

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

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

For the Quarterly Period Ended June 30, 2020

OR

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

Commission file number: **001-11625**

Pentair plc

(Exact name of Registrant as specified in its charter)

Ireland

98-1141328

(State or other jurisdiction of incorporation or organization)

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

Regal House, 70 London Road, Twickenham, London, TW13QS United Kingdom

(Address of principal executive offices)

Registrant's telephone number, including area code: **44-74-9421-6154**

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary Shares, nominal value \$0.01 per share	PNR	New York Stock Exchange

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, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§223.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company 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.

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

On June 30, 2020, 165,908,770 shares of Registrant's common stock were outstanding.

Pentair plc and Subsidiaries

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PART I FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

Pentair plc and Subsidiaries
Condensed Consolidated Statements of Operations and Comprehensive Income (Unaudited)

	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
<i>In millions, except per-share data</i>				
Net sales	\$ 713.3	\$ 799.5	\$ 1,423.3	\$ 1,488.4
Cost of goods sold	468.2	512.8	926.6	966.1
Gross profit	245.1	286.7	496.7	522.3
Selling, general and administrative expenses	116.7	132.2	248.6	279.5
Research and development expenses	17.3	20.7	36.3	41.4
Operating income	111.1	133.8	211.8	201.4
Other (income) expense:				
Loss (gain) on sale of businesses	0.1	0.1	0.1	(3.4)
Net interest expense	7.7	9.4	14.6	16.7
Other (income) expense	(0.3)	(12.9)	0.9	(12.3)
Income from continuing operations before income taxes	103.6	137.2	196.2	200.4
Provision for income taxes	29.8	22.1	49.7	32.9
Net income from continuing operations	73.8	115.1	146.5	167.5
Loss from discontinued operations, net of tax	(1.7)	(0.8)	(1.7)	(1.9)
Net income	\$ 72.1	\$ 114.3	\$ 144.8	\$ 165.6
Comprehensive income, net of tax				
Net income	\$ 72.1	\$ 114.3	\$ 144.8	\$ 165.6
Changes in cumulative translation adjustment	28.2	(0.9)	(9.6)	(2.5)
Changes in market value of derivative financial instruments, net of tax	(17.8)	(3.4)	21.3	0.9
Comprehensive income	\$ 82.5	\$ 110.0	\$ 156.5	\$ 164.0
Earnings (loss) per ordinary share				
<i>Basic</i>				
Continuing operations	\$ 0.44	\$ 0.68	\$ 0.88	\$ 0.98
Discontinued operations	(0.01)	(0.01)	(0.01)	(0.01)
Basic earnings per ordinary share	\$ 0.43	\$ 0.67	\$ 0.87	\$ 0.97
<i>Diluted</i>				
Continuing operations	\$ 0.44	\$ 0.68	\$ 0.87	\$ 0.98
Discontinued operations	(0.01)	(0.01)	(0.01)	(0.01)
Diluted earnings per ordinary share	\$ 0.43	\$ 0.67	\$ 0.86	\$ 0.97
Weighted average ordinary shares outstanding				
Basic	165.8	169.8	166.8	170.6
Diluted	166.4	170.5	167.5	171.4

See accompanying notes to condensed consolidated financial statements.

Pentair plc and Subsidiaries
Condensed Consolidated Balance Sheets (Unaudited)

<i>In millions, except per-share data</i>	June 30, 2020	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents	\$ 90.6	\$ 82.5
Accounts receivable, net of allowances of \$8.8 and \$10.3, respectively	401.8	502.9
Inventories	396.5	377.4
Other current assets	112.8	99.1
Total current assets	1,001.7	1,061.9
Property, plant and equipment, net	284.7	283.2
Other assets		
Goodwill	2,302.1	2,258.3
Intangibles, net	325.4	339.2
Other non-current assets	202.2	196.9
Total other assets	2,829.7	2,794.4
Total assets	\$ 4,116.1	\$ 4,139.5
Liabilities and Equity		
Current liabilities		
Accounts payable	\$ 256.0	\$ 325.1
Employee compensation and benefits	77.9	71.0
Other current liabilities	416.7	352.9
Total current liabilities	750.6	749.0
Other liabilities		
Long-term debt	1,013.0	1,029.1
Pension and other post-retirement compensation and benefits	95.1	96.4
Deferred tax liabilities	112.1	104.4
Other non-current liabilities	195.6	206.7
Total liabilities	2,166.4	2,185.6
Equity		
Ordinary shares \$0.01 par value, 426.0 authorized, 165.9 and 168.3 issued at June 30, 2020 and December 31, 2019, respectively	1.7	1.7
Additional paid-in capital	1,680.3	1,777.7
Retained earnings	482.5	401.0
Accumulated other comprehensive loss	(214.8)	(226.5)
Total equity	1,949.7	1,953.9
Total liabilities and equity	\$ 4,116.1	\$ 4,139.5

See accompanying notes to condensed consolidated financial statements.

Pentair plc and Subsidiaries
Condensed Consolidated Statements of Cash Flows (Unaudited)

<i>In millions</i>	Six months ended	
	June 30, 2020	June 30, 2019
Operating activities		
Net income	\$ 144.8	\$ 165.6
Loss from discontinued operations, net of tax	1.7	1.9
Adjustments to reconcile net income from continuing operations to net cash provided by (used for) operating activities of continuing operations		
Equity income of unconsolidated subsidiaries	(0.3)	(2.5)
Depreciation	22.8	24.4
Amortization	14.6	16.5
Deferred income taxes	13.4	(9.6)
Loss (gain) on sale of businesses	0.1	(3.4)
Share-based compensation	10.4	10.7
Asset impairment	—	18.2
Pension settlement gain	—	(12.2)
Pension and other post-retirement plan contribution	—	(10.7)
Changes in assets and liabilities, net of effects of business acquisitions		
Accounts receivable	103.1	32.2
Inventories	(17.7)	3.1
Other current assets	(14.5)	(18.8)
Accounts payable	(64.2)	(123.1)
Employee compensation and benefits	7.5	(22.5)
Other current liabilities	44.9	28.5
Other non-current assets and liabilities	(0.1)	0.9
Net cash provided by operating activities of continuing operations	266.5	99.2
Net cash used for operating activities of discontinued operations	(0.5)	(2.5)
Net cash provided by operating activities	266.0	96.7
Investing activities		
Capital expenditures	(30.5)	(29.8)
Proceeds from sale of property and equipment	0.1	0.4
Proceeds from the sale of businesses, net	—	0.7
Acquisitions, net of cash acquired	(28.5)	(284.5)
Other	—	(1.5)
Net cash used for investing activities	(58.9)	(314.7)
Financing activities		
Net (repayments) receipts of commercial paper and revolving long-term debt	(17.1)	32.9
Proceeds from long-term debt	—	400.0
Debt issuance costs	—	(5.7)
Shares issued to employees, net of shares withheld	7.3	7.2
Repurchases of ordinary shares	(115.2)	(150.0)
Dividends paid	(63.7)	(62.0)
Net cash (used for) provided by financing activities	(188.7)	222.4
Effect of exchange rate changes on cash and cash equivalents	(10.3)	1.8
Change in cash and cash equivalents	8.1	6.2
Cash and cash equivalents, beginning of period	82.5	74.3
Cash and cash equivalents, end of period	\$ 90.6	\$ 80.5

See accompanying notes to condensed consolidated financial statements.

Pentair plc and Subsidiaries
Condensed Consolidated Statements of Changes in Equity (Unaudited)

<i>In millions</i>	Ordinary shares		Additional paid- in capital	Retained earnings	Accumulated other comprehensive loss	Total
	Number	Amount				
Balance - December 31, 2019	168.3	\$ 1.7	\$ 1,777.7	\$ 401.0	\$ (226.5)	\$ 1,953.9
Net income	—	—	—	72.7	—	72.7
Other comprehensive income, net of tax	—	—	—	—	1.3	1.3
Dividends declared, \$0.19 per share	—	—	—	(31.6)	—	(31.6)
Share repurchases	(3.0)	—	(115.2)	—	—	(115.2)
Exercise of options, net of shares tendered for payment	0.3	—	8.8	—	—	8.8
Issuance of restricted shares, net of cancellations	0.2	—	—	—	—	—
Shares surrendered by employees to pay taxes	(0.1)	—	(3.6)	—	—	(3.6)
Share-based compensation	—	—	6.2	—	—	6.2
Balance - March 31, 2020	165.7	\$ 1.7	\$ 1,673.9	\$ 442.1	\$ (225.2)	\$ 1,892.5
Net income	—	—	—	72.1	—	72.1
Other comprehensive loss, net of tax	—	—	—	—	10.4	10.4
Dividends declared, \$0.19 per share	—	—	—	(31.7)	—	(31.7)
Exercise of options, net of shares tendered for payment	0.1	—	2.8	—	—	2.8
Issuance of restricted shares, net of cancellations	0.1	—	—	—	—	—
Shares surrendered by employees to pay taxes	—	—	(0.6)	—	—	(0.6)
Share-based compensation	—	—	4.2	—	—	4.2
Balance - June 30, 2020	165.9	\$ 1.7	\$ 1,680.3	\$ 482.5	\$ (214.8)	\$ 1,949.7

<i>In millions</i>	Ordinary shares		Additional paid- in capital	Retained earnings	Accumulated other comprehensive loss	Total
	Number	Amount				
Balance - December 31, 2018	171.4	\$ 1.7	\$ 1,893.8	\$ 169.2	\$ (228.6)	\$ 1,836.1
Net income	—	—	—	51.3	—	51.3
Other comprehensive income, net of tax	—	—	—	—	2.7	2.7
Dividends declared, \$0.18 per share	—	—	—	(31.0)	—	(31.0)
Exercise of options, net of shares tendered for payment	0.3	—	9.1	—	—	9.1
Issuance of restricted shares, net of cancellations	0.2	—	—	—	—	—
Shares surrendered by employees to pay taxes	—	—	(3.2)	—	—	(3.2)
Share-based compensation	—	—	5.4	—	—	5.4
Balance - March 31, 2019	171.9	\$ 1.7	\$ 1,905.1	\$ 189.5	\$ (225.9)	\$ 1,870.4
Net income	—	—	—	114.3	—	114.3
Other comprehensive income, net of tax	—	—	—	—	(4.3)	(4.3)
Dividends declared, \$0.18 per share	—	—	—	(30.4)	—	(30.4)
Share repurchases	(4.0)	—	(150.0)	—	—	(150.0)
Exercise of options, net of shares tendered for payment	0.1	—	2.2	—	—	2.2
Issuance of restricted shares, net of cancellations	0.1	—	—	—	—	—
Shares surrendered by employees to pay taxes	(0.1)	—	(0.9)	—	—	(0.9)
Share-based compensation	—	—	5.3	—	—	5.3
Balance - June 30, 2019	168.0	\$ 1.7	\$ 1,761.7	\$ 273.4	\$ (230.2)	\$ 1,806.6

See accompanying notes to condensed consolidated financial statements.

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)****1. Basis of Presentation and Responsibility for Interim Financial Statements**

The accompanying unaudited condensed consolidated financial statements of Pentair plc and its subsidiaries (“we,” “us,” “our,” “Pentair,” or the “Company”) have been prepared following the requirements of the U.S. Securities and Exchange Commission (“SEC”) for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by accounting principles generally accepted in the United States of America (“GAAP”) can be condensed or omitted.

We are responsible for the unaudited condensed consolidated financial statements included in this document. The financial statements include all normal recurring adjustments that are considered necessary for the fair presentation of our financial position and operating results. As these are condensed financial statements, one should also read our consolidated financial statements and notes thereto, which are included in our Annual Report on Form 10-K for the year ended December 31, 2019.

Revenues, expenses, cash flows, assets and liabilities can and do vary during each quarter of the year. Therefore, the results and trends in these interim financial statements may not be indicative of those for a full year.

In March 2020, the World Health Organization declared the novel coronavirus 2019 (“COVID-19”) a global pandemic. The COVID-19 pandemic continues to spread throughout the United States (“U.S.”) and the world, with the continued potential for significant impact. The COVID-19 pandemic has had and may continue to have an unfavorable impact on certain parts of our business. The broader implications of the COVID-19 pandemic on our business, financial condition and results of operations remain uncertain and will depend on certain developments, including the duration and severity of the COVID-19 pandemic, its impact on our customers and suppliers and the range of governmental and community reactions to the pandemic. We may continue to experience reduced customer demand or constrained supply that could materially adversely impact our business, financial condition, results of operations, liquidity and cash flows in future periods.

