CF Industries Holdings, Inc.
Form 10-K
February 23, 2017
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K
(Mark One)

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

For the fiscal year ended December 31, 2016
OR

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

Commission file number 001-32597
CF INDUSTRIES HOLDINGS, INC.
(Exact name of Registrant as specified in its charter)

Delaware	20-2697511
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
4 Parkway North, Suite 400, Deerfield, Illinois	60015
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (847) 405-2400
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.01 par value per share	
Preferred Stock Purchase Rights	New York Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act: None
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ý No o
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No ý
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 ý No o
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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No o
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 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. o
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 ý Accelerated filer o Non-accelerated filer o Smaller reporting company o
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No ý
The aggregate market value of the registrant's common stock held by non-affiliates was $5,597,334,751 based on the closing sale price of common stock on June 30, 2016.
233,114,691 shares of the registrant's common stock, $0.01 par value per share, were outstanding as of January 31, 2017.
DOCUMENTS INCORPORATED BY REFERENCE
Portions of the registrant's definitive proxy statement for its 2017 annual meeting of stockholders (Proxy Statement) are incorporated herein by reference into Part III of this Annual Report on Form 10-K. The Proxy Statement will be filed with the Securities and Exchange Commission, pursuant to Regulation 14A, not later than 120 days after the end of the 2016 fiscal year, or, if we do not file the Proxy Statement within such 120-day period, we will amend this Annual Report on Form 10-K to include the information required under Part III hereof not later than the end of such 120-day period.

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PART I
ITEM 1. BUSINESS.
Our Company

All references to "CF Holdings," "the Company," "we," "us," and "our" refer to CF Industries Holdings, Inc. and its subsidiaries, except where the context makes clear that the reference is only to CF Industries Holdings, Inc. itself and not its subsidiaries. All references to "CF Industries" refer to CF Industries, Inc., a 100% owned subsidiary of CF Industries Holdings, Inc. Notes referenced throughout this document refer to consolidated financial statement note disclosures that are found in Item 8. Financial Statements and Supplementary Data—Notes to Consolidated Financial Statements.

We are one of the largest manufacturers and distributors of nitrogen fertilizer and other nitrogen products in the world. Our principal customers are cooperatives, independent fertilizer distributors, farmers and industrial users. Our principal nitrogen fertilizer products are ammonia, granular urea, urea ammonium nitrate solution (UAN) and ammonium nitrate (AN). Our other nitrogen products include diesel exhaust fluid (DEF), urea liquor, nitric acid and aqua ammonia, which are sold primarily to our industrial customers, and compound fertilizer products (NPKs), which are solid granular fertilizer products for which the nutrient content is a combination of nitrogen, phosphorus, and potassium. Our manufacturing and distribution facilities are concentrated in the midwestern United States and other major agricultural areas of the United States, Canada and the United Kingdom. We also export nitrogen fertilizer products from our Donaldsonville, Louisiana and Yazoo City, Mississippi manufacturing facilities, and our United Kingdom manufacturing facilities in Billingham and Ince.

Our principal assets include:

- four U.S. nitrogen fertilizer manufacturing facilities, located in Donaldsonville, Louisiana (the largest nitrogen fertilizer complex in the world); Port Neal, Iowa; Yazoo City, Mississippi; and Woodward, Oklahoma. These facilities are owned by CF Industries Nitrogen, LLC (CFN), in which we own a majority equity interest and CHS Inc. (CHS) owns a minority equity interest. See Note 17—Noncontrolling Interests for additional information on our strategic venture with CHS;
- an approximately 75.3% interest in Terra Nitrogen Company, L.P. (TNCLP), a publicly traded limited partnership of which we are the sole general partner and the majority limited partner and which, through its subsidiary Terra Nitrogen, Limited Partnership (TNLP), operates a nitrogen fertilizer manufacturing facility in Verdigris, Oklahoma;
- two Canadian nitrogen fertilizer manufacturing facilities, located in Medicine Hat, Alberta (the largest nitrogen fertilizer complex in Canada) and Courtright, Ontario;
- two United Kingdom nitrogen manufacturing complexes, located in Ince and Billingham;
- an extensive system of terminals and associated transportation equipment located primarily in the midwestern United States; and
- a 50% interest in Point Lisas Nitrogen Limited (PLNL), an ammonia production joint venture located in the Republic of Trinidad and Tobago that we account for under the equity method.

