

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **August 8, 2019**

PQ Group Holdings Inc.

Delaware

(State or other jurisdiction of
incorporation or organization)

001-38221

(Commission
File Number)

81-3406833

(I.R.S. Employer
Identification No.)

**300 Lindenwood Drive
Malvern, Pennsylvania**

(Address of principal executive offices)

19355

(Zip Code)

(610) 651-4400

(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

Title of each class	Trading symbol	Name of each exchange on which registered
Common stock, par value \$0.01 per share	PQG	New York Stock Exchange

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

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.

Item 2.02 Results of Operations and Financial Condition.

On August 8, 2019, PQ Group Holdings Inc. issued a press release announcing the reporting of its financial results for the quarter ended June 30, 2019. A copy of the press release is furnished with this Current Report on Form 8-K as Exhibit 99.1 and is incorporated herein by reference.

The information in this Current Report on Form 8-K (including the exhibit attached hereto) shall not be deemed “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that Section. The information in this Current Report on Form 8-K (including the exhibit attached hereto) shall not be deemed incorporated by reference into any filing or other document under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing or document.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press release issued by PQ Group Holdings Inc. announcing financial results for the quarter ended June 30, 2019

SIGNATURE

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

PQ GROUP HOLDINGS INC.

(Registrant)

Date: August 8, 2019 By /s/ MICHAEL CREWS

Michael Crews

Executive Vice President and Chief Financial Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press release issued by PQ Group Holdings Inc. announcing financial results for the quarter ended June 30, 2019

**PQ Group Reports Solid Second Quarter 2019 Results;
Completed Sale of Product Line for \$28 million;
Sale Gain, Refining Services and Catalysts Performance Drives 94% Higher Net Income**

- Sales of \$431.7 million declined 0.7%; up 1.4% on constant currency basis on higher pricing across the portfolio and strong performance in Refining Services and Catalysts;
- Net income of \$30.6 million or diluted EPS of \$0.23; Adjusted net income of \$41.5 million or Adjusted diluted EPS of \$0.31
- Adjusted EBITDA of \$132.5 million increased 2.8%, or 4.6% on a constant currency basis, driving margin up 150 basis points to 28.1% (gain on sale excluded from Adjusted EBITDA, Adjusted net income and Adjusted diluted EPS);
- Repaid \$100 million of term loan in August 2019; targeting repayment of at least \$150 million in 2019

MALVERN, PA, August 8, 2019 -- PQ Group Holdings Inc. (NYSE:PQG) (“PQ” or the “Company”) reported results for the second quarter ended June 30, 2019. Sales of \$431.7 million were down 0.7% versus the same period in 2018, or up 1.4% on a constant currency basis on improved pricing across the portfolio. Net income was \$30.6 million or \$0.23 diluted EPS, including the after-tax gain on the sale of the sulfate salts product line of \$8.5 million and diluted EPS of \$0.06, respectively. Adjusted net income was \$41.5 million or \$0.31 Adjusted diluted EPS. Adjusted EBITDA was \$132.5 million, up 2.8%, or 4.6% on a constant currency basis, with Refining Services and Catalysts driving the improvement. Adjusted EBITDA margin was 28.1%, an increase of 150 basis points.

“Our continued success this quarter in implementing higher pricing for our products and services demonstrates the value that our innovative solutions and reliability of supply bring to our customers. Given this first half performance coupled with order commitments in Catalysts, we anticipate that our second half results will be stronger than the first half of the year,” commented Belgacem Chariag, PQ President and Chief Executive Officer.

Chariag added, “Our differentiated portfolio of businesses has a proven history of delivering stable results through changing macroeconomic environments. To increase value for our shareholders, we are in the process of executing on our plan to streamline our businesses to drive improved performance. Consistent with this strategy, we completed the sale of a non-core product line within Performance Chemicals for \$28 million.”

The financial results and outlook include non-GAAP financial measures. These non-GAAP measures are more fully described and are reconciled from the respective measures determined under GAAP in “Presentation of Non-GAAP Financial Measures” and the attached appendix tables.

Review of Segment Results

Refining Services

Sales of \$117.3 million increased 4.6% and Adjusted EBITDA of \$42.8 million was up 3.6% versus the same period in 2018. This result was largely driven by higher average pricing from the roll-off of a below-market contract which more than offset volume declines from extended unplanned customer outages.

Catalysts

Silica Catalyst sales of \$20.9 million increased 20.8%, or 23.5% on a constant currency basis, versus the same period in 2018, which largely benefited from an accelerated catalyst order and continued strong polyolefin demand. Adjusted EBITDA of \$29.6 million increased 25.4%, or 26.7% on a constant currency basis, largely driven by stronger results for the silica catalysts product line and a gain from the sale of the Zeolyst JV's equity investment in Rive.

Performance Materials

Sales of \$118.9 million decreased 6.0%, or 3.5% on constant currency basis, versus the same period in 2018. Higher pricing was more than offset by lower highway safety volumes due to poor weather conditions. Adjusted EBITDA of \$29.2 million increased \$0.6 million from improved product mix and logistical efficiencies.

