulations requires the installation of equipment on some of the Company’s vessels to treat ballast water before it is discharged. The installation of BWMS equipment will require capital expenditures at the next scheduled drydocking for statutory purposes of those existing vessels requiring a system in order to complete the installation of the approved system.

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**Financial Responsibility Requirement.** Commencing with the Federal Water Pollution Control Act of 1972, as amended, vessels over 300 gross tons operating in the Exclusive Economic Zone of the United States have been required to maintain evidence of financial ability to satisfy statutory liabilities for oil and hazardous substance water pollution. This evidence is in the form of a Certificate of Financial Responsibility (“COFR”) issued by the USCG. The majority of the Company’s tank barges are subject to this COFR requirement, and the Company has fully complied with this requirement since its inception. The Company does not foresee any current or future difficulty in maintaining the COFR certificates under current rules.

**Clean Air Regulations.** The Federal Clean Air Act of 1979 requires states to draft State Implementation Plans (“SIPs”) designed to reduce atmospheric pollution to levels mandated by this act. Several SIPs provide for the regulation of barge loading and discharging emissions. The implementation of these regulations requires a reduction of hydrocarbon emissions released into the atmosphere during the loading of most petroleum products and the degassing and cleaning of barges for maintenance or change of cargo. These regulations require operators who operate in these states to install vapor control equipment on their barges. The Company expects that future emission regulations will be developed and will apply this same technology to many chemicals that are handled by barge. Most of the Company’s barges engaged in the transportation of petrochemicals, chemicals and refined petroleum products are already equipped with vapor control systems. Although a risk exists that new regulations could require significant capital expenditures by the Company and otherwise increase the Company’s costs, the Company believes that, based upon the regulations that have been proposed thus far, no material capital expenditures beyond those currently contemplated by the Company and no material increase in costs are likely to be required.

**Contingency Plan Requirement.** The OPA and several state statutes of similar intent require the majority of the vessels and terminals operated by the Company to maintain approved oil spill contingency plans as a condition of operation. The Company has approved plans that comply with these requirements. The OPA also requires development of regulations for hazardous substance spill contingency plans. The USCG has not yet promulgated these regulations; however, the Company anticipates that they will not be more difficult to comply with than the oil spill plans.

**Occupational Health Regulations.** The Company’s inspected vessel operations are primarily regulated by the USCG for occupational health standards. Uninspected vessel operations and the Company’s shore personnel are subject to the United States Occupational Safety and Health Administration regulations. The Company believes that it is in compliance with the provisions of the regulations that have been adopted and does not believe that the adoption of any further regulations will impose additional material requirements on the Company. There can be no assurance, however, that claims will not be made against the Company for work related illness or injury, or that the further adoption of health regulations will not adversely affect the Company.

**Insurance.** The Company’s marine transportation operations are subject to the hazards associated with operating vessels carrying large volumes of bulk cargo in a marine environment. These hazards include the risk of loss of or damage to the Company’s vessels, damage to third parties as a result of collision, fire or explosion, loss or contamination of cargo, personal injury of employees and third parties, and pollution and other environmental damages. The Company maintains insurance coverage against these hazards. Risk of loss of or damage to the Company’s vessels is insured through hull insurance currently insuring approximately \$3.8 billion in hull values. Liabilities such as collision, cargo, environmental, personal injury and general liability are insured up to \$1.3 billion per occurrence. The Company also maintains insurance coverage to address commercial liabilities arising in connection with its distribution and services segment.

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**Environmental Protection.** The Company has a number of programs that were implemented to further its commitment to environmental responsibility in its operations. In addition to internal environmental audits, one such program is environmental audits of barge cleaning vendors principally directed at management of cargo residues and barge cleaning wastes. Another is the participation by the Company in the American Waterways Operators Responsible Carrier program which is oriented towards continuously reducing the barge industry's impact on the environment, including the distribution services area.

**Safety.** The Company manages its exposure to the hazards associated with its business through safety, training and preventive maintenance efforts. The Company places considerable emphasis on safety through a program oriented toward extensive monitoring of safety performance for the purpose of identifying trends and initiating corrective action, and for the purpose of rewarding personnel achieving superior safety performance.

**Training.** The Company believes that among the major elements of a successful and productive work force are effective training programs. The Company also believes that training in the proper performance of a job enhances both the safety and quality of the service provided. New technology, regulatory compliance, personnel safety, quality and environmental concerns create additional demands for training. The Company has developed and instituted effective training programs.

Centralized training is provided through the Operations Personnel and Training Department, which is charged with developing, conducting and maintaining training programs for the benefit of all of the Company's operating entities. It is also responsible for ensuring that training programs are both consistent and effective. The Company's training facility includes state-of-the-art equipment and instruction aids, including a full bridge wheelhouse simulator, a working towboat, two tank barges and a tank barge simulator for tankermen training. During 2017, approximately 1,100 certificates were issued for the completion of courses at the training facility, of which approximately 550 were USCG approved classes and the balance were employee development and Company required classes, including Leadership and Defensive Driving.

**Quality.** Kirby Inland Marine has made a substantial commitment to the implementation, maintenance and improvement of Quality Assurance Systems in compliance with the International Quality Standard, ISO 9001. Kirby Offshore Marine is certified under ABS ISM standards. These Quality Assurance Systems and certification have enabled both shore and vessel personnel to effectively manage the changes which occur in the working environment, as well as enhancing the Company's safety and environmental performance.

### DISTRIBUTION AND SERVICES

The Company, through its wholly owned subsidiary Kirby Distribution & Services, Inc. and its wholly owned subsidiaries Kirby Engine Systems LLC, ("Kirby Engine Systems"), Stewart & Stevenson LLC ("S&S") and United Holdings LLC ("United"), and through Kirby Engine Systems' wholly owned subsidiaries Marine Systems, Inc. ("Marine Systems") and Engine Systems, Inc. ("Engine Systems"), serves two markets, oil and gas, and commercial and industrial. The Company sells genuine replacement parts, provides service mechanics to overhaul and repair engines, transmissions, reduction gears and related oilfield service equipment, rebuilds component parts or entire diesel engines, transmissions and reduction gears, and related equipment used in oilfield services, marine, mining, power generation, on-highway, and other commercial and industrial applications. The Company manufactures and remanufactures oilfield service equipment, including pressure pumping units, for North American as well international oilfield service companies, and oil and gas operator and producer markets. The Company also sells engines, transmissions, power generation systems, and rents equipment including generators, fork lifts, pumps, air compressors and railcar movers for use in a variety of commercial and industrial markets.

For the oil and gas market, the Company sells Original Equipment Manufacturers (OEM) replacement parts, sells and services diesel engines, pumps and transmissions, and manufactures and remanufactures pressure pumping units, and

manufactures cementing and pumping equipment, coil tubing and well intervention equipment, and gas compression equipment. Customers include oilfield service companies, and oil and gas operators and producers.