Our fiscal year ends on December 31. We report our interim quarterly periods on a calendar quarter basis.

Adoption of new accounting standards

On January 1, 2020, we adopted Accounting Standards Update No. 2016-13 “Financial Instruments–Credit Losses” and the related amendments (the “new standard”). The new standard changes the methodology used to measure credit losses for certain financial instruments and financial assets, including trade receivables. The approach utilizes an expected credit loss model that requires consideration of a broader range of information to estimate expected credit losses over the lifetime of an asset, which may result in earlier recognition of credit losses than under the previous accounting standards.

Under the new standard, we record an allowance for credit losses, reducing our trade receivables balance to an amount we estimate is collectible from our customers. The estimates used in determining the allowance for credit losses are based on historical collection experience, including write-offs and recoveries, periodic credit evaluations of our customers’ financial situation, and current circumstances as well as reasonable and supportable forecasts of future economic conditions. The adoption of this new standard did not have a material impact on our consolidated financial statements.

The following table summarizes the activity in the allowance for credit losses for the six months ended June 30, 2020:

<i>In millions</i>	June 30, 2020	
Beginning balance	\$	10.3
Bad debt expense		(0.3)
Write-offs, net of recoveries		(1.0)
Other ⁽¹⁾		(0.2)
Ending balance	\$	8.8

⁽¹⁾ Other amounts are primarily the effects of changes in currency translations and the impact of allowance for credits.

On March 2, 2020, we early adopted the SEC’s rule titled “Financial Disclosures about Guarantors and Issuers of Guaranteed Securities and Affiliates Whose Securities Collateralize a Registrant’s Securities,” which simplifies the disclosure requirements related to our guaranteed registered securities under Rule 3-10 of Regulation S-X.

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)****2. Revenue**

We disaggregate our revenue from contracts with customers by segment, geographic location and vertical, as we believe these best depict how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors. Refer to Note 14 for revenue disaggregated by segment.

Geographic net sales information, based on geographic destination of the sale, was as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
U.S.	\$ 482.7	\$ 511.1	\$ 946.7	\$ 937.1
Western Europe	84.9	106.9	188.7	211.2
Developing ⁽¹⁾	100.4	129.0	194.9	237.9
Other Developed ⁽²⁾	45.3	52.5	93.0	102.2
Consolidated net sales	\$ 713.3	\$ 799.5	\$ 1,423.3	\$ 1,488.4

⁽¹⁾ Developing includes China, Eastern Europe, Latin America, the Middle East and Southeast Asia.

⁽²⁾ Other Developed includes Australia, Canada and Japan.

Vertical net sales information was as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Residential	\$ 439.7	\$ 451.0	\$ 855.5	\$ 834.6
Commercial	124.4	170.7	265.8	321.4
Industrial	149.2	177.8	302.0	332.4
Consolidated net sales	\$ 713.3	\$ 799.5	\$ 1,423.3	\$ 1,488.4

Performance obligations

On June 30, 2020, we had \$55.6 million of remaining performance obligations on contracts with an original expected duration of one year or more. We expect to recognize the majority of our remaining performance obligations on these contracts within the next 12 to 18 months.

Contract assets and liabilities

Contract assets and liabilities consisted of the following:

<i>In millions</i>	June 30, 2020	December 31, 2019	\$ Change	% Change
Contract assets	\$ 49.5	\$ 41.0	\$ 8.5	20.7 %
Contract liabilities	29.1	32.6	(3.5)	(10.7)%
Net contract assets	\$ 20.4	\$ 8.4	\$ 12.0	142.9 %

The \$12.0 million increase in net contract assets from December 31, 2019 to June 30, 2020 was primarily the result of timing of milestone payments and impact of foreign currency fluctuations. Approximately 60% of our contract liabilities at December 31, 2019 were recognized in revenue in the first half of 2020. There were no impairment losses recognized on our contract assets for the three or six months ended June 30, 2020.

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)****3. Acquisitions**

In February 2019, as part of Consumer Solutions, we completed the acquisitions of Aquion, Inc. (“Aquion”) and Pelican Water Systems (“Pelican”) for \$163.4 million and \$121.1 million, respectively, in cash, net of cash acquired and final working capital true-ups.

For Aquion, the excess of purchase price over tangible net assets and identified intangible assets acquired has been allocated to goodwill in the amount of \$101.9 million, \$4.6 million of which is expected to be deductible for income tax purposes. Identifiable intangible assets acquired as part of the Aquion acquisition include \$15.7 million of indefinite-lived trade name intangible assets and \$78.8 million of definite-lived customer relationships with an estimated useful life of 15 years.

For Pelican, the excess purchase price over tangible net assets acquired has been allocated to goodwill in the amount of \$118.0 million, \$7.6 million of which is expected to be deductible for income tax purposes.

During the first half of 2020, our Consumer Solutions reporting segment completed acquisitions with purchase prices totaling \$28.5 million in cash, net of cash acquired.

The pro forma impact of these acquisitions is not material.

4. Share Plans

In May 2020, the Pentair plc 2020 Share and Incentive Plan (“2020 Share Plan”) was approved during the Annual General Meeting of Shareholders. The Pentair plc 2012 Stock and Incentive Plan (“2012 Stock Plan”) terminated upon the approval of the 2020 Share Plan, although awards outstanding under the 2012 Stock Plan continue in effect. Beginning May 5, 2020, all share-based compensation grants were made under the 2020 Share Plan.

The 2020 Share Plan authorizes the issuance of 3.3 million of our ordinary shares, plus the number of shares reserved under the 2012 Stock Plan that were not the subject of outstanding awards as of the date the 2020 Share Plan became effective, which was 2.5 million shares, plus certain shares that would become available under the 2012 Stock Plan if it had remained in effect. The shares may be issued as new shares or from shares held in treasury. Our practice is to settle equity-based awards by issuing new shares. The 2020 Share Plan terminates on the date all shares reserved for issuance have been issued. The 2020 Share Plan allows for the granting to our employees, consultants and directors of stock options, stock appreciation rights, performance share units, restricted shares, restricted stock units, deferred stock rights, incentive awards, dividend equivalent units and other equity-based awards.

The 2020 Share Plan is administered by our compensation committee (the “Committee”), which is made up of independent members of our Board of Directors. Employees eligible to receive awards under the 2020 Share Plan are managerial, administrative or professional employees. The Committee has the authority to select the recipients of awards, determine the type and size of awards, establish certain terms and conditions of award grants and take certain other actions as permitted under the 2020 Share Plan. The 2020 Share Plan prohibits the Committee from re-pricing awards or canceling and reissuing awards at lower prices.

Total share-based compensation expense for the three and six months ended June 30, 2020 and 2019 was as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Restricted stock units	\$ 3.1	\$ 2.9	\$ 6.3	\$ 5.7
Stock options	0.6	1.1	1.6	2.5
Performance share units	0.5	1.3	2.5	2.5
Total share-based compensation expense	\$ 4.2	\$ 5.3	\$ 10.4	\$ 10.7

In the first quarter of 2020, we issued our annual share-based compensation grants under the 2012 Stock Plan to eligible employees. The total number of awards issued was approximately 0.8 million, of which 0.3 million were restricted stock units (“RSUs”), 0.4 million were stock options and 0.1 million were performance share units (“PSUs”). The weighted-average grant date fair value of the RSUs, stock options and PSUs issued was \$42.77, \$9.58, and \$45.40, respectively.

Pentair plc and Subsidiaries
Notes to condensed consolidated financial statements (unaudited)

We estimated the fair value of each stock option award issued in the annual share-based compensation grant using a Black-Scholes option pricing model, modified for dividends and using the following assumptions:

	2020 Annual Grant
Risk-free interest rate	1.61%
Expected dividend yield	1.80%
Expected share price volatility	24.1%
Expected term (years)	6.8

These estimates require us to make assumptions based on historical results, observance of trends in our share price, changes in option exercise behavior, future expectations and other relevant factors. If other assumptions had been used, share-based compensation expense, as calculated and recorded under the accounting guidance, could have been affected. We based the expected life assumption on historical experience as well as the terms and vesting periods of the options granted. For purposes of determining expected share price volatility, we considered a rolling average of historical volatility measured over a period approximately equal to the expected option term. The risk-free interest rate for periods that coincide with the expected life of the options is based on the U.S. Treasury Department yield curve in effect at the time of grant.

5. Restructuring

During the six months ended June 30, 2020 and the year ended December 31, 2019, we initiated and continued execution of certain business restructuring initiatives aimed at reducing our fixed cost structure and realigning our business, including the reduction in headcount of approximately 100 employees and 375 employees, respectively.

Restructuring-related costs within *Selling, general and administrative expenses* in the Condensed Consolidated Statements of Operations and Comprehensive Income included the following:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Severance and related costs	\$ 1.1	\$ 6.4	\$ 3.8	\$ 7.5
Other	—	0.3	—	0.3
Total restructuring costs	\$ 1.1	\$ 6.7	\$ 3.8	\$ 7.8

Restructuring costs by reportable segment were as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Consumer Solutions	\$ 1.4	\$ 2.3	\$ 2.0	\$ 3.4
Industrial & Flow Technologies	(0.3)	3.3	0.6	3.2
Other	—	1.1	1.2	1.2
Consolidated	\$ 1.1	\$ 6.7	\$ 3.8	\$ 7.8

Activity related to accrued severance and related costs recorded in *Other current liabilities* in the Condensed Consolidated Balance Sheets is summarized as follows for the six months ended June 30, 2020:

<i>In millions</i>	June 30, 2020
Beginning balance	\$ 16.2
Costs incurred	3.8
Cash payments and other	(7.3)
Ending balance	\$ 12.7

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)****6. Earnings Per Share**

Basic and diluted earnings per share were calculated as follows:

<i>In millions, except per-share data</i>	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Net income	\$ 72.1	\$ 114.3	\$ 144.8	\$ 165.6
Net income from continuing operations	\$ 73.8	\$ 115.1	\$ 146.5	\$ 167.5
Weighted average ordinary shares outstanding				
Basic	165.8	169.8	166.8	170.6
Dilutive impact of stock options, restricted stock units and performance share units	0.6	0.7	0.7	0.8
Diluted	166.4	170.5	167.5	171.4
Earnings (loss) per ordinary share				
Basic				
Continuing operations	\$ 0.44	\$ 0.68	\$ 0.88	\$ 0.98
Discontinued operations	(0.01)	(0.01)	(0.01)	(0.01)
Basic earnings per ordinary share	\$ 0.43	\$ 0.67	\$ 0.87	\$ 0.97
Diluted				
Continuing operations	\$ 0.44	\$ 0.68	\$ 0.87	\$ 0.98
Discontinued operations	(0.01)	(0.01)	(0.01)	(0.01)
Diluted earnings per ordinary share	\$ 0.43	\$ 0.67	\$ 0.86	\$ 0.97
Anti-dilutive stock options excluded from the calculation of diluted earnings per share	3.1	2.3	2.8	1.9

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)****7. Supplemental Balance Sheet Information**

<i>In millions</i>	June 30, 2020	December 31, 2019
Inventories		
Raw materials and supplies	\$ 209.6	\$ 196.2
Work-in-process	66.0	65.2
Finished goods	120.9	116.0
Total inventories	\$ 396.5	\$ 377.4
Other current assets		
Cost in excess of billings	\$ 49.5	\$ 41.0
Prepaid expenses	55.0	48.3
Prepaid income taxes	4.5	5.2
Other current assets	3.8	4.6
Total other current assets	\$ 112.8	\$ 99.1
Property, plant and equipment, net		
Land and land improvements	\$ 33.9	\$ 33.7
Buildings and leasehold improvements	186.6	188.1
Machinery and equipment	553.2	537.2
Capitalized software	74.7	73.5
Construction in progress	50.3	48.1
Total property, plant and equipment	898.7	880.6
Accumulated depreciation and amortization	614.0	597.4
Total property, plant and equipment, net	\$ 284.7	\$ 283.2
Other non-current assets		
Right-of-use lease assets	\$ 81.1	\$ 77.2
Deferred income taxes	29.2	29.6
Deferred compensation plan assets	18.3	21.3
Foreign currency contract assets	7.0	0.1
Other non-current assets	66.6	68.7
Total other non-current assets	\$ 202.2	\$ 196.9
Other current liabilities		
Dividends payable	\$ 31.5	\$ 32.0
Accrued warranty	36.6	32.1
Accrued rebates and incentives	110.6	83.5
Billings in excess of cost	21.0	22.5
Current lease liability	20.2	19.0
Income taxes payable	32.0	11.1
Accrued restructuring	12.7	16.2
Other current liabilities	152.1	136.5
Total other current liabilities	\$ 416.7	\$ 352.9
Other non-current liabilities		
Long-term lease liability	\$ 64.8	\$ 61.1
Income taxes payable	45.5	45.4
Self-insurance liabilities	39.7	41.6
Deferred compensation plan liabilities	18.3	21.3
Foreign currency contract liabilities	—	11.6
Other non-current liabilities	27.3	25.7
Total other non-current liabilities	\$ 195.6	\$ 206.7