In 2016, we completed our capacity expansion projects at Donaldsonville, Louisiana and Port Neal, Iowa. These projects, originally announced in 2012, included the construction of new ammonia, urea, and UAN plants at our Donaldsonville, Louisiana complex and new ammonia and urea plants at our Port Neal, Iowa complex. These plants increased our overall production capacity by approximately 25%, improved our product mix flexibility at Donaldsonville, and improved our ability to serve upper-Midwest urea customers from our Port Neal location. In combination, these new facilities are able to produce 2.1 million tons of gross ammonia per year, upgraded products ranging from 2.0 million to 2.7 million tons of granular urea per year and up to 1.8 million tons of UAN 32% solution per year, depending on our choice of product mix. These new facilities will allow us to benefit from the cost advantages of North American natural gas. At our Donaldsonville complex, the ammonia plant was placed in service in October 2016, the UAN plant was placed in service in the first quarter of 2016 and the granular urea plant was placed in service in the fourth quarter of 2015. At our Port Neal, Iowa complex, both the ammonia and granular urea plants were placed in service in the fourth quarter of 2016. The total capital cost of the capacity expansion projects was $5.2 billion. See Item 7. Management's Discussion and Analysis of Financial Condition and Results of

Operations—Liquidity and Capital Resources—Capacity Expansion Projects and Restricted Cash for additional information related to our capacity expansion projects.

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We commenced a strategic venture with CHS on February 1, 2016, at which time CHS purchased a minority equity interest in CFN for $2.8 billion. On February 1, 2016, CHS also began receiving deliveries pursuant to a supply agreement under which CHS has the right to purchase annually from CFN up to approximately 1.1 million tons of granular urea and 580,000 tons of UAN at market prices. As a result of its minority equity interest in CFN, CHS is entitled to semi-annual cash distributions from CFN. We are also entitled to semi-annual cash distributions from CFN. See Note 17—Noncontrolling Interests for additional information on our strategic venture with CHS.

On August 6, 2015, we entered into a definitive agreement (as amended, the Combination Agreement) to combine with the European, North American and global distribution businesses of OCI N.V. (OCI). On May 22, 2016, CF Holdings, OCI and the other parties to the Combination Agreement entered into a termination agreement (the Termination Agreement) under which the parties agreed to terminate the Combination Agreement by mutual written consent. Pursuant to the Termination Agreement, CF Holdings paid OCI a termination fee of $150 million, which is included in transaction costs in our consolidated statement of operations. See Note 4—Acquisitions and Divestitures for additional information.

On July 31, 2015, we acquired the remaining 50% equity interest in CF Fertilisers UK Group Limited (formerly known as GrowHow UK Group Limited) (CF Fertilisers UK) not previously owned by us for total consideration of $570 million, and CF Fertilisers UK became wholly owned by us. This transaction added CF Fertilisers UK's nitrogen manufacturing complexes in Ince, United Kingdom and Billingham, United Kingdom to our consolidated manufacturing capacity.

Prior to March 17, 2014, we also manufactured and distributed phosphate fertilizer products. Our principal phosphate products were diammonium phosphate (DAP) and monoammonium phosphate (MAP). On March 17, 2014, we completed the sale of our phosphate mining and manufacturing business, which was located in Florida, to The Mosaic Company (Mosaic) for approximately $1.4 billion in cash. Our phosphate mining and manufacturing business was reported in our phosphate segment, which reflects the reported results of the phosphate business through March 17, 2014, plus the continuing sales of the phosphate inventory in the distribution network after March 17, 2014. The remaining phosphate inventory was sold in the second quarter of 2014; therefore, the phosphate segment does not have operating results subsequent to that quarter. See Note 4—Acquisitions and Divestitures for additional information.

The ammonia, granular urea, UAN, AN and Other segments are also referred to throughout this document as the "Nitrogen Product Segments." For the years ended December 31, 2016, 2015 and 2014, we sold 17.0 million, 13.7 million and 13.3 million product tons from the Nitrogen Product Segments generating net sales of $3.69 billion, $4.31 billion and $4.57 billion, respectively.

Our principal executive offices are located outside of Chicago, Illinois, at 4 Parkway North, Suite 400, Deerfield, Illinois 60015, and our telephone number is 847-405-2400. Our Internet website address is www.cfindustries.com. Information made available on our website does not constitute part of this Annual Report on Form 10-K.