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For the commercial and industrial market, the Company sells OEM replacement parts and new diesel engines, provides service mechanics and maintains facilities to overhaul and repair diesel engines and ancillary products for marine and on-highway transportation companies, mining and industrial companies. The Company provides engineering and field services, OEM replacement parts and safety-related products to power generation operators and to the nuclear industry, manufactures engine generator and pump packages for power generation operators and municipalities, offers power generation systems customized for specific commercial and industrial applications, and rents equipment including power generation systems, pumps, air compressors, fork lifts and railcar movers.

No single customer of the distribution and services segment accounted for 10% of the Company's revenues in 2017, 2016 or 2015. The distribution and services segment also provides service to the Company's marine transportation segment, which accounted for approximately 2% of the distribution and services segment's 2017 revenues, 8% of 2016 revenues and 5% of 2015 revenues. Such revenues are eliminated in consolidation and not included in the table below.

The following table sets forth the revenues for the distribution and services segment for the three years ended December 31, 2017 (dollars in thousands):

	2017		2016		2015	
	Amounts	%	Amounts	%	Amounts	%
Overhauls and service	\$383,241	43 %	\$181,035	61 %	\$251,447	52 %
Direct parts sales	304,607	34	114,568	38	138,183	28
Manufacturing	202,464	23	3,177	1	94,812	20
	\$890,312	100%	\$298,780	100%	\$484,442	100%

## Oil and Gas Operations

The Company is engaged in the distribution and service of high-speed diesel engines, pumps and transmissions, and the manufacture and remanufacture of oilfield service equipment. The oil and gas operations represented 69% of the segment's 2017 revenues. The Company offers custom fabricated oilfield service equipment, fully tested and field ready. The Company manufactures and remanufactures oilfield service equipment, including pressure pumping units, nitrogen pumping units, cementers, hydration equipment, mud pumps and blenders, coil tubing, well intervention equipment and gas compression equipment. The Company sells OEM replacement parts, and sells and services diesel engines, pumps and transmissions, and offers in-house and in-field service capabilities. The Company is the largest off-highway distributor for Allison Transmission and a major distributor for MTU in North America.

The Company's manufacturing and remanufacturing facilities and service facilities are based in Houston, Texas, and Edmund and Oklahoma City, Oklahoma, key oil and gas producing regions.

## Oil and Gas Customers

The Company's major oil and gas customers include large and mid-cap oilfield service providers, oil and gas operators and producers. The Company has long standing relationships with most of its customers. Since the oil and gas business is linked to the oilfield services industry, and oil and gas operators and producers, there is no assurance that its present gross revenues can be maintained in the future. The results of the Company's oil and gas distribution and services operations are largely tied to the industries it serves and, therefore, are influenced by the cycles of such industries.



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Oil and Gas Competitive Conditions

The Company's primary competitors are other oilfield equipment manufacturers and remanufacturers, and equipment service companies. While price is a major determinant in the competitive process, equipment availability, reputation, consistent quality, expeditious service, experienced personnel, access to parts inventories and market presence are also significant factors. A substantial portion of the Company's business is obtained by competitive bids.

Commercial and Industrial Operations

The Company serves the marine, on-highway, mining, power generation, and other commercial and industrial markets primarily in the United States. The commercial and industrial operations represented 31% of the segment's 2017 revenues.

The Company is engaged in the overhaul and repair of medium-speed and high-speed marine diesel engines and reduction gears, line boring, block welding services and related parts sales for customers in the marine industry. Medium-speed diesel engines have an engine speed of 400 to 1000 revolutions per minute ("RPM") with a horsepower range of 800 to 32000. High-speed diesel engines have an engine speed of over 1000 RPM and a horsepower range of 50 to 8375. The Company services medium-speed and high-speed diesel engines utilized in the inland and offshore barge industries. It also services marine equipment and offshore drilling equipment used in the offshore petroleum exploration and oil service industry, marine equipment used in the offshore commercial fishing industry, harbor docking vessels, commercial ferries, vessels owned by the United States government and large pleasure crafts.

The Company has marine operations throughout the United States providing in-house and in-field repair capabilities and related parts sales. The Company's emphasis is on service to its customers, and it sends its crews from any of its locations to service customers' equipment anywhere in the world. The medium-speed operations are located in Houma and Harvey, Louisiana, Houston, Texas, Chesapeake, Virginia, Paducah, Kentucky, Seattle, Washington and Tampa, Florida, serving as the authorized distributor for EMD Power Products ("EMD") throughout the United States. The Company is also a distributor and representative for certain Alfa Laval products in the Midwest and on the East Coast, Gulf Coast, and West Coast. All of the marine locations are authorized distributors for Falk Corporation reduction gears and Oil States Industries, Inc. clutches. The Chesapeake, Virginia operation concentrates on East Coast inland and offshore dry-bulk, tank barge and harbor docking operators, and the United States government. The Houma and Harvey, Louisiana and Houston, Texas operations concentrate on the inland and offshore barge and oil services industries. The Tampa, Florida operation concentrates on Gulf of Mexico offshore dry-bulk, tank barge and harbor docking operators. The Paducah, Kentucky operation concentrates on the inland river towboat and barge operators and the Great Lakes carriers. The Seattle, Washington operation concentrates on the offshore commercial fishing industry, the offshore barge industry, the United States government, and other customers in Alaska, Hawaii and the Pacific Rim.

The high-speed marine operations are located in Houston, Texas, Houma, Baton Rouge, Belle Chasse and New Iberia, Louisiana, Paducah, Kentucky, Mobile, Alabama, Lodi and Thorofare, New Jersey, and 10 locations in Florida. The Company serves as a factory-authorized marine dealer for Caterpillar diesel engines in multiple states. The Company also operates factory-authorized full service marine distributorships/dealerships for Cummins, Detroit Diesel, John Deere, MTU and Volvo Penta diesel engines, as well as Falk, Lufkin and Twin Disc marine gears. High-speed diesel engines provide the main propulsion for a significant amount of the United States flag commercial vessels and large pleasure craft vessels, other marine applications, including engines for power generators and barge pumps.

The Company distributes, sells parts for and services diesel engines and transmissions for on-highway use and provides in-house and in-field service capabilities. The Company is the largest on-highway distributor for Allison Transmission and Detroit Diesel/Daimler Truck North America, providing parts, service and warranty on engines, transmissions and related equipment in Arkansas, Colorado, Florida, Louisiana, New Mexico, New York, Oklahoma,

Texas, Wyoming, and the country of Colombia. The Company also provides similar service for off-highway use and additionally has distributor rights for Deutz and Isuzu diesel engines. Off-highway applications are primarily surface and underground mining equipment, including loaders, crawlers, crushers, power screens, pumps, cranes, generators, haul trucks and personnel carriers, as well as the rental of equipment.

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The Company is engaged in the overhaul and repair of diesel engines and generators, and related parts sales for power generation customers. The Company is also engaged in the sale and distribution of diesel engine parts, engine modifications, generator modifications, controls, governors and diesel generator packages to the nuclear industry. The Company services users of diesel engines that provide emergency standby, peak and base load power generation. The Company also sells power generation systems that are customized for specific applications and the rental of power generation systems.