Performance Chemicals

Sales of \$177.8 million decreased 3.3% but were flat on a constant currency basis versus the same period in 2018. Adjusted EBITDA of \$41.2 million declined 8.0%, or 4.8% on a constant currency basis, due mainly to softening demand in Europe and higher maintenance costs, partially offset by favorable sales mix.

Cash Flows and Balance Sheet

For the six months ended June 30, 2019, cash flows from operating activities increased to \$60.0 million, as compared to \$50.1 million for the same period in 2018. This increase was primarily driven by an increase in net income and favorable changes in working capital.

At June 30, 2019, the Company had cash and cash equivalents of \$82.2 million and total debt outstanding of \$2,146.2 million.

2019 Financial Outlook

The Company provides 2019 guidance as below:

- Sales of \$1,580 million to \$1,600 million, adjusted down for the pass-through of lower sulfur costs and lower volumes (updated from \$1,640 million to \$1,670 million)
- Adjusted EBITDA of \$470 million to \$485 million, unchanged due to favorable sales mix
- Adjusted diluted EPS of \$0.77 to \$0.93 (updated from \$0.75 to \$0.93)
- Adjusted free cash flow of \$125 million to \$145 million, excluding sale proceeds, unchanged

Conference Call and Webcast Details

On Thursday, August 8, 2019, PQ management will review the results during a conference call and audio-only webcast scheduled for 11:00 a.m. Eastern Time.

Conference Call: Investors may listen to the conference call live via telephone by dialing 1 (877) 883-0383 (domestic) or 1 (412) 902-6506 (international) and use the participant code 1649218.

Webcast: An audio-only live webcast of the conference call and presentation materials can be accessed at <http://investor.pqcorp.com>.

A replay of the conference call/webcast will be made available at <http://investor.pqcorp.com/events-presentations>.

Investor Contact:

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About PQ Group Holdings Inc.

PQ Group Holdings Inc. and subsidiaries is a leading integrated and innovative global provider of specialty catalysts, materials, chemicals and services. We support customers globally through our strategically located network of manufacturing facilities. We believe that our products, which are predominantly inorganic, and services contribute to improving the sustainability of the environment.

We have four uniquely positioned specialty businesses: **Refining Services** provides sulfuric acid recycling to the North American refining industry; **Catalysts** serves the packaging and engineering plastics and the global refining, petrochemical and emissions control industries; **Performance Materials** produces transportation reflective safety markings for roads and airports; and **Performance Chemicals** supplies diverse product end uses, including personal and industrial cleaning products, fuel-efficient tires, surface coatings, and food and beverage products.

We serve over 4,000 customers globally across many end uses and operate over 70 manufacturing facilities which are strategically located across six continents. For more information, see our website at <https://www.pqcorp.com>.

Presentation of Non-GAAP Financial Measures

In addition to the results provided in accordance with U.S. generally accepted accounting principles (“GAAP”) throughout this press release, the Company has provided non-GAAP financial measures—Adjusted EBITDA, Adjusted EBITDA margin, Adjusted free cash flow, Adjusted net income, Adjusted EPS, Adjusted diluted EPS, constant currency sales and constant currency Adjusted EBITDA—which present results on a basis adjusted for certain items. The Company uses these non-GAAP financial measures for business planning purposes and in measuring its performance relative to that of its competitors. The Company believes that these non-GAAP financial measures are useful financial metrics to assess its operating performance from period-to-period by excluding certain items that the Company believes are not representative of its core business. These non-GAAP financial measures are not intended to replace, and should not be considered superior to, the presentation of the Company’s financial results in accordance with GAAP. The use of the terms Adjusted EBITDA, Adjusted EBITDA margin, Adjusted free cash flow, Adjusted net income, Adjusted EPS, Adjusted diluted EPS, constant currency sales and constant currency Adjusted EBITDA may differ from similar measures reported by other companies and may not be comparable to other similarly titled measures. Adjusted EBITDA, Adjusted free cash flow, Adjusted net income, Adjusted EPS, Adjusted diluted EPS, constant currency sales and constant currency Adjusted EBITDA are reconciled from the respective measures under GAAP in the appendix below.

In discussing our operating results, the term currency exchange rates refers to the currency exchange rates we use to convert the operating results for all countries where the functional currency is not the U.S. dollar. We calculate constant currency sales and constant currency Adjusted EBITDA by translating current period results at the prior period’s currency exchange rates. When we refer to constant currency sales and constant currency Adjusted EBITDA, this means sales and Adjusted EBITDA without the impact of the currency exchange rate fluctuations from period-to-period.