We make available free of charge on or through our Internet website, www.cfindustries.com, all of our reports on Forms 10-K, 10-Q and 8-K and all amendments to those reports as soon as reasonably practicable after such material is filed electronically with, or furnished to, the Securities and Exchange Commission (SEC). Copies of our Corporate Governance Guidelines, Code of Corporate Conduct and charters for the Audit Committee, Compensation Committee, and Corporate Governance and Nominating Committee of our Board of Directors (the Board) are also available on our Internet website. We will provide electronic or paper copies of these documents free of charge upon request. The SEC also maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Company History

We were founded in 1946 as a fertilizer brokerage operation by a group of regional agricultural cooperatives. During the 1960s, we expanded our distribution capabilities and diversified into fertilizer manufacturing through the acquisition of several existing plants and facilities. During the 1970s and again during the 1990s, we expanded our production and distribution capabilities significantly, spending approximately $1 billion in each of these decades.

We operated as a traditional manufacturing and supply cooperative until 2002, when we adopted a new business model that established financial performance as our principal objective, rather than assured supply to our owners. A

critical aspect of the new business model was to establish a more economically driven approach to the marketplace. In August 2005, we completed our initial public offering (IPO) of common stock, which is listed on the New York Stock Exchange. In connection with the IPO, we consummated a reorganization transaction whereby we ceased to be a cooperative

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and our pre-IPO owners' equity interests in CF Industries were canceled in exchange for all of the proceeds of the offering and shares of our common stock.

In April 2010, we acquired Terra Industries Inc. (Terra), a leading North American producer and marketer of nitrogen fertilizer products for a purchase price of $4.6 billion, which was paid in cash and shares of our common stock. As a result of the Terra acquisition, we acquired five nitrogen fertilizer manufacturing facilities, our approximately 75.3% interest in TNCLP and certain joint venture interests.

In April 2013, we purchased the remaining noncontrolling interest in Canadian Fertilizers Limited (CFL).

In March 2014, we completed the sale of our phosphate mining and manufacturing business, which was located in Florida, to Mosaic for approximately $1.4 billion in cash.

In July 2015, we acquired the remaining 50% equity interest in CF Fertilisers UK not previously owned by us for total consideration of $570 million, and CF Fertilisers UK became wholly owned by us.

In February 2016, our strategic venture with CHS commenced, at which time CHS purchased a minority equity interest in CFN for $2.8 billion.

In 2016, we completed capacity expansion projects at Donaldsonville, Louisiana and Port Neal, Iowa which increased our production capacity by 25% for a total capital cost of $5.2 billion.

Product Tons and Nutrient Tons

Unless otherwise stated, we measure our production and sales volume in this Annual Report on Form 10-K in product tons, which represents the weight of the product measured in short tons (one short ton is equal to 2,000 pounds). References to UAN product tons assume a 32% nitrogen content basis for production volume.

We also provide certain supplementary volume information measured in nutrient tons. Nutrient tons represent the weight of the product's nitrogen content, which varies by product. Ammonia represents 82% nitrogen content, granular urea represents 46% nitrogen content, UAN represents between 28% and 32% nitrogen content and AN represents between 29% and 35% nitrogen content.

Reportable Segments

Our reportable segments consist of the following segments: ammonia, granular urea, UAN, AN, Other, and phosphate. These segments are differentiated by products. We use gross margin to evaluate segment performance and allocate resources. Total other operating costs and expenses (consisting of selling, general and administrative expenses and other operating—net) and non-operating expenses (interest and income taxes), are centrally managed and are not included in the measurement of segment profitability reviewed by management. See Note 21—Segment Disclosures for additional information.

Nitrogen Product Segments

We are the largest nitrogen fertilizer producer in North America. Our primary nitrogen fertilizer products are ammonia, granular urea, UAN and AN. Our historical sales of nitrogen fertilizer products from our Nitrogen Product Segments are shown in the following table. Net sales do not reflect amounts used internally, such as ammonia, in the manufacture of other products.

	2016		2015		2014	
	Tons	Net Sales	Tons	Net Sales	Tons	Net Sales
	(tons in thousands; dollars in millions)					
Nitrogen Product Segments						
Ammonia	2,874	$981	2,995	$1,523	2,969	$1,576
Granular urea	3,597	831	2,460	788	2,459	915
UAN	6,681	1,196	5,865	1,480	6,092	1,670
AN	2,151	411	1,290	294	958	243
Other[1]	1,654	266	1,108	223	798	171
Total	16,957	$3,685	13,718	$4,308	13,276	$4,575

(1) Other segment products include DEF, urea liquor, nitric acid, aqua ammonia and NPKs.