The Company has power generation operations throughout the United States providing in-house and in-field repair capabilities and products for power generation applications. Through its Rocky Mount, North Carolina operation, the Company serves as the exclusive worldwide distributor of EMD products to the nuclear industry, the worldwide distributor for Woodward, Inc. products to the nuclear industry, the worldwide distributor of Baker Hughes, a GE Company (“Baker Hughes”) products to the nuclear industry, and owns the assets and technology necessary to support the Nordberg medium-speed diesel engines used in nuclear applications. In addition, the Rocky Mount operation is an exclusive distributor for Norlake Manufacturing Company transformer products to the nuclear industry, an exclusive distributor of Hannon Company generator and motor products to the nuclear industry, and a non-exclusive distributor of analog Weschler Instruments metering products and an exclusive distributor of digital Weschler metering products to the nuclear industry. The Company is a non-exclusive distributor of Ingersoll Rand air start equipment to the nuclear industry worldwide.

The Company sells pre-packaged and fabricated power generation systems for emergency, standby and auxiliary power for commercial and industrial applications. The Company also offers rental generator systems from MTU, Atlas Copco, and Multiquip from 50 to 2000 kilowatts of power to a broad range of customers. The Company also is engaged in the rental of power generator systems, fork lifts, pumps, air compressors and railcar movers. In addition, the Company provides accessory products such as cables, hoses, fuel cells, air dryers, air compressor boosters and ground heaters. Lastly, the Company is a dealer for Thermo King refrigeration systems for trucks, railroad cars and other land transportation markets in south and central Texas.

## Commercial and Industrial Customers

The Company’s major marine customers include inland and offshore barge operators, oil service companies, offshore fishing companies, other marine transportation entities, the United States government and large pleasure crafts. Since the marine business is linked to the relative health of the inland towboat, offshore and coastal tugboat, harbor docking tugboat, offshore oil service, oil and gas drilling, offshore commercial fishing industries, Great Lakes ore vessels, dredging vessels, coastal ferries, United States government vessels and the pleasure craft industry, there is no assurance that its present gross revenues can be maintained in the future. The results of the distribution and services industry are largely tied to the industries it serves and, therefore, are influenced by the cycles of such industries.

The Company’s on-highway customers are long-haul and short-haul trucking companies, commercial and industrial companies with truck fleets, buses owned by municipalities and private companies. Off-highway companies include surface and underground mining operations with a large variety of equipment.

The Company’s power generation customers are domestic utilities and the worldwide nuclear power industry, municipalities, universities, medical facilities, data centers, petrochemical plants, manufacturing facilities, shopping malls, office complexes, residential and other industrial users.

The Company’s rental customers are primarily commercial and industrial companies, and residential customers with short-term rental requirements.

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### Commercial and Industrial Competitive Conditions

The Company's primary marine competitors are independent distribution and services companies and other factory-authorized distributors, authorized service centers and authorized marine dealers. Certain operators of diesel powered marine equipment also elect to maintain in-house service capabilities. While price is a major determinant in the competitive process, reputation, consistent quality, expeditious service, experienced personnel, access to parts inventories and market presence are also significant factors. A substantial portion of the Company's business is obtained by competitive bids. However, the Company has entered into service agreements with certain operators of diesel powered marine equipment, providing such operators with one source of support and service for all of their requirements at pre-negotiated prices.

The Company is one of a limited number of authorized resellers of EMD, Caterpillar, Cummins, Detroit Diesel, John Deere, MTU and Volvo Penta parts. The Company is also the marine distributor for Falk, Lufkin and Twin Disc reduction gears throughout the United States.

The Company's primary power generation competitors are other independent diesel service companies and manufacturers. While price is a major determinant in the competitive process, reputation, consistent quality, expeditious service, experienced personnel, access to parts inventories and market presence are also significant factors. A substantial portion of the Company's business is obtained by competitive bids.

As noted above, the Company is the exclusive worldwide distributor of EMD, Baker Hughes, Woodward, Nordberg, Norlake and Hannon parts for the nuclear industry, and non-exclusive distributor of Weschler parts and Ingersoll Rand air start equipment for the nuclear industry. Specific regulations relating to equipment used in nuclear power generation require extensive testing and certification of replacement parts. OEM parts need to be properly tested and certified for nuclear applications.

### Employees

The Company's distribution and services segment has approximately 2,450 employees. None of the United Holdings and Kirby Engine Systems operations are subject to collective bargaining agreements. Approximately 60 S&S employees in New Jersey are subject to a collective bargaining agreement with the Local 15C, International Union of Operating Engineers, AFL-CIO that expires in October 2023. The remaining S&S employees are not subject to collective bargaining agreements.

### Properties

The principal office of the distribution and services segment is located in Houston, Texas. There are 69 active facilities in the distribution and services segment, with 30 of these facilities owned and 39 are leased facilities.

The oil and gas operation's principal manufacturing facilities are located in Houston, Texas, and Edmund and Oklahoma City, Oklahoma, with all three facilities owned by the Company. The oil and gas focused operations have 22 parts and service facilities, with two in Arkansas, two in Colorado, five in Louisiana, one in New Mexico, 11 in Texas and one in Wyoming, with many of these facilities shared with the commercial and industrial operations.

The commercial and industrial businesses operate 44 parts and service facilities, with one facility in Alabama, one in Arizona, one in Connecticut, 11 in Florida, two in Kansas, one in Kentucky, two in Louisiana, one in Massachusetts, one in Oklahoma, four in New Jersey, one in New York, one in North Carolina, 10 in Texas, one in Virginia, one in Washington and five facilities located in Colombia, South America.



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## Executive Officers of the Registrant

The executive officers of the Company are as follows:

Name	Age	Positions and Offices
Joseph H. Pyne	70	Chairman of the Board
David W. Grzebinski	56	President, Chief Executive Officer and Chief Financial Officer
William G. Harvey (1)	60	Executive Vice President – Finance
Christian G. O’Neil	45	President – Kirby Inland Marine and Kirby Offshore Marine
Joseph H. Reniers	43	President – Kirby Distribution & Services, Inc.
Dorman L. Strahan	61	President – Kirby Engine Systems
Kim B. Clarke	62	Vice President and Chief Human Resources Officer
Ronald A. Dragg	54	Vice President, Controller and Assistant Secretary
Eric S. Holcomb	43	Vice President – Investor Relations
Amy D. Husted	49	Vice President and General Counsel
David R. Mosley	53	Vice President and Chief Information Officer
William M. Woodruff	57	Vice President – Public and Governmental Affairs
Renato A. Castro	46	Treasurer

(1) On January 31, 2018, the Company announced the employment of William G. Harvey as Executive Vice President – Finance. Mr. Harvey will assume the role of Chief Financial Officer of the Company after the filing of the Company’s 2017 Form 10-K.

No family relationship exists among the executive officers or among the executive officers and the directors. Officers are elected to hold office until the annual meeting of directors, which immediately follows the annual meeting of stockholders, or until their respective successors are elected and have qualified.