Pentair plc and Subsidiaries
Notes to condensed consolidated financial statements (unaudited)
8. Goodwill and Other Identifiable Intangible Assets

The changes in the carrying amount of goodwill by reportable segment were as follows:

<i>In millions</i>	December 31, 2019		Purchase Accounting Adjustments		Acquisitions		Foreign currency translation/other		June 30, 2020	
Consumer Solutions	\$	1,501.4	\$	14.4	\$	25.8	\$	1.2	\$	1,542.8
Industrial & Flow Technologies		756.9		—		—		2.4		759.3
Total goodwill	\$	2,258.3	\$	14.4	\$	25.8	\$	3.6	\$	2,302.1

Identifiable intangible assets consisted of the following:

<i>In millions</i>	June 30, 2020			December 31, 2019								
	Cost	Accumulated amortization	Net	Cost	Accumulated amortization	Net						
Definite-life intangibles												
Customer relationships	\$	419.3	\$	(283.3)	\$	136.0	\$	418.1	\$	(269.1)	\$	149.0
Proprietary technology and patents		42.4		(27.1)		15.3		42.3		(25.5)		16.8
Total definite-life intangibles		461.7		(310.4)		151.3		460.4		(294.6)		165.8
Indefinite-life intangibles												
Trade names		174.1		—		174.1		173.4		—		173.4
Total intangibles	\$	635.8	\$	(310.4)	\$	325.4	\$	633.8	\$	(294.6)	\$	339.2

Identifiable intangible asset amortization expense was \$7.0 million and \$8.3 million for the three months ended June 30, 2020 and 2019, respectively, and \$14.6 million and \$16.5 million for the six months ended June 30, 2020 and 2019, respectively.

Estimated future amortization expense for identifiable intangible assets during the remainder of 2020 and the next five years is as follows:

<i>In millions</i>	Q3-Q4											
	2020	2021	2022	2023	2024	2025						
Estimated amortization expense	\$	13.2	\$	22.6	\$	15.7	\$	13.1	\$	12.6	\$	12.6

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)****9. Debt**

Debt and the average interest rates on debt outstanding were as follows:

<i>In millions</i>	Average interest rate as of June 30, 2020	Maturity Year	June 30, 2020	December 31, 2019
Commercial paper	N/A	2023	\$ —	\$ 117.8
Revolving credit facilities	1.385%	2023	136.5	35.8
Term loans	1.477%	2023	200.0	200.0
Senior notes - fixed rate ⁽¹⁾	3.625%	2020	74.0	74.0
Senior notes - fixed rate ⁽¹⁾	5.000%	2021	103.8	103.8
Senior notes - fixed rate ⁽¹⁾	3.150%	2022	88.3	88.3
Senior notes - fixed rate ⁽¹⁾	4.650%	2025	19.3	19.3
Senior notes - fixed rate ⁽¹⁾	4.500%	2029	400.0	400.0
Unamortized debt issuance costs and discounts	N/A	N/A	(8.9)	(9.9)
Total debt			\$ 1,013.0	\$ 1,029.1

⁽¹⁾ Senior notes are guaranteed as to payment by Pentair plc.

In April 2018, Pentair, Pentair Investments Switzerland GmbH (“PISG”), Pentair Finance S.à r.l (“PFSA”) and Pentair, Inc. entered into a credit agreement, providing for an \$800.0 million senior unsecured revolving credit facility with a term of five years (the “Senior Credit Facility”), with Pentair and PISG as guarantors and PFSA and Pentair, Inc. as borrowers. In June 2020, Pentair assumed the PISG guarantee. The Senior Credit Facility has a maturity date of April 25, 2023. Borrowings under the Senior Credit Facility bear interest at a rate equal to an adjusted base rate or the London Interbank Offered Rate, plus, in each case, an applicable margin. The applicable margin is based on, at PFSA’s election, Pentair’s leverage level or PFSA’s public credit rating. In May 2019, PFSA executed an increase of the Senior Credit Facility by \$100.0 million for a total commitment up to \$900.0 million in the aggregate.

In December 2019, the Senior Credit Facility was amended to provide for the extension of term loans in an aggregate amount of \$200.0 million (the “Term Loans”). The Term Loans are in addition to the Senior Credit Facility commitment. In addition, PFSA has the option to further increase the Senior Credit Facility in an aggregate amount of up to \$300.0 million, through a combination of increases to the total commitment amount of the Senior Credit Facility and/or one or more tranches of term loans in addition to the Term Loans, subject to customary conditions, including the commitment of the participating lenders.

PFSA is authorized to sell short-term commercial paper notes to the extent availability exists under the Senior Credit Facility. PFSA uses the Senior Credit Facility as back-up liquidity to support 100% of commercial paper outstanding. PFSA had no commercial paper outstanding as of June 30, 2020 and \$117.8 million as of December 31, 2019, all of which was classified as long-term debt as we have the intent and the ability to refinance such obligations on a long-term basis under the Senior Credit Facility.

In March 2020, the commercial paper market began to experience high levels of volatility due to uncertainty related to the COVID-19 pandemic. The volatility impacted both market access to and pricing of commercial paper. As a cost mitigation action, we withdrew our credit ratings to access the commercial paper market in the second quarter of 2020 and continued to use the revolving credit facility, along with cash generated from operations, to fund our general operations. As of June 30, 2020, total availability under the Senior Credit Facility was \$763.5 million.

Our debt agreements contain various financial covenants, but the most restrictive covenants are contained in the Senior Credit Facility. The Senior Credit Facility contains covenants requiring us not to permit (i) the ratio of our consolidated debt (net of our consolidated unrestricted cash in excess of \$5.0 million but not to exceed \$250.0 million) to our consolidated net income (excluding, among other things, non-cash gains and losses) before interest, taxes, depreciation, amortization and non-cash share-based compensation expense (“EBITDA”) on the last day of any period of four consecutive fiscal quarters to exceed 3.75 to 1.00 (the “Leverage Ratio”) and (ii) the ratio of our EBITDA to our consolidated interest expense, for the same period to be less than 3.00 to 1.00 as of the end of each fiscal quarter. For purposes of the Leverage Ratio, the Senior Credit Facility

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)**

provides for the calculation of EBITDA giving pro forma effect to certain acquisitions, divestitures and liquidations during the period to which such calculation relates.

In addition to the Senior Credit Facility, we have various other credit facilities with an aggregate availability of \$20.9 million, of which there were no outstanding borrowings at June 30, 2020. Borrowings under these credit facilities bear interest at variable rates.

We have \$177.8 million aggregate principal amount of fixed rate senior notes maturing in the next twelve months. We classified this debt as long-term as of June 30, 2020 as we have the intent and ability to refinance such obligation on a long-term basis under the Senior Credit Facility.

Debt outstanding, excluding unamortized issuance costs and discounts, at June 30, 2020 matures on a calendar year basis as follows:

In millions	Q3-Q4							Total
	2020	2021	2022	2023	2024	2025	Thereafter	
Contractual debt obligation maturities	\$ 74.0	\$ 103.8	\$ 88.3	\$ 336.5	\$ —	\$ 19.3	\$ 400.0	\$ 1,021.9

10. Derivatives and Financial Instruments**Derivative financial instruments**

We are exposed to market risk related to changes in foreign currency exchange rates. To manage the volatility related to this exposure, we periodically enter into a variety of derivative financial instruments. Our objective is to reduce, where it is deemed appropriate to do so, fluctuations in earnings and cash flows associated with changes in foreign currency exchange rates. The derivative contracts contain credit risk to the extent that our bank counterparties may be unable to meet the terms of the agreements. The amount of such credit risk is generally limited to the unrealized gains, if any, in such contracts. Such risk is minimized by limiting those counterparties to major financial institutions of high credit quality.

Foreign currency contracts

We conduct business in various locations throughout the world and are subject to market risk due to changes in the value of foreign currencies in relation to our reporting currency, the U.S. dollar. We manage our economic and transaction exposure to certain market-based risks through the use of foreign currency derivative financial instruments. Our objective in holding these derivatives is to reduce the volatility of net earnings and cash flows associated with changes in foreign currency exchange rates. The majority of our foreign currency contracts have an original maturity date of less than one year.

At June 30, 2020 and December 31, 2019, we had outstanding foreign currency derivative contracts with gross notional U.S. dollar equivalent amounts of \$17.9 million and \$17.0 million, respectively. The impact of these contracts on the Condensed Consolidated Statements of Operations and Comprehensive Income was not material for any period presented.

Cross Currency Swaps

At June 30, 2020 and December 31, 2019, we had outstanding cross currency swap agreements with a combined notional amount of \$785.3 million and \$770.0 million, respectively. The agreements are accounted for as either cash flow hedges, to hedge foreign currency fluctuations on certain intercompany debt, or as net investment hedges to manage our exposure to fluctuations in the Euro-U.S. Dollar exchange rate. We had deferred foreign currency gains of \$19.0 million and deferred currency losses of \$1.8 million at June 30, 2020 and December 31, 2019, respectively, in *Accumulated other comprehensive loss* associated with our cross currency swap activity.

Fair value measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities measured at fair value are classified using the following hierarchy, which is based upon the transparency of inputs to the valuation as of the measurement date:

- Level 1:* Valuation is based on observable inputs such as quoted market prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2:* Valuation is based on inputs such as quoted market prices for similar assets or liabilities in active markets or other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3:* Valuation is based upon other unobservable inputs that are significant to the fair value measurement.

In making fair value measurements, observable market data must be used when available. When inputs used to measure fair value fall within different levels of the hierarchy, the level within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement.

Fair value of financial instruments

The following methods were used to estimate the fair values of each class of financial instruments:

- *short-term financial instruments (cash and cash equivalents, accounts and notes receivable, accounts and notes payable and variable-rate debt)* — recorded amount approximates fair value because of the short maturity period;
- *long-term fixed-rate debt, including current maturities* — fair value is based on market quotes available for issuance of debt with similar terms, which are inputs that are classified as Level 2 in the valuation hierarchy defined by the accounting guidance;
- *foreign currency contract agreements* — fair values are determined through the use of models that consider various assumptions, including time value, yield curves, as well as other relevant economic measures, which are inputs that are classified as Level 2 in the valuation hierarchy defined by the accounting guidance; and

Pentair plc and Subsidiaries
Notes to condensed consolidated financial statements (unaudited)

- *deferred compensation plan assets (mutual funds, common/collective trusts and cash equivalents for payment of certain non-qualified benefits for retired, terminated and active employees)* — fair value of mutual funds and cash equivalents are based on quoted market prices in active markets that are classified as Level 1 in the valuation hierarchy defined by the accounting guidance; fair value of common/collective trusts are valued at net asset value (“NAV”), which is based on the fair value of the underlying securities owned by the fund and divided by the number of shares outstanding.