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Gross margin for the Nitrogen Product Segments was $0.84 billion, $1.55 billion and $1.77 billion for the years ended December 31, 2016, 2015 and 2014, respectively.

We own and operate seven nitrogen fertilizer manufacturing facilities in North America, including five nitrogen fertilizer manufacturing facilities in the United States, one in Medicine Hat, Alberta, Canada and one in Courtright, Ontario, Canada. As of December 31, 2016, the combined production capacity of these seven facilities represented approximately 43%, 50%, 48% and 19% of North American ammonia, granular urea, UAN and AN production capacity, respectively. Each of our nitrogen fertilizer manufacturing facilities in North America has on-site storage to provide flexibility to manage the flow of outbound shipments without impacting production.

We also operate two United Kingdom nitrogen manufacturing complexes located in Ince and Billingham that produce ammonia, AN and NPKs and serve primarily the British agricultural and industrial markets.

The following table shows the production capacities as of December 31, 2016 at each of our nitrogen manufacturing facilities:

	Average Annual Capacity[1]					
	Gross Ammonia[2]	Net Ammonia[2]	UAN[3]	Urea[4]	AN[5]	NPKs
	(tons in thousands)					
Donaldsonville, Louisiana[6]	4,335	1,390	3,255	2,835	—	—
Medicine Hat, Alberta	1,230	770	—	810	—	—
Port Neal, Iowa	1,230	110	800	1,400	—	—
Verdigris, Oklahoma[7][8]	1,210	430	1,955	—	—	—
Woodward, Oklahoma	480	130	810	45	—	—
Yazoo City, Mississippi[8][9]	570	—	160	50	1,035	—
Courtright, Ontario[8][10]	500	265	345	160	—	—
Ince, U.K.[11]	380	20	—	—	575	385
Billingham, U.K.[8][10]	595	310	—	—	625	—
	10,530	3,425	7,325	5,300	2,235	385
Unconsolidated Affiliate						
Point Lisas, Trinidad[12]	360	360	—	—	—	—
Total	10,890	3,785	7,325	5,300	2,235	385

(1) Average annual capacity includes allowance for normal outages and planned maintenance shutdowns.

(2) Gross ammonia capacity includes ammonia used to produce upgraded products. Net ammonia capacity is gross ammonia capacity less ammonia used to produce upgraded products based on the product mix shown in the table.

(3) Measured in tons of UAN containing 32% nitrogen by weight.

(4) Urea is sold as granular urea from the Donaldsonville and Medicine Hat facilities, as urea liquor from the Woodward, Yazoo City and Courtright facilities and as either granular urea or urea liquor from the Port Neal facility. Urea liquor produced at the Yazoo City, Courtright, Woodward and Port Neal facilities can be sold as DEF.

(5) AN includes prilled products (Amtrate and IGAN) and AN solution produced for sale.

(6) The Donaldsonville facility capacities present an estimated production mix. This facility is capable of producing between 2.4 million and 3.3 million tons of granular urea and between 1.2 million and 4.3 million tons of UAN annually.

(7) Represents 100% of the capacity of this facility.

(8) Reduction of UAN or AN production at the Yazoo City, Courtright, Verdigris and Billingham facilities can allow more merchant nitric acid to be made available for sale.

(9) The Yazoo City facility's production capacity depends on product mix. With the facility maximizing the production of AN products, 160,000 tons of UAN can be produced. UAN production can be increased to 450,000 tons by

reducing the production of AN to 900,000 tons.

(10) Production of urea products at the Courtright facility can be increased by reducing UAN production.

(11) The Ince facility's production capacity depends on product mix. The facility can increase production of NPKs to 550,000 tons by reducing AN production to 485,000 tons.

(12) Represents our 50% interest in the capacity of PLNL.

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The following table summarizes our nitrogen fertilizer production volume for the last three years.

	December 31,		
	2016	2015	2014
	(tons in thousands)		
Ammonia[1]	8,307	7,673	7,011
Granular urea	3,368	2,520	2,347
UAN (32%)	6,698	5,888	5,939
AN	1,845	1,283	950

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[1] Gross ammonia production, including amounts subsequently upgraded on-site into granular urea, UAN or AN.