Joseph H. Pyne holds a degree in liberal arts from the University of North Carolina and has served the Company as Chairman of the Board since April 2014. He served the Company as Chairman of the Board and Chief Executive Officer from January 2014 to April 2014, as Chairman of the Board, President and Chief Executive Officer from April 2013 to January 2014 and from April 2010 to April 2011, and as President and Chief Executive Officer from 1995 to April 2010, Executive Vice President from 1992 to 1995 and as President of Kirby Inland Marine from 1984 to November 1999. He has served the Company as a Director since 1988. He also served in various operating and administrative capacities with Kirby Inland Marine from 1978 to 1984, including Executive Vice President from January to June 1984. Prior to joining the Company, he was employed by Northrop Services, Inc. and served as an officer in the Navy.

David W. Grzebinski is a Chartered Financial Analyst and holds a Master of Business Administration degree from Tulane University and a degree in chemical engineering from the University of South Florida. He has served as President and Chief Executive Officer since April 2014. He served as President and Chief Operating Officer from January 2014 to April 2014 and as Chief Financial Officer from March 2010 to April 2014. He served as Chairman of Kirby Offshore Marine from February 2012 to April 2013 and served as Executive Vice President from March 2010 to January 2014. Prior to joining the Company in February 2010, he served in various administrative positions since 1988 with FMC Technologies Inc. (“FMC”), including Controller, Energy Services, Treasurer, and Director of Global SAP and Industry Relations. Prior to joining FMC, he was employed by Dow Chemical Company.

William G. Harvey is a Chartered Financial Analysts and holds a Master of Business Administration degree from the University of Toronto and a degree in mechanical engineering from Queens University. He has served as Executive Vice President – Finance since February 2018. Prior to joining the Company, Mr. Harvey served as Executive Vice President and Chief Financial Officer of Walter Energy, Inc. from 2012 to 2017, Senior Vice President and Chief

Financial Officer of Resolute Forest Products Inc. (“Resolute”) from 2008 to 2011, and as Executive Vice President and Chief Financial Officer of Bowater Inc., a predecessor company of Resolute, from 2004 to 2008.

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Christian G. O’Neil holds a Master of Business Administration degree from Rice University, a doctorate of jurisprudence from Tulane University and a bachelor of arts degree from Southern Methodist University. He has served as President of Kirby Inland Marine and Kirby Offshore Marine since January 2018. He served as Executive Vice President and Chief Operating Officer of Kirby Inland Marine and Kirby Offshore Marine from May 2016 to January 2018. He also served as Executive Vice President – Commercial Operations of Kirby Inland Marine and Kirby Offshore Marine from April 2014 to May 2016, Vice President – Human Resources of the Company from May 2012 to April 2014, Vice President – Sales for Kirby Inland Marine from 2009 to 2012 and President of Osprey from 2006 through 2008. He has also served in various sales and business development roles at the Company and Osprey. Prior to joining the Company, he served as Sales Manager and Fleet Manager at Hollywood Marine, Inc. (“Hollywood Marine”) after joining Hollywood Marine in 1997.

Joseph H. Reniers holds a degree in mechanical engineering from the United States Naval Academy and a Master of Business Administration degree from the University of Chicago Booth School of Business. He has served the Company as President – Kirby Distribution & Services, Inc. since September 2017. He served as Executive Vice President – Diesel Engine Services and Supply Chain from May 2016 to September 2017, Senior Vice President – Diesel Engine Services and Marine Facility Operations from February 2015 to May 2016, Vice President – Strategy and Operational Service from April 2014 to February 2015, Vice President – Supply Chain from April 2012 to April 2014 and Vice President – Human Resources from March 2010 to April 2012. Prior to joining the Company, he was a management consultant with McKinsey & Company serving a wide variety of industrial clients. Prior to joining McKinsey, he served as a nuclear power officer in the Navy.

Dorman L. Strahan attended Nicholls State University and has served the Company as President of Kirby Engine Systems since May 1999, President of Marine Systems since 1986 and President of Engine Systems since 1996. After joining the Company in 1982 in connection with the acquisition of Marine Systems, he served as Vice President of Marine Systems until 1985.

Kim B. Clarke holds a Bachelor of Science degree from the University of Houston. She has served as Vice President and Chief Human Resources Officer since October 2017. She served as Vice President – Human Resources from December 2016 to April 2017. Prior to joining the Company, she served in senior leadership roles in human resources, safety, information technology and business development as Senior Vice President and Chief Administration Officer for Key Energy Services, Inc. from 2004 to March 2016.

Ronald A. Dragg is a Certified Public Accountant and holds a Master of Science in Accountancy degree from the University of Houston and a degree in finance from Texas A&M University. He has served the Company as Vice President and Controller since January 2007. He also served as Controller from November 2002 to January 2007, Controller – Financial Reporting from January 1999 to October 2002, and Assistant Controller – Financial Reporting from October 1996 to December 1998. Prior to joining the Company, he was employed by Baker Hughes Incorporated.

Eric S. Holcomb is a Certified Public Accountant and holds a B.B.A. degree in accounting from Southern Methodist University. He has served the Company as Vice President – Investor Relations since December 2017. Prior to joining the Company, he was employed by Baker Hughes Incorporated from 2003 to December 2017 serving in various roles including Investor Relations Director, Finance Director for North America Land, Finance Director for North America Offshore and Finance Director for Canada.

Amy D. Husted holds a doctorate of jurisprudence from South Texas College of Law and a degree in political science from the University of Houston. She has served the Company as Vice President and General Counsel since January 2017. She served as Vice President – Legal from January 2008 to January 2017 and served as Corporate Counsel from November 1999 through December 2007. Prior to joining the Company, she served as Corporate Counsel of Hollywood Marine from 1996 to 1999 after joining Hollywood Marine in 1994.



David R. Mosley holds a degree in computer science from Texas A&M University and has served the Company as Vice President and Chief Information Officer since May 2007. Prior to joining the Company in 2007, he served as Vice President and Chief Information Officer for Prudential Real Estate Services Company from 2005 to May 2007, Vice President – Service Delivery for Iconixx Corporation from 1999 to 2005, Vice President – Product Development and Services for ADP Dealer Services from 1995 to 1999 and in various information technology development and management positions from 1987 to 1995.

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William M. Woodruff holds a doctorate of jurisprudence from the University of Houston Law Center and a bachelor of science degree from Texas A&M University. He was elected Vice President – Public and Governmental Affairs in October 2017. He served as Director – Public & Government Affairs from 2014 to October 2017 after joining the Company as Director – Government Affairs in 2004. Prior to joining the Company, he was a maritime lawyer in private practice and Vice President and General Counsel of Coastal Towing, Inc.

Renato A. Castro is a Certified Public Accountant and holds a Master of Business Administration degree from Tulane University and a degree in civil engineering from the National Autonomous University of Honduras. He has served the Company as Treasurer since April 2010 and served as Manager of Financial Analysis from 2007 to April 2010. He also served as Financial Analyst from 2005 through 2006 and Assistant Controller of Kirby Inland Marine from 2001 through 2004. Prior to joining the Company, he was employed by a subsidiary of Astaldi S.p.A. in their transport infrastructure division.