The Company is not able to provide a reconciliation of the Company’s non-GAAP financial guidance to the corresponding GAAP measures without unreasonable effort because of the inherent difficulty in forecasting and quantifying certain amounts necessary for such a reconciliation such as certain non-cash, nonrecurring or other items that are included in net income and EBITDA as well as the related tax impacts of these items and asset dispositions/acquisitions and changes in foreign currency exchange rates that are included in cash flow, due to the uncertainty and variability of the nature and amount of these future charges and costs.

Zeolyst Joint Venture

The Company’s zeolite catalysts product group operates through its Zeolyst Joint Venture, which is accounted for as an equity method investment in accordance with GAAP. The presentation of the Zeolyst Joint Venture’s sales represents 50% of the sales of the Zeolyst Joint Venture. The Company does not record sales by the Zeolyst Joint Venture as revenue and such sales are not consolidated within the Company’s results of operations. However, the Company’s Adjusted EBITDA reflects the share of earnings of the Zeolyst Joint Venture that have been recorded as equity in net income from affiliated companies in the Company’s consolidated statements of operations for such periods and includes Zeolyst Joint Venture adjustments on a proportionate basis based on the Company’s 50% ownership interest. Accordingly, the Company’s Adjusted EBITDA margins are calculated including 50% of the sales of the Zeolyst Joint Venture for the relevant periods in the denominator.

Note on Forward-Looking Statements

Some of the information contained in this press release constitutes “forward-looking statements.” Forward-looking statements can be identified by words such as “anticipates,” “intends,” “plans,” “seeks,” “believes,” “estimates,” “expects,” “projects” and similar references to future periods. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Examples of forward-looking statements include, but are not limited to, statements regarding our results of operations, financial condition, liquidity, prospects, growth, strategies, product and service offerings and 2019 outlook. Our actual results may differ materially from those contemplated by the forward-looking statements. We caution you, therefore, against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, regional, national or global political, economic, business, competitive, market and regulatory conditions, currency exchange rates and other factors, including those described in the sections titled “Risk Factors” and “Management Discussion & Analysis of Financial Condition and Results of Operations” in our filings with the SEC, which are available on the SEC’s website at www.sec.gov. These forward-looking statements speak only as of the date of this release. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by applicable law.

PQ GROUP HOLDINGS INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF INCOME

	Three months ended June 30,			Six months ended June 30,		
	2019	2018	% Change	2019	2018	% Change
	<i>(in millions, except percentages, share and per share amounts)</i>					
Sales	\$ 431.7	\$ 434.7	(0.7)%	\$ 790.9	\$ 800.9	(1.2)%
Cost of goods sold	316.2	326.3	(3.1)%	594.5	614.4	(3.2)%
Gross profit	115.5	108.4	6.5 %	196.4	186.5	5.3 %
Selling, general and administrative expenses	43.4	43.5	(0.2)%	84.1	84.1	— %
Other operating expense, net	1.8	15.9	(88.7)%	12.6	25.2	(50.0)%
Operating income	70.3	49.0	43.5 %	99.7	77.2	29.1 %
Equity in net (income) from affiliated companies	(12.3)	(13.7)	(10.2)%	(14.4)	(25.5)	(43.5)%
Interest expense, net	28.5	27.2	4.8 %	57.2	56.4	1.4 %
Debt extinguishment costs	—	—	— %	—	5.9	(100.0)%
Other expense, net	3.1	5.7	(45.6)%	—	10.6	(100.0)%
Income before income taxes and noncontrolling interest	51.0	29.8	71.1 %	56.9	29.8	90.9 %
Provision for income taxes ⁽¹⁾	20.3	13.6	49.3 %	22.8	13.1	74.0 %
<i>Effective tax rate</i>	39.8%	45.8%		40.0%	44.0%	
Net income	30.7	16.2	89.5 %	34.1	16.7	104.2 %
Less: Net income attributable to the noncontrolling interest	0.1	0.4	(75.0)%	0.4	0.7	(42.9)%
Net income attributable to PQ Group Holdings Inc.	\$ 30.6	\$ 15.8	93.7 %	\$ 33.7	\$ 16.0	110.6 %
Earnings per share:						
Basic earnings per share	\$ 0.23	\$ 0.12		\$ 0.25	\$ 0.12	
Diluted earnings per share	\$ 0.23	\$ 0.12		\$ 0.25	\$ 0.12	
Weighted average shares outstanding:						
Basic	134,142,552	133,222,463		134,044,972	133,188,303	
Diluted	135,323,024	134,209,740		135,107,007	134,047,362	

⁽¹⁾ Net of a \$7.8 million and \$7.3 million provision for Global Intangible Low-Taxed Income ("GILTI") for the three and six months ended June 30, 2019, respectively. Net of a \$3.2 million and \$3.6 million provision for GILTI for the three and six months ended June 30, 2018, respectively, and a \$1.1 million provisional adjustment for the impact of the U.S. Tax Cuts and Job Act of 2017 for the three and six months ended June 30, 2018.