Donaldsonville, Louisiana

The Donaldsonville nitrogen fertilizer complex is the world's largest nitrogen fertilizer production facility. It has six ammonia plants, five urea plants, four nitric acid plants and three UAN plants. The complex, which is located on the Mississippi River, includes deep-water docking facilities, access to an ammonia pipeline, and truck and railroad loading capabilities. The complex has on-site storage for 160,000 tons of ammonia, 201,000 tons of UAN (measured on a 32% nitrogen content basis) and 173,000 tons of granular urea.

As part of our capacity expansion projects, the new Donaldsonville urea plant became operational during the fourth quarter of 2015. The new UAN plant was placed in service in the first quarter of 2016, and the new ammonia plant was placed in service in October 2016. For additional details regarding the capacity expansion projects, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Capacity Expansion Projects and Restricted Cash.

Medicine Hat, Alberta, Canada

Medicine Hat is the largest nitrogen fertilizer complex in Canada. It has two ammonia plants and one urea plant. The complex has on-site storage for 60,000 tons of ammonia and 60,000 tons of granular urea.

The complex is owned by CFL, which until April 30, 2013, was a variable interest entity which we consolidated in our financial statements. In April 2013, we purchased the remaining noncontrolling interest. CFL continues to be a wholly owned subsidiary.

Port Neal, Iowa

The Port Neal facility is located approximately 12 miles south of Sioux City, Iowa on the Missouri River. The facility consists of two ammonia plants, three urea plants, two nitric acid plants and a UAN plant. The location has on-site storage for 90,000 tons of ammonia, 154,000 tons of granular urea, and 81,000 tons of 32% UAN.

As part of our capacity expansion projects, both the ammonia and urea plants were placed in service in December 2016. For additional details regarding the capacity expansion projects, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Capacity Expansion Projects and Restricted Cash.

Verdigris, Oklahoma

The Verdigris facility is located northeast of Tulsa, Oklahoma, near the Verdigris River and is owned by TNLP. It is the second largest UAN production facility in North America. The facility comprises two ammonia plants, two nitric acid plants, two UAN plants and a port terminal. Through our approximately 75.3% interest in TNCLP and its subsidiary, TNLP, we operate the plants and lease the port terminal from the Tulsa-Rogers County Port Authority. The complex has on-site storage for 60,000 tons of ammonia and 100,000 tons of 32% UAN.

Woodward, Oklahoma

The Woodward facility is located in rural northwest Oklahoma and consists of an ammonia plant, two nitric acid plants, two urea plants and two UAN plants. The facility has on-site storage for 36,000 tons of ammonia and 84,000 tons of 32% UAN.