### Item 1A. Risk Factors

The following risk factors should be considered carefully when evaluating the Company, as its businesses, results of operations, or financial condition could be materially adversely affected by any of these risks. The following discussion does not attempt to cover factors, such as trends in the United States and global economies or the level of interest rates, among others, that are likely to affect most businesses.

The Inland Waterway infrastructure is aging and may result in increased costs and disruptions to the Company's marine transportation segment. Maintenance of the United States inland waterway system is vital to the Company's operations. The system is composed of over 12,000 miles of commercially navigable waterway, supported by over 240 locks and dams designed to provide flood control, maintain pool levels of water in certain areas of the country and facilitate navigation on the inland river system. The United States inland waterway infrastructure is aging, with more than half of the locks over 50 years old. As a result, due to the age of the locks, scheduled and unscheduled maintenance outages may be more frequent in nature, resulting in delays and additional operating expenses. One-half of the cost of new construction and major rehabilitation of locks and dams is paid by marine transportation companies through a 29 cent per gallon diesel fuel tax and the remaining 50% is paid from general federal tax revenues. Failure of the federal government to adequately fund infrastructure maintenance and improvements in the future would have a negative impact on the Company's ability to deliver products for its customers on a timely basis. In addition, any additional user taxes that may be imposed in the future to fund infrastructure improvements would increase the Company's operating expenses.

The Company is subject to adverse weather conditions in its marine transportation and distribution and services segments. The Company's marine transportation segment is subject to weather conditions on a daily basis. Adverse weather conditions such as high or low water on the inland waterway systems, fog and ice, tropical storms, hurricanes and tsunamis on both the inland waterway systems and throughout the United States coastal waters can impair the operating efficiencies of the marine fleet. Such adverse weather conditions can cause a delay, diversion or postponement of shipments of products and are totally beyond the control of the Company. In addition, adverse water and weather conditions can negatively affect a towing vessel's performance, tow size, loading drafts, fleet efficiency, place limitations on night passages and dictate horsepower requirements. The Company's distribution and services segment is subject to tropical storms and hurricanes impacting its coastal locations and tornadoes impacting its Oklahoma facilities.

The Company could be adversely impacted by a marine accident or spill event. A marine accident or spill event could close a portion of the inland waterway system or a coastal area of the United States for a period of time. Although statistically marine transportation is the safest means of surface transportation of bulk commodities, accidents do occur, both involving Company equipment and equipment owned by other marine carriers.



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The Company transports a wide variety of petrochemicals, black oil, refined petroleum products and agricultural chemicals throughout the Mississippi River System, on the Gulf Intracoastal Waterway, coastwise along all three United States coasts and in Alaska and Hawaii. The Company manages its exposure to losses from potential discharges of pollutants through the use of well-maintained and equipped tank barges and towing vessels, through safety, training and environmental programs, and through the Company's insurance program, but a discharge of pollutants by the Company could have an adverse effect on the Company.

The Company's marine transportation segment is dependent on its ability to adequately crew its towing vessels. The Company's towing vessels are crewed with employees who are licensed or certified by the USCG, including its captains, pilots, engineers and tankermen. The success of the Company's marine transportation segment is dependent on the Company's ability to adequately crew its towing vessels. As a result, the Company invests significant resources in training its crews and providing crew members an opportunity to advance from a deckhand to the captain of a Company towboat or tugboat. Lifestyle issues are a deterrent for employment for inland and coastal crew members. Inland crew members generally work a 20 days on, 10 days off rotation, or a 30 days on, 15 days off rotation. For the coastal fleet, crew members are generally required to work a 14 days on, 14 days off, 21 days on, 21 days off or 30 days on, 30 days off rotation, dependent upon the location. With ongoing retirements and competitive labor pressure in the marine transportation segment, the Company continues to monitor and implement market competitive pay practices. The Company also utilizes an internal development program to train Maritime Academy graduates for vessel leadership positions.

The Company's marine transportation segment has approximately 3,225 employees, of which approximately 2,500 are vessel crew members. None of the segment's inland operations are subject to collective bargaining agreements. The segment's coastal operations include approximately 750 vessel employees, of whom approximately 420 are subject to collective bargaining agreements in certain geographic areas. Any work stoppages or labor disputes could adversely affect coastal operations in those areas.

The Company may be unable to make attractive acquisitions or successfully integrate acquired businesses, and any inability to do so may adversely affect the Company's business and hinder its ability to grow. The Company has made asset and business acquisitions in the past and may continue to make acquisitions of assets or businesses in the future that complement or expand the Company's current business. The Company may not be able to identify attractive acquisition opportunities. Even if attractive acquisition opportunities are identified, the Company may not be able to complete the acquisition or do so on commercially acceptable terms. The success of any completed acquisition depends on the Company's ability to integrate the acquired assets or business effectively into the Company's existing operations. The process of integrating acquired assets or businesses may involve difficulties that require a disproportionate amount of the Company's managerial and financial resources to resolve. The value of acquired assets or businesses may be negatively impacted by a variety of circumstances unknown to the Company prior to the acquisition. In addition, possible future acquisitions may be larger and for purchase prices significantly higher than those paid for earlier acquisitions. No assurance can be given that the Company will be able to identify additional suitable acquisition opportunities, negotiate acceptable terms, obtain financing for acquisitions on acceptable terms or successfully acquire identified targets. The Company's failure to achieve consolidation savings, to integrate successfully the acquired businesses and assets into the Company's existing operations, or to minimize any unforeseen operational difficulties could have a material adverse effect on the Company's business, financial condition, and results of operations. In addition, agreements governing the Company's indebtedness from time to time may impose certain limitations on the Company's ability to undertake acquisitions or make investments or may limit the Company's ability to incur certain indebtedness and liens, which could limit the Company's ability to make acquisitions.

The Company's failure to comply with the Foreign Corrupt Practices Act ("FCPA") could have a negative impact on its ongoing operations. The Company's operations outside the United States require the Company to comply with a number of United States and international regulations. For example, its operations in countries outside the United States are subject to the FCPA, which prohibits United States companies or their agents and employees from

providing anything of value to a foreign official for the purposes of influencing any act or decision of these individuals in their official capacity to help obtain or retain business, direct business to any person or corporate entity, or obtain any unfair advantage. The Company has internal control policies and procedures and has implemented training and compliance programs for its employees and agents with respect to the FCPA. However, the Company's policies, procedures and programs may not always protect it from reckless or criminal acts committed by its employees or agents, and severe criminal or civil sanctions could be the result of violations of the FCPA. The Company is also subject to the risks that its employees, joint venture partners, and agents outside of the United States may fail to comply with other applicable laws.