PQ GROUP HOLDINGS INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(in millions, except share and per share amounts)

	June 30, 2019	December 31, 2018
ASSETS		
Cash and cash equivalents	\$ 82.2	\$ 57.9
Accounts receivable, net	243.7	196.8
Inventories, net	275.2	264.7
Prepaid and other current assets	35.8	39.2
Total current assets	636.9	558.6
Investments in affiliated companies	477.3	468.2
Property, plant and equipment, net	1,193.2	1,209.0
Goodwill	1,258.2	1,254.9
Other intangible assets, net	702.1	728.4
Right-of-use lease asset	55.1	—
Other long-term assets	118.8	108.3
Total assets	\$ 4,441.6	\$ 4,327.4
LIABILITIES		
Notes payable and current maturities of long-term debt	\$ 10.0	\$ 7.2
Accounts payable	135.6	148.4
Operating lease liabilities - current	14.0	—
Accrued liabilities	99.0	100.0
Total current liabilities	258.6	255.6
Long-term debt, excluding current portion	2,104.6	2,106.7
Deferred income taxes	207.0	196.1
Operating lease liabilities - noncurrent	39.4	—
Other long-term liabilities	112.7	104.8
Total liabilities	2,722.3	2,663.2
Commitments and contingencies		
EQUITY		
Common stock (\$0.01 par); authorized shares 450,000,000; issued shares 136,355,874 and 135,758,269 on June 30, 2019 and December 31, 2018, respectively; outstanding shares 136,101,083 and 135,592,045 on June 30, 2019 and December 31, 2018, respectively	1.4	1.4
Preferred stock (\$0.01 par); authorized shares 50,000,000; no shares issued or outstanding on June 30, 2019 and December 31, 2018	—	—
Additional paid-in capital	1,686.9	1,674.7
Retained earnings	57.2	25.5
Treasury stock, at cost; shares 254,791 and 166,224 on June 30, 2019 December 31, 2018, respectively	(4.3)	(2.9)
Accumulated other comprehensive loss	(27.2)	(39.1)
Total PQ Group Holdings Inc. equity	1,714.0	1,659.6
Noncontrolling interest	5.3	4.6
Total equity	1,719.3	1,664.2
Total liabilities and equity	\$ 4,441.6	\$ 4,327.4

PQ GROUP HOLDINGS INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Six months ended June 30,	
	2019	2018
	(in millions)	
Cash flows from operating activities:		
Net income	\$ 34.2	\$ 16.7
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	65.5	68.9
Amortization	25.4	26.6
Amortization of inventory step-up	—	1.6
Amortization of deferred financing costs and original issue discount	2.9	3.1
Debt extinguishment costs	—	3.8
Foreign currency exchange loss	0.9	11.8
Deferred income tax provision	10.8	3.1
Net (gain) loss on asset disposals	(8.8)	5.9
Stock compensation	8.8	7.6
Equity in net (income) from affiliated companies	(14.4)	(25.5)
Dividends received from affiliated companies	5.1	15.9
Net interest income on swaps designated as net investment hedges	(4.5)	—
Other, net	(5.7)	(7.5)
Working capital changes that provided (used) cash, excluding the effect of acquisitions and dispositions:		
Receivables	(46.3)	(54.3)
Inventories	(12.2)	(9.9)
Prepays and other current assets	2.2	(3.6)
Accounts payable	(0.2)	1.0
Accrued liabilities	(3.7)	(15.1)
Net cash provided by operating activities	<u>60.0</u>	<u>50.1</u>
Cash flows from investing activities:		
Purchases of property, plant and equipment	(65.5)	(66.1)
Business combinations, net of cash acquired	—	(1.0)
Proceeds from sale of product line	26.7	—
Net interest proceeds on swaps designated as net investment hedges	4.5	—
Other, net	0.4	0.8
Net cash used in investing activities	<u>(33.9)</u>	<u>(66.3)</u>
Cash flows from financing activities:		
Draw down of revolving credit facilities	74.9	123.9
Repayments of revolving credit facilities	(72.2)	(114.8)
Issuance of long-term debt	—	1,267.0
Debt issuance costs	—	(6.4)
Repayments of long-term debt	(5.0)	(1,264.7)
Stock repurchases	(1.3)	(0.1)
Proceeds from stock options exercised	3.5	—
Other, net	(0.2)	(0.2)
Net cash (used in) provided by financing activities	<u>(0.3)</u>	<u>4.7</u>
Effect of exchange rate changes on cash, cash equivalents and restricted cash	<u>(1.5)</u>	<u>(1.8)</u>
Net change in cash, cash equivalents and restricted cash	<u>24.3</u>	<u>(13.1)</u>
Cash, cash equivalents and restricted cash at beginning of period	59.7	67.2
Cash, cash equivalents and restricted cash at end of period	<u>\$ 84.0</u>	<u>\$ 53.9</u>