The recorded amounts and estimated fair values of total debt, excluding unamortized issuance costs and discounts, were as follows:

<i>In millions</i>	June 30, 2020		December 31, 2019	
	Recorded Amount	Fair Value	Recorded Amount	Fair Value
Variable rate debt	\$ 336.5	\$ 336.5	\$ 353.6	\$ 353.6
Fixed rate debt	685.4	741.1	685.4	732.2
Total debt	\$ 1,021.9	\$ 1,077.6	\$ 1,039.0	\$ 1,085.8

Financial assets and liabilities measured at fair value on a recurring and nonrecurring basis were as follows:

<i>In millions</i>	June 30, 2020				
	Level 1	Level 2	Level 3	NAV	Total
Recurring fair value measurements					
Foreign currency contract assets	\$ —	\$ 7.0	\$ —	\$ —	\$ 7.0
Deferred compensation plan assets	9.9	—	—	8.4	18.3
Total recurring fair value measurements	\$ 9.9	\$ 7.0	\$ —	\$ 8.4	\$ 25.3

<i>In millions</i>	December 31, 2019				
	Level 1	Level 2	Level 3	NAV	Total
Recurring fair value measurements					
Foreign currency contract assets	\$ —	\$ 0.1	\$ —	\$ —	\$ 0.1
Foreign currency contract liabilities	—	(11.6)	—	—	(11.6)
Deferred compensation plan assets	12.5	—	—	8.8	21.3
Total recurring fair value measurements	\$ 12.5	\$ (11.5)	\$ —	\$ 8.8	\$ 9.8

Nonrecurring fair value measurements ⁽¹⁾

⁽¹⁾ During the year ended December 31, 2019, we recorded impairment charges for cost method investments in the amount of \$21.2 million, of which \$2.9 million and \$18.2 million was recorded in the three and six months ended June 30, 2019, respectively. A valuation method using unobservable inputs was utilized to determine the fair value. We wrote the balance of the cost method investments to zero.

11. Income Taxes

We manage our affairs so that we are centrally managed and controlled in the United Kingdom (“U.K.”) and therefore have our tax residency in the U.K. The provision for income taxes consists of provisions for the U.K. and international income taxes. We operate in an international environment with operations in various locations outside the U.K. Accordingly, the consolidated income tax rate is a composite rate reflecting the earnings in the various locations and the applicable rates.

The effective income tax rate for the six months ended June 30, 2020 was 25.3%, compared to 16.4% for the six months ended June 30, 2019. We continue to actively pursue initiatives to reduce our effective tax rate. The tax rate in any quarter can be affected positively or negatively by adjustments that are required to be reported in the specific quarter of resolution.

On March 27, 2020, the U.S. enacted the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) in response to the COVID-19 pandemic. The CARES Act contains numerous income tax provisions, such as relaxing limitations on the deductibility of interest and the ability to carryback net operating losses arising in taxable years from 2018 through 2020. The CARES Act provides positive cash benefits of approximately \$28.7 million, offset by an increase to our 2020 annual effective

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)**

tax rate of approximately 1.0% and \$5.7 million in discrete tax items recorded in the first half of 2020 mainly attributable to base erosion and anti-abuse tax related to 2019.

In April 2020, the Internal Revenue Service released final regulations as part of the Tax Cuts and Jobs Act of 2017 that place limitations on the deductibility of certain interest expense for U.S. tax purposes. These regulations resulted in discrete tax expense of approximately \$14.1 million in the second quarter of 2020, as well as an increase to our 2020 annual effective tax rate of approximately 0.5%.

The liability for uncertain tax positions was \$47.2 million and \$47.4 million at June 30, 2020 and December 31, 2019, respectively. We record penalties and interest related to unrecognized tax benefits in *Provision for income taxes* and *Net interest expense*, respectively, on the Condensed Consolidated Statements of Operations and Comprehensive Income, which is consistent with our past practices.

12. Benefit Plans

Components of net periodic benefit cost for our pension plans for the three and six months ended June 30, 2020 and 2019 were as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Service cost	\$ 0.8	\$ 0.7	\$ 1.6	\$ 1.4
Interest cost	0.7	2.7	1.4	5.4
Expected return on plan assets	(0.2)	(1.7)	(0.4)	(3.4)
Plan settlement gain ⁽¹⁾	—	(12.2)	—	(12.2)
Net periodic benefit cost	\$ 1.3	\$ (10.5)	\$ 2.6	\$ (8.8)

⁽¹⁾ In 2019, we received all required government approvals to terminate the Pentair Salaried Plan (the "Salaried Plan") and entered into an agreement with an insurance company to purchase from us, through an annuity contract, our remaining obligations under the Salaried Plan. For the six months ended June 30, 2019, we contributed \$10.7 million to the Salaried Plan as part of the process to settle our obligations. As a result of these actions, a non-cash pre-tax settlement gain of \$12.2 million was recorded for the three and six months ended June 30, 2019.

Components of net periodic benefit cost for our other post-retirement plans for the three and six months ended June 30, 2020 and 2019 were not material.

13. Shareholders' Equity**Share repurchases**

In May 2018, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of \$750.0 million. The authorization expires on May 31, 2021. During the six months ended June 30, 2020, we repurchased 3.0 million of our shares for \$115.2 million. As of June 30, 2020, we had \$134.7 million available for share repurchases under this authorization.

In March 2020, to enhance our liquidity position in response to the COVID-19 pandemic, we elected to temporarily suspend share repurchases under our existing share repurchase program. The existing program remains authorized by the Board of Directors, and we may resume share repurchases in the future at any time, depending upon market conditions, our capital needs and other factors.

Dividends payable

On May 5, 2020, the Board of Directors declared a quarterly cash dividend of \$0.19, payable on August 7, 2020 to shareholders of record at the close of business on July 24, 2020. As a result, the balance of dividends payable included in *Other current liabilities* on our Condensed Consolidated Balance Sheets was \$31.5 million at June 30, 2020, compared to \$32.0 million at December 31, 2019.

14. Segment Information

Effective January 1, 2020, we reorganized our business segments to better support our organization with our strategies and to better align with our customer base, resulting in a change to our reporting segments. All prior period amounts related to the segment change have been retrospectively reclassified to conform to the new presentation. As part of this reorganization, the legacy Aquatic Systems, Flow Technologies, and Filtration Solutions segments were realigned into two reportable business segments:

- **Consumer Solutions** — This segment designs, manufactures and sells energy-efficient residential and commercial pool equipment and accessories, and commercial and residential water treatment products and systems. Residential and commercial pool equipment and accessories include pumps, filters, heaters, lights, automatic controls, automatic cleaners, maintenance equipment and pool accessories. Water treatment products and systems include pressure tanks, control valves, activated carbon products, conventional filtration products, and point-of-entry and point-of-use systems. Applications for our pool business's products include residential and commercial pool maintenance, repair, renovation, service and construction. Our water treatment products and systems are used in residential whole home water filtration, drinking water filtration and water softening solutions in addition to commercial total water management and filtration in foodservice operations. The primary focus of this segment is business-to-consumer.
- **Industrial & Flow Technologies** — This segment manufactures and sells a variety of fluid treatment and pump products and systems, including pressure vessels, gas recovery solutions, membrane bioreactors, wastewater reuse systems and advanced membrane filtration, separation systems, water disposal pumps, water supply pumps, fluid transfer pumps, turbine pumps, solid handling pumps, and agricultural spray nozzles, while serving the global residential, commercial and industrial markets. These products and systems are used in a range of applications, fluid delivery, ion exchange, desalination, food and beverage, separation technologies for the oil and gas industry, residential and municipal wells, water treatment, wastewater solids handling, pressure boosting, circulation and transfer, fire suppression, flood control, agricultural irrigation and crop spray. The primary focus of this segment is business-to-business.

We evaluate performance based on net sales and segment income (loss) and use a variety of ratios to measure performance of our reporting segments. These results are not necessarily indicative of the results of operations that would have occurred had each segment been an independent, stand-alone entity

during the periods presented. Segment income (loss) represents equity income of unconsolidated subsidiaries and operating income exclusive of intangible amortization, certain acquisition related expenses, costs of restructuring activities, impairments and other unusual non-operating items.

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)**

Financial information by reportable segment is as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Net sales				
Consumer Solutions	\$ 401.2	\$ 437.1	\$ 790.0	\$ 795.3
Industrial & Flow Technologies	311.8	362.1	632.7	692.4
Other	0.3	0.3	0.6	0.7
Consolidated	\$ 713.3	\$ 799.5	\$ 1,423.3	\$ 1,488.4
Segment income (loss)				
Consumer Solutions	\$ 96.7	\$ 109.0	\$ 181.5	\$ 184.2
Industrial & Flow Technologies	44.1	59.7	88.8	100.7
Other	(16.1)	(14.6)	(34.1)	(32.1)
Consolidated	\$ 124.7	\$ 154.1	\$ 236.2	\$ 252.8

The following table presents a reconciliation of consolidated segment income to consolidated income from continuing operations before income taxes:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Segment income	\$ 124.7	\$ 154.1	\$ 236.2	\$ 252.8
Deal-related costs and expenses	—	—	(0.4)	(4.2)
Inventory step-up	—	(0.5)	—	(2.2)
Restructuring and other	(1.1)	(6.7)	(3.5)	(7.8)
Intangible amortization	(7.0)	(8.3)	(14.6)	(16.5)
Pension settlement gain	—	12.2	—	12.2
Asset impairment	—	(2.9)	—	(18.2)
(Loss) gain on sale of businesses	(0.1)	(0.1)	(0.1)	3.4
COVID-19 related costs and expenses	(4.8)	—	(5.7)	—
Net interest expense	(7.7)	(9.4)	(14.6)	(16.7)
Other expense	(0.4)	(1.2)	(1.1)	(2.4)
Income from continuing operations before income taxes	\$ 103.6	\$ 137.2	\$ 196.2	\$ 200.4

Pentair plc and Subsidiaries**Notes to condensed consolidated financial statements (unaudited)****15. Commitments and Contingencies****Warranties and guarantees**

In connection with our disposition of businesses, product lines and assets, we often provide representations, warranties and indemnities to cover purchasers for various potential liabilities relating to the sold businesses, product lines and assets, such as unknown damages or liabilities relating to the assets and pre-closing tax, product liability, warranty, environmental, or other obligations. The subject matter, amounts and duration of any such indemnification obligations vary for each type of liability indemnified and may vary widely from transaction to transaction.

Generally, the maximum obligations under such indemnifications are not explicitly stated and as a result, the overall amount of these obligations cannot be reasonably estimated due to their inchoate and unknown nature. Historically, we have not made significant payments for these indemnifications. We believe that if we were to incur a loss in any of these matters, the loss would not have a material adverse effect on our financial position, results of operations or cash flows.

We recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee.

We provide service and warranty policies on our products. Liability under service and warranty policies is based upon a review of historical warranty and service claim experience. Adjustments are made to accruals as claim data and historical experience warrant.

The changes in the carrying amount of service and product warranties of continuing operations for the six months ended June 30, 2020 were as follows:

<i>In millions</i>	June 30, 2020
Beginning balance	\$ 32.1
Service and product warranty provision	27.2
Payments	(22.7)
Ending balance	\$ 36.6

Stand-by letters of credit, bank guarantees and bonds

In certain situations, Tyco International Ltd., Pentair Ltd.'s former parent company ("Tyco"), guaranteed performance by the flow control business of Pentair Ltd. ("Flow Control") to third parties or provided financial guarantees for financial commitments of Flow Control. In situations where Flow Control and Tyco were unable to obtain a release from these guarantees in connection with the spin-off of Flow Control from Tyco, we will indemnify Tyco for any losses it suffers as a result of such guarantees.

In the ordinary course of business, we are required to commit to bonds, letters of credit and bank guarantees that require payments to our customers for any non-performance. The outstanding face value of these instruments fluctuates with the value of our projects in process and in our backlog. In addition, we issue financial stand-by letters of credit primarily to secure our performance to third parties under self-insurance programs.

As of June 30, 2020 and December 31, 2019, the outstanding value of bonds, letters of credit and bank guarantees totaled \$97.9 million and \$91.3 million, respectively.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-looking Statements

This report contains statements that we believe to be “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact are forward-looking statements. Without limitation, any statements preceded or followed by or that include the words “targets,” “plans,” “believes,” “expects,” “intends,” “will,” “likely,” “may,” “anticipates,” “estimates,” “projects,” “should,” “would,” “could,” “positioned,” “strategy,” “future” or words, phrases or terms of similar substance or the negative thereof, are forward-looking statements. These forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, assumptions and other factors, some of which are beyond our control, which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These factors include the overall impact of the COVID-19 pandemic on our business; the duration and severity of the COVID-19 pandemic; actions that may be taken by us, other businesses and governments to address or otherwise mitigate the impact of the COVID-19 pandemic, including those that may impact our ability to operate our facilities, meet production demands, and deliver products to our customers; the negative impacts of the COVID-19 pandemic on the global economy, our customers and suppliers, and customer demand; overall global economic and business conditions impacting our business, including the strength of housing and related markets; demand, competition and pricing pressures in the markets we serve; volatility in currency exchange rates; failure of markets to accept new product introductions and enhancements; the ability to successfully identify, finance, complete and integrate acquisitions; the ability to achieve the benefits of our restructuring plans and cost reduction initiatives; risks associated with operating foreign businesses; the impact of material cost and other inflation; the impact of seasonality of sales and weather conditions; our ability to comply with laws and regulations; the impact of changes in laws, regulations and administrative policy, including those that limit U.S. tax benefits or impact trade agreements and tariffs; the outcome of litigation and governmental proceedings; and the ability to achieve our long-term strategic operating goals. Additional information concerning these and other factors is contained in our filings with the U.S. Securities and Exchange Commission (the “SEC”), including this Form 10-Q and our Form 10-K for the year ended December 31, 2019. All forward-looking statements speak only as of the date of this report. Pentair assumes no obligation, and disclaims any obligation, to update the information contained in this report.