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The Company's marine transportation segment is subject to the Jones Act. The Company's marine transportation segment competes principally in markets subject to the Jones Act, a federal cabotage law that restricts domestic marine transportation in the United States to vessels built and registered in the United States, and manned and owned by United States citizens. The Company presently meets all of the requirements of the Jones Act for its vessels. The loss of Jones Act status could have a significant negative effect on the Company. The requirements that the Company's vessels be United States built and manned by United States citizens, the crewing requirements and material requirements of the USCG, and the application of United States labor and tax laws increases the cost of United States flag vessels when compared with comparable foreign flag vessels. The Company's business could be adversely affected if the Jones Act or international trade agreements or laws were to be modified as to permit foreign competition that is not subject to the same United States government imposed burdens. Since the events of September 11, 2001, the United States government has taken steps to increase security of United States ports, coastal waters and inland waterways. The Company believes that it is unlikely that the current cabotage provisions of the Jones Act would be modified or eliminated in the foreseeable future.

The Secretary of Homeland Security is vested with the authority and discretion to waive the Jones Act to such extent and upon such terms as the Secretary may prescribe whenever the Secretary deems that such action is necessary in the interest of national defense. On September 8, 2017, following Hurricanes Harvey and Irma, the Department of Homeland Security issued a waiver of the Jones Act for a 7-day period for shipments from New York, Pennsylvania, Texas and Louisiana to South Carolina, Georgia, Florida and Puerto Rico. The waiver was specifically tailored to address the transportation of refined petroleum products due to disruptions in hurricane-affected areas. On September 11, 2017, the waiver was extended for 11 days and expanded to include additional states. Following Hurricane Maria, on September 28, 2017, the Department of Homeland Security issued a waiver of the Jones Act for movement of products shipped from United States coastwise points to Puerto Rico through October 18, 2017. Waivers of the Jones Act, whether in response to natural disasters or otherwise, could result in increased competition from foreign tank vessel operators, which could negatively impact the marine transportation segment.

The Company's marine transportation segment is subject to regulation by the USCG, federal laws, state laws and certain international conventions, as well as numerous environmental regulations. The majority of the Company's vessels are subject to inspection by the USCG and carry certificates of inspection. The crews employed by the Company aboard vessels are licensed or certified by the USCG. The Company is required by various governmental agencies to obtain licenses, certificates and permits for its vessels. The Company's operations are also affected by various United States and state regulations and legislation enacted for protection of the environment. The Company incurs significant expenses and capital expenditures to comply with applicable laws and regulations and any significant new regulation or legislation, including climate change laws or regulations, could have an adverse effect on the Company.

The Company is subject to risks associated with possible climate change legislation, regulation and international accords. Greenhouse gas emissions have increasingly become the subject of a large amount of international, national, regional, state and local attention. On December 7, 2009, the EPA furthered its focus on greenhouse gas emissions when it issued its endangerment finding in response to a decision of the Supreme Court of the United States. The EPA found that the emission of six greenhouse gases, including carbon dioxide (which is emitted from the combustion of fossil fuels), may reasonably be anticipated to endanger public health and welfare. Based on this finding, the EPA defined the mix of these six greenhouse gases to be "air pollution" subject to regulation under the Clean Air Act. Although the EPA has stated a preference that greenhouse gas regulation be based on new federal legislation rather than the existing Clean Air Act, many sources of greenhouse gas emissions may be regulated without the need for further legislation.

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The United States Congress has considered in the past legislation that would create an economy-wide “cap-and-trade” system that would establish a limit (or cap) on overall greenhouse gas emissions and create a market for the purchase and sale of emissions permits or “allowances.” Any proposed cap-and-trade legislation would likely affect the chemical industry due to anticipated increases in energy costs as fuel providers pass on the cost of the emissions allowances, which they would be required to obtain under cap-and-trade to cover the emissions from fuel production and the eventual use of fuel by the Company or its energy suppliers. In addition, cap-and-trade proposals would likely increase the cost of energy, including purchases of diesel fuel, steam and electricity, and certain raw materials used or transported by the Company. Proposed domestic and international cap-and-trade systems could materially increase raw material and operating costs of the Company’s customer base. Future environmental regulatory developments related to climate change in the United States that restrict emissions of greenhouse gases could result in financial impacts on the Company’s operations that cannot be predicted with certainty at this time.

The Company’s marine transportation segment is subject to volatility in the United States production of petrochemicals. For 2017, 56% of the marine transportation segment’s revenues were from the movement of petrochemicals, including the movement of raw materials and feedstocks from one refinery or petrochemical plant to another, as well as the movement of more finished products to end users and terminals for export. During 2017, petrochemical volumes were relatively stable compared with 2016 and 2015. The United States petrochemical industry continues to benefit from a low-cost domestically produced natural gas feedstock advantage, producing strong volumes of raw materials and intermediate products for transportation between Gulf Coast petrochemical plants and the transportation of more finished products to terminals for both domestic consumers and for export destinations. In addition, approximately 30 new United States petrochemical projects, including expansion of existing plants or new plants, are scheduled to be completed during 2018 and 2019 which should provide additional movements for the marine transportation segment. Higher natural gas prices and other factors could negatively impact the United States petrochemical industry and its production volumes, which would negatively impact the Company.

The Company’s marine transportation segment could be adversely impacted by the construction of tank barges by its competitors. At the present time, there are an estimated 3,825 inland tank barges in the United States, of which the Company operates 998, or 26%. The number of tank barges peaked at an estimated 4,200 in 1982, slowly declined to 2,750 by 2003, and then gradually increased to an estimated 3,850 by the end of 2015 and 2016. At the end of 2017 the Company estimates there are approximately 3,825 inland tank barges. The Company estimates that industry-wide approximately 260 tank barges were placed in service during 2015, of which 36 were for the Company, and 60 tank barges were retired, 18 of which were by the Company. The Company estimates that industry-wide approximately 100 tank barges were placed in service during 2016, of which five were by the Company, and 100 tank barges were retired, 50 of which were by the Company. The Company estimates that industry-wide 75 tank barges were placed in service during 2017, of which five were by the Company, and 100 tank barges were retired, 54 of which were by the Company. The increase for 2015 reflected the improved demand for inland petrochemical, refined petroleum products and black oil barges experienced in 2014 and federal tax incentives on new equipment. The decrease in the number of tank barges at the end of 2016 and 2017 reflected the industry-wide oversupply of tank barges. The Company estimates that approximately 30 tank barges were ordered during 2017 for delivery throughout 2018, one of which is for the Company, and many older tank barges, including an expected 25 by the Company, will be retired, dependent on 2018 market conditions.

The long-term risk of an oversupply of inland tank barges may be mitigated by the fact that the inland tank barge industry has a mature fleet. Of the estimated 3,825 tank barges in the industry at the present time, approximately 500 are over 30 years old and approximately 250 of those over 40 years old. Given the age profile of the industry inland tank barge fleet, the expectation is that older tank barges will continue to be removed from service and replaced by new tank barges as needed, with the extent of both retirements and new builds dependent on petrochemical and refinery production levels and crude oil and natural gas condensate movements, both of which can have a direct effect on industry-wide tank barge utilization, as well as term and spot contract rates.