Appendix Table A-1: Reconciliation of Net Income to Segment Adjusted EBITDA

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
(in millions)				
Reconciliation of net income attributable to PQ Group Holdings Inc. to Segment Adjusted EBITDA				
Net income attributable to PQ Group Holdings Inc.	\$ 30.6	\$ 15.8	\$ 33.7	\$ 16.0
Provision for income taxes	20.3	13.6	22.8	13.1
Interest expense, net	28.5	27.2	57.2	56.4
Depreciation and amortization	45.1	47.0	91.0	95.5
EBITDA	124.5	103.6	204.7	181.0
Joint venture depreciation, amortization and interest ^(a)	3.7	2.6	7.5	5.9
Amortization of investment in affiliate step-up ^(b)	1.7	1.7	4.2	3.3
Amortization of inventory step-up ^(c)	—	—	—	1.6
Debt extinguishment costs	—	—	—	5.9
Net (gain) loss on asset disposals ^(d)	(9.7)	4.8	(8.8)	5.9
Foreign currency exchange loss ^(e)	3.6	6.8	0.9	11.8
LIFO expense ^(f)	0.1	0.1	10.3	5.0
Transaction and other related costs ^(g)	1.0	0.3	1.1	0.7
Equity-based compensation	5.4	3.8	8.8	7.6
Restructuring, integration and business optimization expenses ^(h)	—	2.4	0.7	3.5
Defined benefit pension plan cost (benefit) ⁽ⁱ⁾	0.6	(0.4)	1.5	0.1
Other ^(j)	1.6	3.2	2.6	4.5
Adjusted EBITDA	132.5	128.9	233.5	236.8
Unallocated corporate expenses	10.3	9.4	20.3	17.0
Segment Adjusted EBITDA	\$ 142.8	\$ 138.3	\$ 253.8	\$ 253.8

Descriptions to PQ Non-GAAP Reconciliations

- (a) We use Adjusted EBITDA as a performance measure to evaluate our financial results. Because our Catalysts segment includes our 50% interest in our Zeolyst Joint Venture, we include an adjustment for our 50% proportionate share of depreciation, amortization and interest expense of our Zeolyst Joint Venture.
- (b) Represents the amortization of the fair value adjustments associated with the equity affiliate investment in our Zeolyst Joint Venture as a result of the combination of the businesses of PQ Holdings Inc. and Eco Services Operations LLC in May 2016 (the “Business Combination”). We determined the fair value of the equity affiliate investment and the fair value step-up was then attributed to the underlying assets of our Zeolyst Joint Venture. Amortization is primarily related to the fair value adjustments associated with fixed assets and intangible assets, including customer relationships and technical know-how.
- (c) As a result of the Sovitec acquisition there was a step-up in the fair value of inventory, which is amortized through cost of goods sold in the statements of income.
- (d) When asset disposals occur, we remove the impact of net gain/loss of the disposed asset because such impact primarily reflects the non-cash write-off of long-lived assets no longer in use. During the three and six months ended June 30, 2019, net (gain) loss on asset disposals reflects the gain related to the sale of a non-core product line.
- (e) Reflects the exclusion of the foreign currency transaction gains and losses in the statements of income primarily related to the non-permanent intercompany debt denominated in local currency translated to U.S. dollars for the three and six months ended June 30, 2019 and primarily relates to the Euro denominated term loan (which was settled as part of the February 2018 term loan refinancing) for the three and six months ended June 30, 2018.
- (f) Represents non-cash adjustments to the Company’s LIFO reserves for certain inventories in the U.S. that are valued using the LIFO method, which we believe provides a means of comparison to other companies that may not use the same basis of accounting for inventories.
- (g) Relates to certain transaction costs, including debt financing, due diligence and other costs related to transactions that are completed, pending or abandoned, that we believe are not representative of our ongoing business operations.
- (h) Includes the impact of restructuring, integration and business optimization expenses which are incremental costs that are not representative of our ongoing business operations.
- (i) Represents adjustments for defined benefit pension plan costs in our statements of income. More than two-thirds of our defined benefit pension plan obligations are under defined benefit pension plans that are frozen, and the remaining obligations primarily relate to plans operated in certain of our non-U.S. locations that, pursuant to jurisdictional requirements, cannot be frozen. As such, we do not view such expenses as core to our ongoing business operations.
- (j) Other costs consist of certain expenses that are not core to our ongoing business operations, including environmental remediation-related costs associated with the legacy operations of our business prior to the Business Combination, capital and franchise taxes, non-cash asset retirement obligation accretion and the initial implementation of procedures to comply with Section 404 of the Sarbanes-Oxley Act. Included in this line-item are rounding discrepancies that may arise from rounding from dollars (in thousands) to dollars (in millions).