Overview

The terms “us,” “we,” “our” or “Pentair” refer to Pentair plc and its consolidated subsidiaries. At Pentair, we believe the health of our world depends on reliable access to clean water. We deliver a comprehensive range of smart, sustainable water solutions to homes, business and industry around the world. Our industry leading and proven portfolio of solutions enables our customers to access clean, safe water, reduce water consumption, and recover and reuse it. Whether it's improving, moving or helping people enjoy water, we help manage the world's most precious resource. We are comprised of two reporting segments: Consumer Solutions and Industrial & Flow Technologies. For the first six months of 2020, the Consumer Solutions and Industrial & Flow Technologies segments represented approximately 56% and 44% of total revenues, respectively. We classify our operations into business segments based primarily on types of products offered and markets served:

- **Consumer Solutions** — This segment designs, manufactures and sells energy-efficient residential and commercial pool equipment and accessories, and commercial and residential water treatment products and systems. Residential and commercial pool equipment and accessories include pumps, filters, heaters, lights, automatic controls, automatic cleaners, maintenance equipment and pool accessories. Water treatment products and systems include pressure tanks, control valves, activated carbon products, conventional filtration products, and point-of-entry and point-of-use systems. Applications for our pool business's products include residential and commercial pool maintenance, repair, renovation, service and construction. Our water treatment products and systems are used in residential whole home water filtration, drinking water filtration and water softening solutions in addition to commercial total water management and filtration in foodservice operations. The primary focus of this segment is business-to-consumer.
- **Industrial & Flow Technologies** — This segment manufactures and sells a variety of fluid treatment and pump products and systems, including pressure vessels, gas recovery solutions, membrane bioreactors, wastewater reuse systems and advanced membrane filtration, separation systems, water disposal pumps, water supply pumps, fluid transfer pumps, turbine pumps, solid handling pumps, and agricultural spray nozzles, while serving the global residential, commercial and industrial markets. These products and systems are used in a range of applications, fluid delivery, ion exchange, desalination, food and beverage, separation technologies for the oil and gas industry, residential and municipal wells, water treatment, wastewater solids handling, pressure boosting, circulation and

transfer, fire suppression, flood control, agricultural irrigation and crop spray. The primary focus of this segment is business-to-business.

In February 2019, as part of Consumer Solutions, we completed the acquisitions of Aquion and Pelican for \$163.4 million and \$121.1 million, respectively, in cash, net of cash acquired and final working capital true-ups. Aquion offers a diverse line of water conditioners, water filters, drinking-water purifiers, ozone and ultraviolet disinfection systems, reverse osmosis systems and acid neutralizers for the residential and commercial water treatment industry. Pelican provides residential whole home water treatment systems.

COVID-19 Pandemic

In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. The COVID-19 pandemic continues to spread throughout the United States (“U.S.”) and the world, with the continued potential for significant impact. The COVID-19 pandemic has resulted in governments around the world implementing increasingly stringent measures to help control the spread of the virus, including quarantines, “shelter-in-place” and “stay-at-home” orders, travel restrictions, business curtailments, limits on gatherings, and other measures. In addition, governments and central banks in several parts of the world have enacted fiscal and monetary stimulus measures to counteract the economic impacts of the COVID-19 pandemic. The effects of the COVID-19 pandemic have had and may continue to have an unfavorable impact on certain parts of our business.

Health and safety

From the earliest signs of the outbreak, we have taken proactive action to protect the health and safety of our employees, customers, and suppliers. We have enacted rigorous safety measures in our sites, including implementing social distancing protocols, implementing working from home arrangements for those employees that do not need to be physically present on the manufacturing floor, suspending travel, extensively and frequently disinfecting our workspaces, conducting temperature monitoring at our facilities, and providing or accommodating the wearing of masks to those employees who must be physically present in their workplace and where masks are required by local government orders. We expect to continue to implement these measures until we determine that the COVID-19 pandemic is adequately contained for purposes of our business, and we may take further actions as government authorities require or recommend or as we determine to be in the best interests of our employees, customers, and suppliers. For the three and six months ended June 30, 2020, we incurred \$4.8 million and \$5.7 million, respectively, of costs related to providing for the health and safety of our employees specific to the COVID-19 pandemic.

Operations

We have important manufacturing operations in the U.S. and around the world that have been affected by the COVID-19 pandemic, and we have taken certain actions to help curb its spread. Government-mandated measures providing for business curtailments or shutdowns generally exclude certain essential businesses and services, including businesses that manufacture and sell products that are considered essential to daily lives or otherwise operate in essential or critical sectors. While substantially all of our facilities are considered essential and have remained operational, during the second quarter of 2020, we experienced intermittent partial or full factory closures at certain facilities as a result of these measures or the need to sanitize the facilities and address employee well-being. During the second quarter of 2020, we also experienced brief interruptions in operations due to government-mandated shutdowns at our sites in India, Italy, and New Zealand. While sanitation-related closures or governmental shut-downs may occur again in the future, all of our manufacturing facilities currently remain operational.

Supply

During the second quarter of 2020, the COVID-19 pandemic impacted our factory productivity and supply chain. Certain of our suppliers, particularly in our pool and flow businesses, faced difficulties maintaining operations in light of manufacturing shutdowns and interruptions due to the COVID-19 pandemic, which negatively impacted our production and contributed to an increase in backlog. Further, in our pool business, we encountered production and capacity challenges as a result of supply chain issues and increased demand, which led to higher transportation and labor costs in order to timely deliver finished goods to our customers. Restrictions or disruptions of transportation, such as reduced availability of air transport, port closures and increased border controls or closures, have in certain cases resulted in higher costs and delays, both for obtaining raw materials and components and shipping finished goods to customers, which could harm our profitability, make our products less competitive, or cause our customers to seek alternative suppliers. Although we regularly monitor the financial health and operations of companies in our supply chain, and use alternative suppliers when necessary and available, financial hardship or government restrictions on our suppliers or sub-suppliers caused by the COVID-19 pandemic could cause a disruption in our ability to obtain raw materials or components required to manufacture our products and adversely affect our operations.

Demand

The COVID-19 pandemic has significantly increased economic and demand uncertainty. We have experienced and expect to continue to experience reductions in customer demand in several of our end-markets. Within our Consumer Solutions segment, while water quality has remained important to consumers, we have seen demand disruptions. During the second quarter of 2020, residential shelter-in-place orders and commercial closures significantly impacted our ability to reach our customers in our water solutions business. In particular, our commercial filtration business saw a decrease in demand due to restaurant and hospitality industry closures or operations at limited capacity across North America and Europe for much of the second quarter. Our pool business experienced high demand as consumers sheltered-in-place. This contributed to an increase in backlog as we exited the second quarter of 2020. We started to experience stabilization in demand in our residential water solutions business towards the end of the second quarter, but new or extended government-mandated shutdowns could impact demand for our Consumer Solutions products in the future.

Within our Industrial & Flow Technologies segment, demand for our residential flow products was negatively impacted due to store closures as a result of state-wide orders in the U.S. Sell through improved throughout the second quarter of 2020 in our residential and irrigation flow business, while distributors remained cautious on ordering. While infrastructure backlog remained steady in our commercial and infrastructure flow business, commercial demand softened. While we continue to monitor our commercial and infrastructure flow order book closely, it appears too early to determine at what rate backlog will be replenished. In our industrial filtration business, demand is mostly driven by customer capital spending, which was reduced and/or delayed in the second quarter of 2020 across most industries served. In addition, lower asset utilization drove down demand in industrial filtration aftermarket sales. While we are preparing for this business to remain under pressure for the second half of 2020, we expect long-term demand drivers for this business not to be significantly changed.

The current COVID-19 pandemic or continued spread of COVID-19 has caused a global economic slowdown, and a possibility of a global recession. In the event of a recession, demand for our products would decline and our business and results of operations would be adversely affected.

Cost mitigation actions

We began to see softening of demand in most of our businesses in April 2020, which continued through the second quarter of 2020, and we have taken steps across our organization to align costs with lower sales volumes. These steps include renegotiations with suppliers to reduce input costs, driving manufacturing direct labor reductions in line with volume drop, temporary furloughs, and hiring freezes, and delaying, reducing or eliminating purchased services and travel. Additionally, we are proactively managing our working capital and reviewing our capital spending plan for 2020, but have not deferred strategic ongoing initiatives. We also continue to monitor government economic stabilization efforts and have participated in certain legislative provisions, such as deferring estimated tax payments and utilizing job retention subsidies.

We continue to monitor the rapidly evolving situation and guidance from international and domestic authorities, including federal, state and local public health authorities, and may take additional actions based on their requirements and recommendations. In these circumstances, there may be developments outside our control requiring us to adjust our operating plan. As such, given the dynamic nature of this situation, we cannot reasonably estimate the impacts of the COVID-19 pandemic on our financial condition, results of operations or cash flows in the future. In addition, see Part II—Item 1A, “Risk Factors,” included herein for updates to our risk factors regarding risks associated with the COVID-19 pandemic.

Key Trends and Uncertainties Regarding Our Existing Business

The following trends and uncertainties affected our financial performance in the first six months of 2020 and/or may impact our results in the future:

- There are many uncertainties regarding the COVID-19 pandemic, including the anticipated duration and severity of the pandemic and the extent of worldwide social, political and economic disruption it may continue to cause. The broader implications of the COVID-19 pandemic on our business, financial condition, results of operations and cash flows cannot be determined at this time, and ultimately will be affected by a number of evolving factors including the length of time that the pandemic continues, its effect on the demand for our products and services, the supply chain, and our manufacturing capacity, as well as the impact of governmental regulations imposed in response to the pandemic. See further discussion above under “COVID-19 Pandemic” for key trends and uncertainties with regard to the COVID-19 pandemic.

- During 2019 and the first half of 2020, we executed certain business restructuring initiatives unrelated to the COVID-19 pandemic aimed at reducing our fixed cost structure and realigning our business. We expect these actions will contribute to margin growth in the second half of 2020.
- We have identified specific product and geographic market opportunities that we find attractive and continue to pursue, both within and outside the U.S. We are reinforcing that our businesses more effectively address these opportunities through research and development and additional sales and marketing resources. Unless we successfully penetrate these markets, our core sales growth will likely be limited or may decline.
- We have experienced material and other cost inflation. We strive for productivity improvements, and we implement increases in selling prices to help mitigate this inflation. We expect the current economic environment will result in continuing price volatility for many of our raw materials, and we are uncertain as to the timing and impact of these market changes.

In 2020, our operating objectives include the following:

- Managing our business through the COVID-19 pandemic, with a focus on:
 - Protecting our employees, customers and our businesses;
 - Optimizing our free cash flow and liquidity; and
 - Delivering the best financial results possible in the near-term while staying focused on longer-term strategies.
- Continued focus on accelerating Pentair Integrated Management System (“PIMS”);
- Delivering our growth priorities through new products and global and market expansion, specifically in the areas of pool and residential and commercial filtration solutions;
- Optimizing our technological capabilities to increasingly generate innovative new products and advance digital transformation; and
- Building a high performance growth culture and delivering on our commitments while living our Win Right values.