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During the majority of 2015, the coastal operations reflected improvements in market conditions with tank barge utilization in the 90% to 95% range, occasionally declining to the high-80% level during portions of the 2015 fourth quarter. During the majority of 2015, the Company experienced increased demand for coastal crude oil and natural gas condensate moves and success in expanding the coastal customer base to include inland customers with coastal requirements. During the 2015 fourth quarter continuing throughout 2016 and 2017, a decline in crude oil and natural gas condensate transportation volumes increased available capacity and resulted in some reluctance among certain customers to extend term contracts, which led to an increase in the number of coastal vessels operating in the spot market. In addition, the Company and the industry added new coastal tank barge capacity during 2015, 2016 and 2017, with additional new capacity coming on-line in 2018 and 2019. Much of this new capacity is replacement capacity for older vessels anticipated to be retired.

The Company estimates there are approximately 290 tank barges operating in the 195,000 barrel or less coastal industry fleet, the sector of the market in which the Company operates, and approximately 20 of those are over 30 years old. The Company took delivery of a new 185,000 barrel ATB in late 2015 and a second 185,000 barrel ATB in June 2016. The Company also took delivery of a new 155,000 barrel ATB in November 2016 and a second 155,000 ATB in September 2017. The Company also took delivery in December 2016 of a 35,000 barrel coastal petrochemical tank barge. The Company is aware of nine coastal tank barge and tugboat units placed in service in 2016 and seven in 2017 by competitors, and seven announced coastal tank barge and tugboat units under construction by competitors for delivery in 2018 and 2019. The Company removed from service 12 out-of-service coastal tank barges in the 2017 fourth quarter. The coastal tank barges will be either scrapped or sold into international non-competing markets during 2018.

Higher fuel prices could increase operating expenses and fuel price volatility could reduce profitability. The cost of fuel during 2017 was approximately 9% of marine transportation revenue. All marine transportation term contracts contain fuel escalation clauses, or the customer pays for the fuel. However, there is generally a 30 to 90 day delay before contracts are adjusted depending on the specific contract. In general, the fuel escalation clauses are effective over the long-term in allowing the Company to adjust to changes in fuel costs due to fuel price changes; however, the short-term effectiveness of the fuel escalation clauses can be affected by a number of factors including, but not limited to, specific terms of the fuel escalation formulas, fuel price volatility, navigating conditions, tow sizes, trip routing, and the location of loading and discharge ports that may result in the Company over or under recovering its fuel costs. Spot contract rates generally reflect current fuel prices at the time the contract is signed but do not have escalators for fuel.

Loss of a large customer or other significant business relationship could adversely affect the Company. Four marine transportation customers accounted for approximately 20% of the Company's 2017, 25% of 2016 and 30% of 2015 revenue. The Company has contracts with these customers expiring in 2018 through 2021. Two distribution and services customers accounted for approximately 13% of the Company's 2017, 3% of 2016 and 7% of 2015 revenue. Although the Company considers its relationships with these companies to be strong, the loss of any of these customers could have an adverse effect on the Company.

The Company's distribution and services segment has a 52-year relationship with EMD, the largest manufacturer of medium-speed diesel engines. The Company, through Kirby Engine Systems, serves as both an EMD distributor and service center for select markets and locations for both service and parts. With the acquisition of S&S in September 2017, the Company added additional EMD exclusive distributorship rights in key states, primarily through the central, south and eastern areas of the United States. With the S&S acquisition, the Company became the United States distributor for EMD marine and power generation applications. Sales and service of EMD products account for approximately 3% of the Company's revenues for 2017. Although the Company considers its relationship with EMD to be strong, the loss of the EMD distributorship and service rights, or a disruption of the supply of EMD parts, could have a negative impact on the Company's ability to service its customers.



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United and S&S have maintained continuous exclusive distribution rights for MTU and Allison since the 1940s. United and S&S are two of MTU's top five distributors of off-highway engines in North America, with exclusive distribution rights in multiple states. In addition, as distributors of Allison products, United and S&S have exclusive distribution rights in multiple key growth states. United and S&S are also the distributor for parts, service and warranty on Daimler truck engines and related equipment in multiple states. Sales and service of MTU and Allison products accounted for approximately 12% of the Company's revenues during 2017. Although the Company considers its relationships with MTU and Allison to be strong, the loss of MTU, Allison or Daimler distributorships and service rights, or a disruption of the supply of MTU or Allison parts, could have a negative impact on the Company's ability to service its customers.

The Company is subject to competition in both its marine transportation and distribution and services segments. The inland and coastal tank barge industry remains very competitive. The Company's primary competitors are noncaptive inland tank barge operators and coastal operators. The Company also competes with companies who operate refined product and petrochemical pipelines, railroad tank cars and tractor-trailer tank trucks. Increased competition from any significant expansion of or additions to facilities or equipment by the Company's competitors could have a negative impact on the Company's results of operations.

The distribution and services industry is also very competitive. The segment's oil and gas market's principal competitors are independent distribution and service and oilfield manufacturing companies and other factory-authorized distributors and service centers. In addition, certain oilfield service companies that are customers of the Company also manufacture and service a portion of their own oilfield equipment. Increased competition in the distribution and services industry and continued low price of natural gas, crude oil or natural gas condensate, and resulting decline in drilling for such natural resources in North American shale formations, could result in less oilfield equipment being manufactured and remanufactured, lower rates for service and parts pricing and result in less manufacturing, remanufacturing, service and repair opportunities and parts sales for the Company. For the commercial and industrial market, the segment's primary marine diesel competitors are independent diesel services companies and other factory-authorized distributors, authorized service centers and authorized marine dealers. Certain operators of diesel powered marine equipment also elect to maintain in-house service capabilities. For power generation, the primary competitors are other independent service companies.

Significant increases in the construction cost of tank barges and towing vessels may limit the Company's ability to earn an adequate return on its investment in new tank barges and towing vessels. The price of steel increased significantly from 2006 to 2009, thereby increasing the construction cost of new tank barges and towing vessels. The Company's average construction price for a new 30,000 barrel capacity inland tank barge ordered in 2008 for 2009 delivery was approximately 90% higher than in 2000, primarily due to the increase in steel prices. During 2009, the United States and global recession negatively impacted demand levels for inland tank barges and as a result, the construction price of inland tank barges for 2010 delivery fell significantly, primarily due to a significant decrease in steel prices, as well as a decrease in the number of tank barges ordered. The average construction price for inland tank barges delivered since 2010 steadily increased until reaching its peak in early 2015, but remained below the construction price for tank barges delivered in 2009. Construction costs for inland tank barges ordered in 2016 for delivery in 2017, and ordered in 2017 for delivery in 2018 have declined, reflecting the current industry-wide over-capacity in the inland tank barge market and subsequent decline in the number of tank barges ordered for delivery in 2017 and 2018.

The Company's marine transportation segment could be adversely impacted by the failure of the Company's shipyard vendors to deliver new vessels according to contractually agreed delivery schedules and terms. The Company contracts with shipyards to build new vessels and currently has many vessels under construction. Construction projects are subject to risks of delay and cost overruns, resulting from shortages of equipment, materials and skilled labor; lack of shipyard availability; unforeseen design and engineering problems; work stoppages; weather interference; unanticipated cost increases; unscheduled delays in the delivery of material and equipment; and financial and other difficulties at shipyards including labor disputes, shipyard insolvency and inability to obtain necessary

certifications and approvals. A significant delay in the construction of new vessels or a shipyard's inability to perform under the construction contract could negatively impact the Company's ability to fulfill contract commitments and to realize timely revenues with respect to vessels under construction. Significant cost overruns or delays for vessels under construction could also adversely affect the Company's financial condition, results of operations and cash flows.