Appendix Table A-2: Reconciliation of Net Income to Adjusted Net Income⁽¹⁾

	Three months ended June 30,					
	2019			2018		
	Pre-tax	Tax expense (benefit)	After-tax	Pre-tax	Tax expense (benefit)	After-tax
	(in millions)					
Net income before non-controlling interest	\$ 51.0	\$ 20.3	\$ 30.7	\$ 29.8	\$ 13.6	\$ 16.2
Less: Net income attributable to non-controlling interest	0.1	—	0.1	0.4	—	0.4
Net income attributable to PQ Group Holdings Inc.	50.9	20.3	30.6	29.4	13.6	15.8
Earnings per share:						
Basic earnings per share			\$ 0.23			\$ 0.12
Diluted earnings per share			\$ 0.23			\$ 0.12
Net income attributable to PQ Group Holdings Inc.	\$ 50.9	\$ 20.3	\$ 30.6	\$ 29.4	\$ 13.6	\$ 15.8
Amortization of investment in affiliate step-up ^(b)	1.7	0.7	1.0	1.7	0.7	1.0
Net (gain) loss on asset disposals ^(d)	(9.7)	(2.3)	(7.4)	4.8	1.7	3.1
Foreign currency exchange loss ^(e)	3.6	(0.5)	4.1	6.8	1.6	5.2
LIFO expense ^(f)	0.1	(0.1)	0.2	0.1	0.1	—
Transaction and other related costs ^(g)	1.0	0.4	0.6	0.3	0.1	0.2
Equity-based compensation	5.4	1.9	3.5	3.8	1.3	2.5
Restructuring, integration and business optimization expenses ^(h)	—	—	—	2.4	0.8	1.6
Defined benefit plan pension cost (benefit) ⁽ⁱ⁾	0.6	0.2	0.4	(0.4)	(0.1)	(0.3)
Other ^(j)	1.6	0.6	1.0	3.2	1.2	2.0
Adjusted Net Income, including non-cash GILTI tax	55.3	21.2	34.0	52.0	21.1	31.1
Impact of non-cash GILTI tax ⁽²⁾	—	(7.5)	7.5	—	(5.0)	5.0
Impact of tax reform ⁽³⁾	—	—	—	—	1.1	1.1
Adjusted Net Income ⁽¹⁾	\$ 55.3	\$ 13.7	\$ 41.5	\$ 52.0	\$ 17.2	\$ 37.2
Adjusted earnings per share:						
Adjusted basic earnings per share			\$ 0.31			\$ 0.28
Adjusted diluted earnings per share			\$ 0.31			\$ 0.28
Weighted average shares outstanding:						
Basic			134,142,552			133,222,463
Diluted			135,323,024			134,209,740

	Six months ended June 30,					
	2019			2018		
	Pre-tax	Tax expense (benefit)	After-tax	Pre-tax	Tax expense (benefit)	After-tax
	(in millions)					
Net income before non-controlling interest	\$ 56.9	\$ 22.8	\$ 34.1	\$ 29.8	\$ 13.1	\$ 16.7
Less: Net income attributable to non-controlling interest	0.4	—	0.4	0.7	—	0.7
Net income attributable to PQ Group Holdings Inc.	56.5	22.8	33.7	29.1	13.1	16.0
Earnings per share:						
Basic earnings per share			\$ 0.25			\$ 0.12
Diluted earnings per share			\$ 0.25			\$ 0.12
Net income attributable to PQ Group Holdings Inc.	\$ 56.5	\$ 22.8	\$ 33.7	\$ 29.1	\$ 13.1	\$ 16.0
Amortization of investment in affiliate step-up ^(b)	4.2	1.5	2.7	3.3	1.1	2.2
Amortization of inventory step-up ^(c)	—	—	—	1.6	0.5	1.1
Debt extinguishment costs	—	—	—	5.9	1.8	4.1
Net (gain) loss on asset disposals ^(d)	(8.8)	(1.9)	(6.9)	5.9	2.0	3.9
Foreign currency exchange loss ^(e)	0.9	(1.2)	2.1	11.8	3.7	8.1
LIFO expense ^(f)	10.3	3.7	6.6	5.0	1.6	3.4
Transaction and other related costs ^(g)	1.1	0.4	0.7	0.7	0.2	0.5
Equity-based compensation	8.8	3.2	5.6	7.6	2.5	5.1
Restructuring, integration and business optimization expenses ^(h)	0.7	0.2	0.5	3.5	1.2	2.3
Defined benefit plan pension cost ⁽ⁱ⁾	1.5	0.5	1.0	0.1	—	0.1
Other ^(j)	2.6	0.9	1.7	4.5	1.8	2.7
Adjusted Net Income, including non-cash GILTI tax	77.8	30.1	47.7	79.1	29.6	49.5
Impact of non-cash GILTI tax ⁽²⁾	—	(11.2)	11.2	—	(7.5)	7.5
Impact of tax reform ⁽³⁾	—	—	—	—	1.1	1.1
Adjusted Net Income ⁽¹⁾	\$ 77.8	\$ 18.9	\$ 58.9	\$ 79.1	\$ 23.2	\$ 58.1
Adjusted earnings per share:						
Adjusted basic earnings per share			\$ 0.44			\$ 0.44
Adjusted diluted earnings per share			\$ 0.44			\$ 0.43
Weighted average shares outstanding:						
Basic			134,044,972			133,188,303
Diluted			135,107,007			134,047,362

See Appendix Table A-1 for Descriptions to PQ Non-GAAP Reconciliations in the table above.