CONSOLIDATED RESULTS OF OPERATIONS

The consolidated results of operations for the three months ended June 30, 2020 and 2019 were as follows:

<i>In millions</i>	Three months ended			
	June 30, 2020	June 30, 2019	\$ Change	% / Point Change
Net sales	\$ 713.3	\$ 799.5	\$ (86.2)	(10.8)%
Cost of goods sold	468.2	512.8	(44.6)	(8.7)%
Gross profit	245.1	286.7	(41.6)	(14.5)%
<i>% of net sales</i>	34.4%	35.9%		(1.5) pts
Selling, general and administrative	116.7	132.2	(15.5)	(11.7)%
<i>% of net sales</i>	16.4%	16.5%		(0.1) pts
Research and development	17.3	20.7	(3.4)	(16.4)%
<i>% of net sales</i>	2.4%	2.6%		(0.2) pts
Operating income	111.1	133.8	(22.7)	(17.0)%
<i>% of net sales</i>	15.6%	16.7%		(1.1) pts
Loss on sale of businesses	0.1	0.1	—	N.M.
Other income	(0.3)	(12.9)	12.6	N.M.
Net interest expense	7.7	9.4	(1.7)	(18.1)%
Income from continuing operations before income taxes	103.6	137.2	(33.6)	(24.5)%
Provision for income taxes	29.8	22.1	7.7	34.8 %
<i>Effective tax rate</i>	28.8%	16.1%		12.7 pts

N.M. Not Meaningful

The consolidated results of operations for the six months ended June 30, 2020 and June 30, 2019 were as follows:

<i>In millions</i>	Six months ended			
	June 30, 2020	June 30, 2019	\$ Change	% / Point Change
Net sales	\$ 1,423.3	\$ 1,488.4	\$ (65.1)	(4.4)%
Cost of goods sold	926.6	966.1	(39.5)	(4.1)%
Gross profit	496.7	522.3	(25.6)	(4.9)%
<i>% of net sales</i>	34.9%	35.1%		(0.2) pts
Selling, general and administrative expenses	248.6	279.5	(30.9)	(11.1)%
<i>% of net sales</i>	17.5%	18.8%		(1.3) pts
Research and development expenses	36.3	41.4	(5.1)	(12.3)%
<i>% of net sales</i>	2.6%	2.8%		(0.2) pts
Operating income	211.8	201.4	10.4	5.2 %
<i>% of net sales</i>	14.9%	13.5%		1.4 pts
Loss (gain) on sale of businesses	0.1	(3.4)	3.5	N.M.
Other expense (income)	0.9	(12.3)	13.2	N.M.
Net interest expense	14.6	16.7	(2.1)	(12.6)%
Income from continuing operations before income taxes	196.2	200.4	(4.2)	(2.1)%
Provision for income taxes	49.7	32.9	16.8	51.1 %
<i>Effective tax rate</i>	25.3%	16.4%		8.9 pts

N.M. Not Meaningful

Net sales

The components of the consolidated net sales change from the prior period were as follows:

	Three months ended June 30, 2020 over the prior year period	Six months ended June 30, 2020 over the prior year period
Volume	(11.0)%	(5.4)%
Price	1.0	1.3
Core growth	(10.0)	(4.1)
Acquisition (divestiture)	0.1	0.7
Currency	(0.9)	(1.0)
Total	(10.8)%	(4.4)%

The 10.8 and 4.4 percentage point decreases in net sales in the second quarter and first half, respectively, of 2020 from 2019 were primarily driven by:

- sales volume declines in both the Consumer Solutions and Industrial & Flow Technologies segments due to the impacts of the COVID-19 pandemic; and
- unfavorable foreign currency effects compared to the same periods of the prior year.

These decreases were partially offset by:

- selective increases in selling prices to mitigate inflationary cost increases; and
- increased sales due to the Aquion and Pelican acquisitions in February 2019 and other small acquisitions in Consumer Solutions in the fourth quarter of 2019 and first half of 2020.

Gross profit

The 1.5 and 0.2 percentage point decreases in gross profit as a percentage of sales in the second quarter and first half, respectively, of 2020 from 2019 were primarily driven by:

- unfavorable mix within the commercial and infrastructure flow and residential, commercial, and industrial filtration businesses;
- higher freight and labor costs due to supply chain constraints in our pool business; and
- inflationary increases related to labor costs and certain raw materials.

These decreases were partially offset by:

- selective increases in selling prices to mitigate impacts of inflation; and
- increased productivity due to cost actions such as temporary furloughs and hiring freezes in response to the COVID-19 pandemic driving manufacturing efficiencies and lower operating expenses.

Selling, general and administrative expenses (“SG&A”)

The 0.1 and 1.3 percentage point decreases in SG&A as a percentage of sales in the second quarter and first half, respectively, of 2020 from 2019 were primarily driven by:

- asset impairment of \$18.2 million in the first half of 2019 that did not occur in 2020;
- reduction in travel and entertainment, trade show and advertising expenses due to the COVID-19 pandemic;
- lower sales incentive expense in line with decreased sales in our water solutions business and Industrial & Flow Technologies segment; and
- restructuring and other costs of \$3.5 million in the first half of 2020, compared to \$7.8 million in the first half of 2019.

Net interest expense

The 18.1 and 12.6 percent decreases in net interest expense in the second quarter and first half, respectively, of 2020 from 2019 were primarily driven by:

- cross currency swaps entered into in June 2019 and December 2019 resulting in more interest income in the second quarter and first half of 2020 than in the comparative 2019 periods; and
- the impact of a weaker Euro relative to the U.S. Dollar, resulting in increased interest income on the cross currency swaps during the second quarter and first half of 2020, compared to the same periods in 2019.

Provision for income taxes

The 12.7 and 8.9 percentage point increases in the effective tax rate in the second quarter and first half, respectively, of 2020 from 2019 were primarily driven by:

- the unfavorable impact of discrete items, including items related to the CARES Act and items related to final regulations as part of the Tax Cuts and Jobs Act of 2017 that place limitations on the deductibility of certain interest expense for U.S. tax purposes.

These increases were partially offset by:

- the favorable mix of global earnings.

SEGMENT RESULTS OF OPERATIONS

The summary that follows provides a discussion of the results of operations of our two reportable segments (Consumer Solutions and Industrial & Flow Technologies). Each of these segments is comprised of various product offerings that serve multiple end users.

We evaluate performance based on net sales and segment income and use a variety of ratios to measure performance of our reporting segments. Segment income represents equity income of unconsolidated subsidiaries and operating income exclusive of intangible amortization, certain acquisition related expenses, costs of restructuring activities, impairments and other unusual non-operating items.

Consumer Solutions

The net sales and segment income for Consumer Solutions were as follows:

<i>In millions</i>	Three months ended			Six months ended		
	June 30, 2020	June 30, 2019	% / Point Change	June 30, 2020	June 30, 2019	% / Point Change
Net sales	\$ 401.2	\$ 437.1	(8.2)%	\$ 790.0	\$ 795.3	(0.7)%
Segment income	96.7	109.0	(11.3)%	181.5	184.2	(1.5)%
<i>% of net sales</i>	24.1%	24.9%	(0.8) pts	23.0%	23.2%	(0.2) pts

Net sales

The components of the change in Consumer Solutions net sales from the prior period were as follows:

	Three months ended June 30, 2020 over the prior year period	Six months ended June 30, 2020 over the prior year period
Volume	(9.0)%	(2.8)%
Price	1.2	1.5
Core growth	(7.8)	(1.3)
Acquisition	0.1	1.2
Currency	(0.5)	(0.6)
Total	(8.2)%	(0.7)%

The 8.2 and 0.7 percent decreases in net sales for Consumer Solutions in the second quarter and first half, respectively, of 2020 from 2019 were primarily driven by:

- decreased demand in the residential and commercial filtration businesses as government-mandated shutdown and shelter-in-place orders and commercial closures due to the COVID-19 pandemic impacted the ability to reach customers; and
- unfavorable foreign currency effects compared to the same periods of the prior year.

These decreases were partially offset by:

- increased sales volume across all product lines in our pool business in the first quarter of 2020 due to more normal weather patterns and reduced inventory levels in the channel compared to 2019;
- increased sales volume across several of the product lines in our pool business in the second quarter of 2020 due to consumers increasing their pool use while sheltering-in-place due to the COVID-19 pandemic;
- selective increases in selling prices to mitigate impacts of inflation; and
- increased sales due to the Aquion and Pelican acquisitions that occurred in February 2019 and other small acquisitions in the fourth quarter of 2019 and first half of 2020.

Segment income

The components of the change in Consumer Solutions segment income as a percentage of net sales from the prior period were as follows:

	Three months ended June 30, 2020 over the prior year period	Six months ended June 30, 2020 over the prior year period
Growth	(1.7) pts	(0.3) pts
Acquisition	0.5	0.4
Inflation	(1.3)	(1.4)
Productivity/Price	1.7	1.1
Total	(0.8) pts	(0.2) pts

The 0.8 and 0.2 percentage point decreases in segment income for Consumer Solutions as a percentage of net sales in the second quarter and first half, respectively, of 2020 from 2019 were primarily driven by:

- decreased sales volumes in the second quarter of 2020 across all businesses due to the COVID-19 pandemic;
- lower sales volume in the higher margin commercial filtration business;
- higher freight and labor costs in our pool business due to supply chain constraints as a result of the COVID-19 pandemic; and
- inflationary increases related to labor costs and certain raw materials.

These decreases were partially offset by:

- impact of Aquion and Pelican acquisitions;
- increase in sales volume in our pool business in the first quarter of 2020 resulting in favorable sales mix;
- reduction in travel and entertainment, trade show and advertising expenses due to the COVID-19 pandemic and other cost reduction initiatives; and
- selective increases in selling prices to mitigate the impacts of inflation.

Industrial & Flow Technologies

The net sales and segment income for Industrial & Flow Technologies were as follows:

In millions	Three months ended			Six months ended		
	June 30, 2020	June 30, 2019	% / Point Change	June 30, 2020	June 30, 2019	% / Point Change
Net sales	\$ 311.8	\$ 362.1	(13.9)%	\$ 632.7	\$ 692.4	(8.6)%
Segment income	44.1	59.7	(26.1)%	88.8	100.7	(11.8)%
% of net sales	14.1%	16.5%	(2.4) pts	14.0%	14.5%	(0.5) pts

Net sales

The components of the change in Industrial & Flow Technologies net sales from the prior period were as follows:

	Three months ended June 30, 2020 over the prior year period	Six months ended June 30, 2020 over the prior year period
Volume	(13.5)%	(8.5)%
Price	0.9	1.2
Core growth	(12.6)	(7.3)
Currency	(1.3)	(1.3)
Total	(13.9)%	(8.6)%

The 13.9 and 8.6 percent decreases in net sales for Industrial & Flow Technologies in the second quarter and first half, respectively, of 2020 from 2019 were primarily driven by:

- decreased sales volume in our residential and irrigation flow businesses due to market conditions resulting from the COVID-19 pandemic;
- decreased sales volume in our commercial water supply and water disposal, industrial filtration and food and beverage businesses due to less project sales as a result of customers freezing their capital spending and less service and aftermarket revenue driven by reduced consumption and travel restrictions from government-mandated shutdowns and “shelter-in-place” orders due to the COVID-19 pandemic; and
- unfavorable foreign currency effects compared to the same periods of the prior year.

These decreases were partially offset by:

- sales growth in our infrastructure business as a result of strong backlog entering 2020; and

- selective increases in selling prices to mitigate inflationary cost increases.

Segment income

The components of the change in Industrial & Flow Technologies segment income as a percentage of net sales from the prior period were as follows:

	Three months ended June 30, 2020 over the prior year period	Six months ended June 30, 2020 over the prior year period
Growth	(3.7) pts	(2.3) pts
Inflation	(0.8)	(1.0)
Productivity/Price	2.1	2.8
Total	(2.4) pts	(0.5) pts

The 2.4 and 0.5 percentage point decreases in segment income for Industrial & Flow Technologies as a percentage of net sales in the second quarter and first half, respectively, of 2020 from 2019 were primarily driven by:

- decreased sales volumes in our residential and irrigation flow businesses due to the COVID-19 pandemic, which resulted in decreased leverage on fixed operating expenses;
- decreased sales volume in our commercial water supply and water disposal, industrial filtration and food and beverage businesses due to the COVID-19 pandemic along with unfavorable mix within our industrial filtration business; and
- inflationary increases related to raw material and labor costs.

These decreases were partially offset by:

- selective increases in selling prices to mitigate inflationary cost increases; and
- increased productivity due to cost actions driving manufacturing efficiencies and lower operating expenses.