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The Company's distribution and services segment could be adversely impacted by future legislation or additional regulation of hydraulic fracturing practices. The Company, through its United and S & S subsidiaries, is a distributor and service provider of engine and transmission related products for the oil and gas services, power generation and transportation industries, and a manufacturer of oilfield service equipment, including pressure pumping units. The EPA is studying hydraulic fracturing practices, and legislation may be introduced in Congress that would authorize the EPA to impose additional regulations on hydraulic fracturing. In addition, a number of states have adopted or are evaluating the adoption of legislation or regulations governing hydraulic fracturing. Such federal or state legislation and/or regulations could materially impact customers' operations and greatly reduce or eliminate demand for the Company's pressure pumping fracturing equipment and related products. The Company is unable to predict whether future legislation or any other regulations will ultimately be enacted and, if so, the impact on the Company's distribution and services segment.

The Company relies on critical information systems for the operation of its businesses, and the failure of any critical information system, including a cyber-security breach, may adversely impact its businesses. The Company is dependent on its technology infrastructure and must maintain and rely upon critical information systems for the effective and safe operation of its businesses. These information systems include software applications and hardware equipment, as well as data networks and telecommunications.

The Company's information systems, including the Company's proprietary vessel management computer system, are subject to damage or interruption from a number of potential sources, including but not limited to, natural disasters, software viruses, power failures and cyber-attacks. The Company has implemented measures such as emergency recovery processes, virus protection software, intrusion detection systems and annual attack and penetration audits to mitigate these risks. However, the Company cannot guarantee that its information systems cannot be damaged or compromised.

Any damage or compromise of its data security or its inability to use or access these critical information systems could adversely impact the efficient and safe operation of its businesses, or result in the failure to maintain the confidentiality of data of its customers or its employees and could subject the Company to increased operating expenses or legal action, which could have an adverse effect on the Company.

Prevailing natural gas and crude oil prices, as well as the volatility of their prices, could have an adverse effect on the Company's businesses. Demand for tank barge transportation services is driven by the production of volumes of the bulk liquid commodities such as petrochemicals, black oil and refined petroleum products that the Company transports by tank barge. This production can depend on the prevailing level of natural gas and crude oil prices, as well as the volatility of their prices.

In general, lower energy prices are good for the United States economy and typically translate into increased petrochemical and refined product production and therefore increased demand for tank barge transportation services. However, during 2015, 2016 and 2017 lower crude oil prices resulted in a decline in domestic crude oil and natural gas condensate production and reduced volumes to be transported by tank barge. The Company estimates that at the beginning of 2015 there were approximately 550 inland tank barges and 35 coastal tank barges in the 195,000 barrels or less category transporting crude oil and natural gas condensate. At the end of 2016, the Company estimated that approximately 140 inland tank barges and approximately ten coastal tank barges in the 195,000 barrel or less category were transporting such products, a reduction of approximately 410 inland tank barges and 25 coastal tank barges that have moved into other markets. At the end of 2017, the Company estimates that approximately 250 inland tank barges and approximately three coastal tank barges were transporting crude and natural gas condensate. Volatility in the price of natural gas and crude oil can also result in heightened uncertainty which may lead to decreased production and delays in new petrochemical and refinery plant construction. Increased competition for available black oil and petrochemical barge moves caused by reduced crude oil and natural gas condensate production could have an adverse impact on the Company's marine transportation segment.



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Lower energy prices generally result in a decrease in the number of oil and gas wells being drilled. Oilfield service companies reduce their capital spending, resulting in decreased demand for new parts and equipment, including pressure pumping units, provided by the Company's distribution and services segment. This may also lead to order cancellations from customers or customers requesting to delay delivery of new equipment. The Company also services offshore supply vessels and offshore drillings rigs operating in the Gulf of Mexico, as well as internationally. Low energy prices may negatively impact the number of wells drilled in the Gulf of Mexico and international waters. In addition to the possibility that decreased energy prices may result in reduced demand for the Company's services, parts and equipment, energy price volatility may also result in difficulties in the Company's ability to ramp up and ramp down production on a timely basis and, therefore, could result in an adverse impact on the Company's distribution and services segment.

The Company's distribution and services segment could be adversely impacted by the construction of pressure pumping units by its competitors. In early 2015, an estimated 19.5 million horsepower of pressure pumping units were working in North America. By late 2016, the working horsepower in North America has declined to an estimated 9.0 million, with an estimated 4.5 million horsepower scrapped, an estimated 2.0 million horsepower available for work and an estimated 4.0 million horsepower stacked, the large majority of which would require major service before being placed back in service. A significant drop in demand due to the low price of crude oil resulted in an oversupply in the pressure pumping market and negatively impacted the Company's 2015 and 2016 results of operations. During late 2016 and 2017, with the stabilization of crude oil prices in the \$40 to \$60 per barrel range, the United States land rig count improved and service intensity in the well completion business increased. As a result, the Company experienced a healthy rebound in service demand, particularly with pressure pumping unit remanufacturing and transmission overhauls, and with the acquisition of S&S in September 2017, the manufacture of oilfield service equipment, including pressure pumping units, and the sale of transmissions. However, increased expansion of, or additions to, facilities or equipment by the Company's competitors could have a negative impact on the Company's results of operations.

### Item 1B. Unresolved Staff Comments

Not applicable.

### Item 2. Properties

The information appearing in Item 1 under "Marine Transportation– Properties" and "Distribution and Services– Properties" is incorporated herein by reference. The Company believes that its facilities are adequate for its needs and additional facilities would be available if required.

### Item 3. Legal Proceedings

In 2009, the Company was named a Potentially Responsible Party ("PRP") in addition to a group of approximately 250 named PRPs under the Comprehensive Environmental Response, Compensation and Liability Act of 1981 ("CERCLA") with respect to a Superfund site, the Portland Harbor Superfund site ("Portland Harbor") in Portland, Oregon. The site was declared a Superfund site in December 2000 as a result of historical heavily industrialized use due to manufacturing, shipbuilding, petroleum storage and distribution, metals salvaging, and electrical power generation activities which led to contamination of Portland Harbor, an urban and industrial reach of the lower Willamette River located immediately downstream of downtown Portland. The Company's involvement arises from four spills at the site after it was declared a Superfund site, as a result of predecessor entities' actions in the area. To date, there is no information suggesting the extent of the costs or damages to be claimed from the 250 notified PRPs. Based on the nature of the involvement at the Portland Harbor site, the Company believes its potential contribution is de minimis; however, to date neither the Environmental Protection Agency ("EPA") nor the named PRPs have performed an allocation of potential liability in connection with the site nor have they provided costs and expenses in connection

with the site.

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In January 2015, the Company was named as a defendant in a Complaint filed in the U.S. District Court of the Southern District of Texas,