- (1) We define adjusted net income as net income attributable to PQ Group Holdings adjusted for non-operating income or expense and the impact of certain non-cash or other items that are included in net income that we do not consider indicative of our ongoing operating performance. Adjusted net income is presented as a key performance indicator as we believe it will enhance a prospective investor's understanding of our results of operations and financial condition. Adjusted net income may not be comparable with net income or adjusted net income as defined by other companies.

- (2) Amount represents the impact to tax expense in net income before non-controlling interest and the related adjustments to net income associated with GILTI provisions of the Tax Cuts and Jobs Act of 2017 (“TCJA”). Beginning January 1, 2018, GILTI results in taxation of “excess of foreign earnings,” which is defined as amounts greater than a 10% rate of return on applicable foreign tangible asset basis. The Company is required to record incremental tax provision impact with respect to GILTI as a result of having historical U.S. net operating loss (“NOL”) amounts to offset the GILTI taxable income inclusion. This NOL utilization precludes us from recognizing foreign tax credits (“FTCs”) which would otherwise help offset the tax impacts of GILTI. No FTCs will be recognized with respect to GILTI until our cumulative NOL balance has been exhausted. Because the GILTI provision does not impact our cash taxes (given available U.S. NOLs), and given that we expect to recognize FTCs to offset GILTI impacts once the NOLs are exhausted, we do not view this item as a component of core operations.
- (3) Represents the provisional adjustment for the impact of the TCJA and the Dutch Tax Plan 2019 recorded in net income.

Appendix Table A-3: Business Segment Sales and Adjusted EBITDA

	Three months ended June 30,			Six months ended June 30,		
	2019	2018	% Change	2019	2018	% Change
Sales:						
Refining Services	\$ 117.3	\$ 112.1	4.6 %	\$ 223.1	\$ 212.8	4.8 %
Catalysts	20.9	17.3	20.8 %	36.7	33.8	8.6 %
Performance Materials	118.9	126.5	(6.0)%	180.0	189.3	(4.9)%
Performance Chemicals	177.8	183.8	(3.3)%	358.3	373.7	(4.1)%
Eliminations	(3.2)	(5.0)		(7.2)	(8.7)	
Total sales	\$ 431.7	\$ 434.7	(0.7)%	\$ 790.9	\$ 800.9	(1.2)%
Zeolyst joint venture sales	\$ 39.1	\$ 49.5	(21.0)%	\$ 68.6	\$ 87.8	(21.9)%
Adjusted EBITDA:						
Refining Services	\$ 42.8	\$ 41.3	3.6 %	\$ 82.6	\$ 76.8	7.6 %
Catalysts	29.6	23.6	25.4 %	47.7	46.5	2.6 %
Performance Materials	29.2	28.6	2.1 %	39.7	40.6	(2.2)%
Performance Chemicals	41.2	44.8	(8.0)%	83.8	89.9	(6.8)%
Total Segment Adjusted EBITDA	\$ 142.8	\$ 138.3	3.3 %	\$ 253.8	\$ 253.8	— %
Corporate	(10.3)	(9.4)	9.6 %	(20.3)	(17.0)	19.4 %
Total Adjusted EBITDA	\$ 132.5	\$ 128.9	2.8 %	\$ 233.5	\$ 236.8	(1.4)%
Adjusted EBITDA Margin:						
Refining Services	36.5%	36.8%		37.0%	36.1%	
Catalysts ⁽¹⁾	49.4%	35.3%		45.3%	38.2%	
Performance Materials	24.6%	22.6%		22.1%	21.4%	
Performance Chemicals	23.1%	24.4%		23.4%	24.1%	
Total Adjusted EBITDA Margin⁽¹⁾	28.1%	26.6%		27.2%	26.6%	

⁽¹⁾ Adjusted EBITDA margin calculation includes proportionate 50% share of sales from the Zeolyst joint venture.

Appendix Table A-4: Constant Currency Sales and Adjusted EBITDA

The tables below reflect the calculation of constant currency sales and constant currency Adjusted EBITDA by segment for the three and six months ended June 30, 2019.