LIQUIDITY AND CAPITAL RESOURCES

We generally fund cash requirements for working capital, capital expenditures, equity investments, acquisitions, debt repayments, dividend payments and share repurchases from cash generated from operations, availability under existing committed revolving credit facilities and in certain instances, public and private debt and equity offerings. Our primary revolving credit facilities have generally been adequate for these purposes, although we have negotiated additional credit facilities or completed debt and equity offerings as needed to allow us to complete acquisitions.

We experience seasonal cash flows primarily due to seasonal demand in a number of markets. Consistent with historical trends, we experienced seasonal cash usage in the first quarter of 2020 and drew on our revolving credit facility to repay commercial paper and to fund our operations. This cash usage reversed in the second quarter of 2020 as the seasonality of our businesses peaked. Consistent with historical seasonal patterns, the second quarter of 2020 generated significant cash to fund our operations and we used this cash to significantly reduce the draw on our revolving credit facility.

End-user demand for pool and certain pumping equipment follows warm weather trends and is at seasonal highs from April to August. The magnitude of the sales spike is partially mitigated by employing some advance sale “early buy” programs (generally including extended payment terms and/or additional discounts). Demand for residential and agricultural water systems is also impacted by weather patterns, particularly by heavy flooding and droughts.

We expect to continue to have cash requirements to support working capital needs and capital expenditures, to pay interest and service debt and to pay dividends to shareholders quarterly. We believe our existing liquidity position, coupled with our currently anticipated operating cash flows will be sufficient to meet our cash needs arising in the ordinary course of business for the next twelve months. Although there is uncertainty of the impact of the COVID-19 pandemic on our future results, we believe we are well-positioned to manage our business and have the ability and sufficient capacity to meet these cash requirements by using available cash, internally generated funds and borrowing under our committed and uncommitted credit facilities. We are committed to maintaining investment grade credit ratings and a solid liquidity position.

Operating activities

Cash provided by operating activities of continuing operations was \$266.5 million in the first six months of 2020, compared to \$99.2 million in the same period of 2019.

The \$266.5 million in net cash provided by operating activities of continuing operations in the first six months of 2020 primarily reflects \$183.9 million of net income from continuing operations, net of non-cash depreciation and amortization. Additionally, the Company had a cash inflow of \$59.1 million as a result of changes in net working capital, primarily the result of collections on accounts receivables from our early buy programs in the pool business that became due in the second quarter.

The \$99.2 million in net cash provided by operating activities of continuing operations in the first six months of 2019 primarily reflects net income from continuing operations of \$226.6 million, net of non-cash depreciation, amortization and asset impairments, offset by an increase in net working capital of \$100.6 million, \$10.7 million of pension plan contributions and a \$12.2 million pension settlement gain in conjunction with the termination of the Pentair Salaried Plan during the first six months of 2019.

Investing activities

Cash used for investing activities was \$58.9 million in the first six months of 2020, compared to \$314.7 million in the same period of 2019. Net cash used for investing activities in the first six months of 2020 primarily reflects capital expenditures of \$30.5 million and cash paid for acquisitions of \$28.5 million, net of cash acquired.

Net cash used for investing activities in the first six months of 2019 primarily reflects capital expenditures of \$29.8 million and cash paid for the Aquion and Pelican acquisitions of \$284.5 million, net of cash acquired.

Financing activities

Net cash used for financing activities was \$188.7 million in the first six months of 2020, compared to \$222.4 million provided by financing activities in the same period of 2019. Net cash used for financing activities in the first six months of 2020 primarily relates to \$115.2 million of share repurchases and dividend payments of \$63.7 million.

Net cash provided by financing activities in the first six months of 2019 primarily relates to proceeds from long-term debt of \$400.0 million, net receipts of commercial paper and revolving long-term debt of \$32.9 million, partially offset by \$150.0 million of share repurchases and payment of dividends of \$62.0 million.

In April 2018, Pentair, PISG, PFSA and Pentair, Inc. entered into a credit agreement, providing for an \$800.0 million senior unsecured revolving credit facility with a term of five years (the "Senior Credit Facility"), with Pentair and PISG as guarantors and PFSA and Pentair, Inc. as borrowers. In June 2020, Pentair assumed the PISG guarantee. The Senior Credit Facility has a maturity date of April 25, 2023. Borrowings under the Senior Credit Facility bear interest at a rate equal to an adjusted base rate or the London Interbank Offered Rate, plus, in each case, an applicable margin. The applicable margin is based on, at PFSA's election, Pentair's leverage level or PFSA's public credit rating. In May 2019, PFSA executed an increase of the Senior Credit Facility by \$100.0 million for a total commitment up to \$900.0 million in the aggregate.

In December 2019, the Senior Credit Facility was amended to provide for the extension of term loans in an aggregate amount of \$200.0 million (the "Term Loans"). The Term Loans are in addition to the Senior Credit Facility commitment. In addition, PFSA has the option to further increase the Senior Credit Facility in an aggregate amount of up to \$300.0 million, through a combination of increases to the total commitment amount of the Senior Credit Facility and/or one or more tranches of term loans in addition to the Term Loans, subject to customary conditions, including the commitment of the participating lenders.

In June 2019, PFSA completed a public offering of \$400.0 million aggregate principal amount of PFSA's 4.500% Senior Notes due 2029 (the "2029 Notes"). We used the net proceeds of the 2029 Notes to partially repay outstanding commercial paper.

PFSA is authorized to sell short-term commercial paper notes to the extent availability exists under the Senior Credit Facility. PFSA uses the Senior Credit Facility as back-up liquidity to support 100% of commercial paper outstanding. PFSA had no commercial paper outstanding as of June 30, 2020 and \$117.8 million as of December 31, 2019, all of which was classified as long-term debt as we have the intent and the ability to refinance such obligations on a long-term basis under the Senior Credit Facility.

In March 2020, the commercial paper market began to experience high levels of volatility due to uncertainty related to the COVID-19 pandemic. The volatility impacted both market access to and pricing of commercial paper. As a cost mitigation action, we withdrew our credit ratings to access the commercial paper market in the second quarter of 2020 and continued to use the revolving credit facility, along with cash generated from operations, to fund our general operations. As of June 30, 2020, total availability under the Senior Credit Facility was \$763.5 million.

Our debt agreements contain various financial covenants, but the most restrictive covenants are contained in the Senior Credit Facility. The Senior Credit Facility contains covenants requiring us not to permit (i) the ratio of our consolidated debt (net of our consolidated unrestricted cash in excess of \$5.0 million but not to exceed \$250.0 million) to our consolidated net income (excluding, among other things, non-cash gains and losses) before interest, taxes, depreciation, amortization and non-cash share-based compensation expense (“EBITDA”) on the last day of any period of four consecutive fiscal quarters to exceed 3.75 to 1.00 (the “Leverage Ratio”) and (ii) the ratio of our EBITDA to our consolidated interest expense, for the same period to be less than 3.00 to 1.00 as of the end of each fiscal quarter. For purposes of the Leverage Ratio, the Senior Credit Facility provides for the calculation of EBITDA giving pro forma effect to certain acquisitions, divestitures and liquidations during the period to which such calculation relates. As of June 30, 2020, we were in compliance with all financial covenants in our debt agreements, and there was no material uncertainty about our ongoing ability to meet these covenants.

In addition to the Senior Credit Facility, we have various other credit facilities with an aggregate availability of \$20.9 million, of which there were no outstanding borrowings at June 30, 2020. Borrowings under these credit facilities bear interest at variable rates.

We have \$177.8 million aggregate principal amount of fixed rate senior notes maturing in the next twelve months. We classified this debt as long-term as of June 30, 2020 as we have the intent and ability to refinance such obligation on a long-term basis under the Senior Credit Facility.

As of June 30, 2020, we have \$63.1 million of cash held in certain countries in which the ability to repatriate is limited due to local regulations or significant potential tax consequences.

Supplemental guarantor information

Prior to the second quarter of 2020, Pentair plc (the “Parent Company Guarantor”) and PISG (the “Subsidiary Guarantor”), fully and unconditionally, guaranteed the senior notes of PFSA (the “Subsidiary Issuer”). The Subsidiary Guarantor is a Switzerland limited liability company and 100 percent-owned subsidiary of the Parent Company Guarantor. The Subsidiary Issuer is a Luxembourg private limited liability company and 100 percent-owned subsidiary of the Parent Company Guarantor. In June 2020, the Parent Company Guarantor assumed the guarantee of the Subsidiary Guarantor, and the guarantee of the Subsidiary Guarantor was released.

The Parent Company Guarantor is a holding company established to own directly and indirectly substantially all of its operating and other subsidiaries. The Subsidiary Issuer is a holding company formed to own directly and indirectly substantially all of its operating and other subsidiaries and to issue debt securities, including the senior notes. The Parent Company Guarantor’s principal source of cash flow, including cash flow to make payments on the senior notes pursuant to the guarantees, is dividends from its subsidiaries. The Subsidiary Issuer’s principal source of cash flow is interest income from its subsidiaries. None of the subsidiaries of the Parent Company Guarantor or the Subsidiary Issuer is under any direct obligation to pay or otherwise fund amounts due on the senior notes or the guarantees, whether in the form of dividends, distributions, loans or other payments. In addition, there may be statutory and regulatory limitations on the payment of dividends from certain subsidiaries of the Parent Company Guarantor or the Subsidiary Issuer. If such subsidiaries are unable to transfer funds to the Parent Company Guarantor or the Subsidiary Issuer and sufficient cash or liquidity is not otherwise available, the Parent Company Guarantor or the Subsidiary Issuer may not be able to make principal and interest payments on their outstanding debt, including the senior notes or the guarantees.

The following tables present summarized financial information as of and for the six months ended June 30, 2020 for the Parent Company Guarantor and Subsidiary Issuer and as of December 31, 2019 for the Parent Company Guarantor, Subsidiary Guarantor and Subsidiary Issuer on a combined basis after elimination of (i) intercompany transactions and balances among the guarantors and issuer and (ii) equity in earnings from and investments in any subsidiary that is a non-Guarantor or issuer.

<i>In millions</i>	Six months ended	
	June 30, 2020	
Net sales	\$	—
Gross profit		—
Loss from continuing operations before taxes		(9.8)
Net loss of continuing operations		(9.8)

<i>In millions</i>	June 30, 2020		December 31, 2019	
Current assets ⁽¹⁾	\$	5.3	\$	3.6
Noncurrent assets ⁽²⁾		1,000.5		1,303.2
Current liabilities ⁽³⁾		320.6		702.6
Noncurrent liabilities ⁽⁴⁾		1,447.6		1,428.4

⁽¹⁾ Includes assets due from non-guarantor subsidiaries of \$2.4 million as of June 30, 2020 and December 31, 2019, respectively.

⁽²⁾ Includes assets due from non-guarantor subsidiaries of \$988.1 million and \$1,278.7 million as of June 30, 2020 and December 31, 2019, respectively.

⁽³⁾ Includes liabilities due to non-guarantor subsidiaries of \$268.4 million and \$648.8 million as of June 30, 2020 and December 31, 2019, respectively.

⁽⁴⁾ Includes liabilities due to non-guarantor subsidiaries of \$454.7 million and \$449.9 million as of June 30, 2020 and December 31, 2019, respectively.

Share repurchases

In May 2018, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of \$750.0 million. The authorization expires on May 31, 2021. During the six months ended June 30, 2020, we repurchased 3.0 million of our shares for \$115.2 million. As of June 30, 2020, we had \$134.7 million available for share repurchases under this authorization.

In March 2020, to enhance our liquidity position in response to the COVID-19 pandemic, we elected to temporarily suspend share repurchases under our existing share repurchase program. The existing program remains authorized by the Board of Directors, and we may resume share repurchases in the future at any time, depending upon market conditions, our capital needs and other factors.

Dividends payable

On May 5, 2020, the Board of Directors declared a quarterly cash dividend of \$0.19, payable on August 7, 2020 to shareholders of record at the close of business on July 24, 2020. As a result, the balance of dividends payable included in *Other current liabilities* on our Condensed Consolidated Balance Sheets was \$31.5 million at June 30, 2020, compared to \$32.0 million at December 31, 2019.

We paid dividends in the first six months of 2020 of \$63.7 million, or \$0.38 per ordinary share compared with \$62.0 million, or \$0.36 per ordinary share, in the prior year period.