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Yazoo City, Mississippi
The Yazoo City facility is located in central Mississippi and includes one ammonia plant, four nitric acid plants, an AN plant, two urea plants, a UAN plant and a dinitrogen tetroxide production and storage facility. The site has on-site storage for 50,000 tons of ammonia, 48,000 tons of 32% UAN and 11,000 tons of AN and related products.
Courtright, Ontario, Canada
The Courtright facility is located south of Sarnia, Ontario near the St. Clair River. The facility consists of an ammonia plant, a UAN plant, a nitric acid plant and a urea plant. The location has on-site storage for 64,000 tons of ammonia, 10,400 tons of granular urea and 16,000 tons of 32% UAN.
Ince, United Kingdom
The Ince facility is located in northwestern England and consists of an ammonia plant, three nitric acid plants, an AN plant and three NPK plants. The location has on-site storage for 11,000 tons of ammonia, 110,000 tons of AN, and 50,000 tons of NPKs.
Billingham, United Kingdom
The Billingham facility, located in the Teesside chemical area in northeastern England, is geographically split among three primary locations: the main site, which contains an ammonia plant, three nitric acid plants and a carbon dioxide plant; the Portrack site, approximately two miles away, which contains an AN fertilizer plant; and the North Tees site, approximately seven miles away, which contains an ammonia storage area. These locations collectively have on-site storage for 40,000 tons of ammonia and 128,000 tons of AN.
Point Lisas, Trinidad
The Point Lisas Nitrogen facility in the Republic of Trinidad and Tobago is owned jointly through a 50/50 venture with Koch Fertilizer LLC. This facility has the capacity to produce 720,000 tons of ammonia annually from natural gas supplied under a contract with the National Gas Company of Trinidad and Tobago (NGC).
Nitrogen Fertilizer Raw Materials
Natural gas is the principal raw material and primary fuel source used in the ammonia production process at our nitrogen fertilizer manufacturing facilities. In 2016, natural gas accounted for approximately 47% of our total production costs for nitrogen fertilizer products. Our nitrogen fertilizer manufacturing facilities have access to abundant, competitively-priced natural gas through a reliable network of pipelines that are connected to major natural gas trading hubs near the facilities. Our facilities utilize the following natural gas hubs: Henry Hub in Louisiana; SONAT in Louisiana; TETCO ELA in Louisiana; ONEOK in Oklahoma; AECO in Alberta; Ventura in Iowa; Demarcation in Kansas; Welcome in Minnesota; Dawn in Ontario; Parkway in Ontario; and the National Balancing Point (NBP) in the United Kingdom.
In 2016, our nitrogen manufacturing facilities consumed, in the aggregate, approximately 295 million MMBtus of natural gas. In 2017, the amount of natural gas consumed by our nitrogen manufacturing facilities will increase as a result of the completion of our capacity expansion projects. We employ a combination of spot and term purchases from a variety of quality suppliers to maintain a reliable, competitively-priced supply of natural gas. We also use certain financial instruments to hedge natural gas prices. See Note 15—Derivative Financial Instruments for additional information about our natural gas hedging activities.
Nitrogen Fertilizer Distribution
The safe, efficient and economical distribution of nitrogen fertilizer products is critical for successful operations. Our nitrogen fertilizer production facilities have access to multiple transportation modes by which we ship fertilizer products to terminals, warehouses and customers. Each of our production facilities has a unique distribution pattern based on its production capacity and location.
Our North American nitrogen production facilities can ship products via truck and rail to customers and our storage facilities in the U.S. and Canada, with access to our leased railcar fleet of approximately 5,700 tank and hopper cars, as well as railcars provided by rail carriers. Our United Kingdom nitrogen production facilities mainly ship products via truck.
The North American waterway system is also used extensively to ship products from our Donaldsonville, Verdigris and Yazoo City facilities. To ship ammonia and UAN, we employ a fleet of ten tow boats and thirty-two river barges,

which are

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primarily leased. We also utilize contract marine services to move urea fertilizer. We can also export nitrogen fertilizer products via seagoing vessels from our Donaldsonville, Yazoo City, Billingham and Ince manufacturing facilities.

Three of our nitrogen production facilities also have access to pipelines for the transportation of ammonia. The Donaldsonville facility is connected to the 2,000-mile long Nustar pipeline through which we have the ability to transport ammonia to more than 20 terminals and shipping points in the midwestern U.S. corn belt. Our Verdigris and Port Neal facilities are connected to the 1,100-mile long Magellan ammonia pipeline that also serves the U.S. Midwest.

Phosphate Segment

The phosphate segment reflects the reported results of the phosphate business through March 17, 2014, plus the continuing sales of the phosphate inventory in the distribution network after March 17, 2014. The remaining phosphate inventory was sold in the second quarter of 2014; therefore, the phosphate segment does not have operating results subsequent to that quarter.

Our historical sales of phosphate fertilizer products are shown in the table below.

	2014	
	Tons	Net Sales
	(tons in thousands; dollars in millions)	
Phosphate Fertilizer Products		
DAP	372	$ 127
MAP	115	41
Total	487	$ 168

Gross margin for the phosphate segment was $10 million for the year ended December 31, 2014.

Storage Facilities and Other Properties

As of December 31, 2016, we owned or leased space at 91 in-market storage terminals and warehouses located in a 23-state region of the United States, Canada and the United Kingdom. Including storage at our production facilities, we have an aggregate storage capacity for approximately 3.7 million tons of fertilizer. Our storage capabilities are summarized in the following table.

	Ammonia		Granular Urea		UAN[1]		AN	
	Number of Facilities	Capacity (000 Tons)	Number of Facilities	Capacity (000 Tons)	Number of Facilities	Capacity (000 Tons)	Number of Facilities	Capacity (000 Tons)
Plants	9	571	5	447	6	530	3	249
Terminal and Warehouse Locations								
Owned	22	810	1	200	8	219	—	—
Leased[2]	4	130	1	9	55	576	—	—
Total In-Market								