	Three months ended June 30, 2019			Three months ended June 30, 2018	
	As Reported	FX	Constant Currency	As Reported	% Change
(in millions, except percentages)					
Sales:					
Refining Services	\$ 117.3	\$ —	\$ 117.3	\$ 112.1	4.6 %
Catalysts	20.9	0.5	21.4	17.3	23.5 %
Performance Materials	118.9	3.2	122.1	126.5	(3.5)%
Performance Chemicals	177.8	5.6	183.4	183.8	(0.2)%
Eliminations	(3.2)	—	(3.2)	(5.0)	(36.6)%
Total sales	<u>\$ 431.7</u>	<u>\$ 9.3</u>	<u>\$ 441.0</u>	<u>\$ 434.7</u>	1.4 %
Zeolyst joint venture sales	\$ 39.1	\$ —	\$ 39.1	\$ 49.5	(21.0)%
Adjusted EBITDA:					
Refining Services	\$ 42.8	\$ —	\$ 42.8	\$ 41.3	3.6 %
Catalysts	29.6	0.3	29.9	23.6	26.7 %
Performance Materials	29.2	0.5	29.7	28.6	3.9 %
Performance Chemicals	41.2	1.5	42.7	44.8	(4.8)%
Total Segment Adjusted EBITDA	<u>\$ 142.8</u>	<u>\$ 2.3</u>	<u>\$ 145.1</u>	<u>\$ 138.3</u>	4.9 %
Corporate	(10.3)	—	(10.3)	(9.4)	9.2 %
Total Adjusted EBITDA	<u>\$ 132.5</u>	<u>\$ 2.3</u>	<u>\$ 134.8</u>	<u>\$ 128.9</u>	4.6 %

	Six months ended June 30, 2019			Six months ended June 30, 2018	
	As Reported	FX	Constant Currency	As Reported	% Change
(in millions, except percentages)					
Sales:					
Refining Services	\$ 223.1	\$ —	\$ 223.1	\$ 212.8	4.9 %
Catalysts	36.7	1.1	37.8	33.8	11.9 %
Performance Materials	180.0	6.5	186.5	189.3	(1.5)%
Performance Chemicals	358.3	14.2	372.5	373.7	(0.3)%
Eliminations	(7.2)	(0.3)	(7.5)	(8.7)	(13.7)%
Total sales	<u>\$ 790.9</u>	<u>\$ 21.5</u>	<u>\$ 812.4</u>	<u>\$ 800.9</u>	1.4 %
Zeolyst joint venture sales	\$ 68.6	\$ —	\$ 68.6	\$ 87.8	(21.9)%
Adjusted EBITDA:					
Refining Services	\$ 82.6	\$ —	\$ 82.6	\$ 76.8	7.6 %
Catalysts	47.7	0.7	48.4	46.5	4.2 %
Performance Materials	39.7	0.8	40.5	40.6	(0.2)%
Performance Chemicals	83.8	3.7	87.5	89.9	(2.6)%
Total Segment Adjusted EBITDA	<u>\$ 253.8</u>	<u>\$ 5.2</u>	<u>\$ 259.0</u>	<u>\$ 253.8</u>	2.0 %
Corporate	(20.3)	—	(20.3)	(17.0)	19.2 %
Total Adjusted EBITDA	<u>\$ 233.5</u>	<u>\$ 5.2</u>	<u>\$ 238.7</u>	<u>\$ 236.8</u>	0.8 %

Appendix Table A-5: Adjusted Free Cash Flow

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
	(in millions)			
Net cash provided by operating activities	\$ 33.2	\$ 28.1	\$ 60.0	\$ 50.1
Less:				
Purchases of property, plant and equipment ⁽¹⁾	(31.9)	(32.7)	(65.5)	(66.1)
Free cash flow	<u>1.3</u>	<u>(4.6)</u>	<u>(5.5)</u>	<u>(16.0)</u>
Adjustments to free cash flow:				
Net interest proceeds on currency swaps	0.6	—	4.5	—
Adjusted free cash flow ⁽²⁾	<u>\$ 1.9</u>	<u>\$ (4.6)</u>	<u>\$ (1.0)</u>	<u>\$ (16.0)</u>
Net cash used in investing activities ⁽³⁾	\$ (4.6)	\$ (33.2)	\$ (33.9)	\$ (66.3)
Net cash (used in) provided by financing activities	\$ 2.3	\$ (0.7)	\$ (0.3)	\$ 4.7

⁽¹⁾ Excludes the Company's proportionate 50% share of capital expenditures from the Zeolyst joint venture.

⁽²⁾ We define adjusted free cash flow as net cash provided by operating activities less purchases of property, plant and equipment, adjusted for net interest proceeds on swaps designated as net investment hedges. Adjusted free cash flow is a non-GAAP financial measure that we believe will enhance a prospective investor's understanding of our ability to generate additional cash from operations, including the reduction in cash paid for interest related to our cross-currency interest rate swaps, and is an important financial measure for use in evaluating our financial performance. Our presentation of adjusted free cash flow is not intended to replace, and should not be considered superior to, the presentation of our net cash provided by operating activities determined in accordance with GAAP. Additionally, our definition of adjusted free cash flow is limited, in that it does not represent residual cash flows available for discretionary expenditures, due to the fact that the measure does not deduct the payments required for debt service and other contractual obligations or payments made for business acquisitions. Therefore, we believe it is important to view adjusted free cash flow as a measure that provides supplemental information to our consolidated statements of cash flows.

⁽³⁾ Net cash used in investing activities includes purchases of property, plant and equipment and net interest proceeds on swaps designated as net investment hedges, which are also included in our computation of adjusted free cash flow.