Under Irish law, the payment of future cash dividends and repurchases of shares may be paid only out of Pentair plc's "distributable reserves" on its statutory balance sheet. Pentair plc is not permitted to pay dividends out of share capital, which includes share premiums. Distributable reserves may be created through the earnings of the Irish parent company and through a reduction in share capital approved by the Irish High Court. Distributable reserves are not linked to a U.S. generally accepted accounting principles ("GAAP") reported amount (e.g., retained earnings). Our distributable reserve balance was \$6.6 billion as of December 31, 2019.

Other financial measures

In addition to measuring our cash flow generation or usage based upon operating, investing and financing classifications included in the Condensed Consolidated Statements of Cash Flows, we also measure our free cash flow. We have a long-term goal to consistently generate free cash flow greater than 100 percent conversion of net income. Free cash flow is a non-GAAP financial measure that we use to assess our cash flow performance. We believe free cash flow is an important measure of liquidity because it provides us and our investors a measurement of cash generated from operations that is available to pay dividends, make acquisitions, repay debt and repurchase shares. In addition, free cash flow is used as a criterion to measure and pay compensation-based incentives. Our measure of free cash flow may not be comparable to similarly titled measures reported by other companies.

The following table is a reconciliation of free cash flow:

<i>In millions</i>	Six months ended	
	June 30, 2020	June 30, 2019
Net cash provided by operating activities of continuing operations	\$ 266.5	\$ 99.2
Capital expenditures of continuing operations	(30.5)	(29.8)
Proceeds from sale of property and equipment of continuing operations	0.1	0.4
Free cash flow from continuing operations	\$ 236.1	\$ 69.8
Net cash provided by operating activities of discontinued operations	(0.5)	(2.5)
Free cash flow	\$ 235.6	\$ 67.3

NEW ACCOUNTING STANDARDS

See Note 1 of the Notes to Condensed Consolidated Financial Statements for information pertaining to recently adopted accounting standards.

CRITICAL ACCOUNTING POLICIES

We have adopted various accounting policies to prepare the consolidated financial statements in accordance with GAAP. Certain of our accounting policies require the application of significant judgment by management in selecting the appropriate assumptions for calculating financial estimates. In our 2019 Annual Report on Form 10-K, we identified the critical accounting policies that affect our more significant estimates and assumptions used in preparing our consolidated financial statements. There have been no material changes to our critical accounting policies and estimates from those disclosed in our 2019 Annual Report on Form 10-K for the year ended December 31, 2019.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Except for the broad effects of the COVID-19 pandemic as a result of its negative impact on the global economy and major financial markets, there have been no material changes in our market risk during the six months ended June 30, 2020. For additional information refer to Item 7A of our 2019 Annual Report on Form 10-K.

ITEM 4. CONTROLS AND PROCEDURES**(a) Evaluation of Disclosure Controls and Procedures**

We maintain a system of disclosure controls and procedures designed to provide reasonable assurance as to the reliability of our published financial statements and other disclosures included in this report. Our management evaluated, with the participation of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the quarter ended June 30, 2020 pursuant to Rule 13a-15(b) of the Securities Exchange Act of 1934 (the "Exchange Act"). Based upon their evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective, at the reasonable assurance level, as of the end of the quarter ended June 30, 2020 to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms, and to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosures.

(b) Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the quarter ended June 30, 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We have been, and in the future may be, made parties to a number of actions filed or have been, and in the future may be, given notice of potential claims relating to the conduct of our business, including those relating to commercial or contractual disputes with suppliers, customers or parties to acquisitions and divestitures, intellectual property matters, environmental, safety and health matters, product liability, the use or installation of our products, consumer matters, and employment and labor matters.

While we believe that a material impact on our consolidated financial position, results of operations or cash flows from any such future claims or potential claims is unlikely, given the inherent uncertainty of litigation, a remote possibility exists that a future adverse ruling or unfavorable development could result in future charges that could have a material adverse impact. We do and will continue to periodically reexamine our estimates of probable liabilities and any associated expenses and receivables and make appropriate adjustments to such estimates based on experience and developments in litigation. As a result, the current estimates of the potential impact on our consolidated financial position, results of operations and cash flows for the proceedings and claims described in the notes to our consolidated financial statements could change in the future.

Asbestos matters

Our current and former subsidiaries and numerous other unaffiliated companies are named as defendants in personal injury lawsuits based on alleged exposure to asbestos-containing materials. These cases typically involve product liability claims based primarily on allegations of manufacture, sale or distribution of industrial products that either contained asbestos or were attached to or used with asbestos-containing components manufactured by third-parties. Each case typically names between several dozen to more than a hundred corporate defendants. Our historical strategy has been to mount a vigorous defense aimed at having unsubstantiated suits dismissed, and, where appropriate, settling suits before trial. Although a large percentage of litigated suits have been dismissed, we cannot predict the extent to which we will be successful in resolving lawsuits in the future.

As of June 30, 2020, there were approximately 610 claims outstanding against our subsidiaries. This amount is not adjusted for claims that are not actively being prosecuted, identified incorrect defendants, or duplicated other actions, which would ultimately reflect our current estimate of the number of viable claims made against us, our affiliates, or entities for which we assumed responsibility in connection with acquisitions or divestitures. In addition, the amount does not include certain claims pending against third parties for which we have been provided an indemnification.

Environmental matters

We have been named as defendant, target or a potentially responsible party (“PRP”) in a number of environmental clean-ups relating to our current or former business units. We have disposed of a number of businesses in recent years, and in certain cases, we have retained responsibility and potential liability for certain environmental obligations. We have received claims for indemnification from certain purchasers. We may be named as a PRP at other sites in the future for existing business units, as well as both divested and acquired businesses. In addition to cleanup actions brought by governmental authorities, private parties could bring personal injury or other claims due to the presence of, or exposure to, hazardous substances.

Certain environmental laws impose liability on current or previous owners or operators of real property for the cost of removal or remediation of hazardous substances at their properties or at properties at which they have disposed of hazardous substances. We have projects underway at several current and former manufacturing facilities to investigate and remediate environmental contamination resulting from our past operations or the operations of former subsidiaries or by other businesses that previously owned or used the properties.

Our accruals for environmental matters are recorded on a site-by-site basis when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based on current law and existing technologies. It can be difficult to estimate reliably the final costs of investigation and remediation due to various factors. In our opinion, the amounts accrued are appropriate based on facts and circumstances as currently known. As of June 30, 2020, our recorded reserves for environmental matters were not material. We do not anticipate these environmental conditions will have a material adverse effect on our financial position, results of operations or cash flows. However, unknown conditions, new details about existing conditions or changes in environmental requirements may give rise to environmental liabilities that will exceed the amount of our current reserves and could have a material adverse effect in the future.

Product liability claims

We are subject to various product liability lawsuits and personal injury claims. A substantial number of these lawsuits and claims are insured and accrued for by Penwald, our captive insurance subsidiary. Penwald records a liability for these claims based on actuarial projections of ultimate losses. For all other claims, accruals covering the claims are recorded, on an undiscounted basis, when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated based on existing information. The accruals are adjusted periodically as additional information becomes available. We have not experienced significant unfavorable trends in either the severity or frequency of product liability lawsuits or personal injury claims.

ITEM 1A. RISK FACTORS

There have been no material changes from the risk factors previously disclosed in our 2019 Annual Report on Form 10-K for the year ended December 31, 2019, except for the addition of the risk factor set forth below.

The COVID-19 pandemic is expected to have a material negative impact on our business, financial condition, results of operations and cash flows.

Our business and financial results have been and are expected to continue to be negatively impacted by the COVID-19 pandemic. The severity, magnitude and duration of the current COVID-19 pandemic is uncertain, rapidly changing and hard to predict. In 2020, COVID-19 has significantly impacted economic activity and markets around the world, and it is expected to negatively impact our business in numerous ways, including but not limited to those outlined below:

- The COVID-19 pandemic has caused a global economic slowdown that may last for a potentially extended duration, and it is possible that it could cause a global recession. Deteriorating economic and political conditions caused by the COVID-19 pandemic, such as increased unemployment, decreases in capital spending, declines in consumer confidence, or economic slowdowns or recessions, could cause a decrease in demand for our products.
- Due to the impacts of the COVID-19 pandemic, we have experienced and expect to continue to experience reductions in customer demand for certain of our products and in several of our end-markets, including residential and commercial filtration, residential and irrigation flow, commercial flow, industrial filtration and food and beverage.
- The COVID-19 pandemic is adversely affecting, and is expected to continue to adversely affect, certain elements of our business (including certain elements of our operations, supply chains and distribution systems), including as a result of impacts associated with required, preventive and precautionary measures that we, other businesses, our communities and governments are taking. These impacts include requiring employees to work from home or not go into their offices or plants, limiting the number of employees attending meetings, reducing the number of people in our sites at any one time, reducing employee travel and adopting other employee safety measures. These measures also may impact our ability to meet production demands or requests and may delay our new product introductions depending on employee attendance or ability to continue to work.
- If the COVID-19 pandemic continues and economic conditions worsen, we expect to experience additional adverse impacts on our operational and commercial activities, customer orders and our collections of accounts receivable, which may be material, and it remains uncertain the impact on future operational and commercial activities, customer orders, and collections even if economic conditions begin to improve.
- Government or regulatory responses to the COVID-19 pandemic have and are likely to continue to negatively impact our business. During the first and second quarters of 2020, mandatory lockdowns or other restrictions on operations in some countries temporarily disrupted our ability to manufacture or distribute our products in some of these markets. Continuation or expansion of these disruptions could materially adversely impact our operations and results. In addition to existing travel restrictions, jurisdictions may continue to close borders, impose prolonged quarantines and further restrict travel and business activity, which could significantly impact our ability to support our operations and customers, meet demand, develop new products, ship our backlog and also impact the ability of our employees to get to their workplaces to produce products and services, or significantly hamper our products from moving through the supply chain.
- The impacts of the COVID-19 pandemic may limit our ability to reduce our overall operating costs. We have experienced increased costs relating to our efforts to mitigate the impact of the COVID-19 pandemic through enhanced sanitization procedures and social-distancing measures we have enacted and will likely continue to enact at our locations around the world in an effort to protect our employees' health and well-being.

- The COVID-19 pandemic has disrupted and is expected to continue to disrupt our operations, global supply chain and routes to market or those of our suppliers or their suppliers. These disruptions or our failure to effectively respond to them have increased and may continue to increase product, distribution or labor costs or cause delays in delivering our backlog or may cause an inability to deliver products to our customers or meet customer demand.
- Disruptions or uncertainties related to the COVID-19 pandemic for a sustained period of time could result in delays or modifications to some of our strategic plans and initiatives and hinder our ability to achieve our growth targets.
- The COVID-19 pandemic has increased volatility and pricing in and disrupted the capital markets and commercial paper markets, and volatility is likely to continue. We might not be able to continue to access preferred sources of liquidity when we would like, and our borrowing costs could increase.
- Actions we have taken or may take, or decisions we have made or may make, as a consequence of the COVID-19 pandemic, may result in legal claims or litigation against us.

We might not be able to predict or respond to all impacts of the COVID-19 pandemic on a timely basis to prevent near- or long-term adverse impacts to our results. Due to the speed with which the COVID-19 situation continues to develop, the global breadth of its spread and the range of governmental and community reactions thereto, there is uncertainty around its duration and ultimate impact; therefore, any negative impact on our business, financial condition (including without limitation our liquidity), results of operations and cash flows cannot be reasonably estimated at this time, but the COVID-19 pandemic could lead to extended disruption of economic activity and the impact on our business, financial condition, results of operations and cash flows could be material. The ultimate impact of these disruptions also depends on events beyond our knowledge or control, including the duration and severity of the COVID-19 pandemic and actions taken by parties other than us to respond to them. The foregoing and other impacts of the COVID-19 pandemic could have the effect of heightening many of the other risks described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and any of these impacts could materially adversely affect our business, financial condition, results of operations and cash flows.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table provides information with respect to purchases we made of our ordinary shares during the second quarter of 2020:

Period	(a) Total number of shares purchased	(b) Average price paid per share	(c) Total number of shares purchased as part of publicly announced plans or programs	(d) Dollar value of shares that may yet be purchased under the plans or programs
April 1 - April 25	7,801	\$ 31.12	—	\$ 134,718,028
April 26 - May 23	20,417	35.05	—	134,718,028
May 24 - June 30	235	37.65	—	134,718,028
Total	28,453		—	

- (a) The purchases in this column include 7,801 shares for the period April 1 - April 25, 20,417 shares for the period April 26 - May 23 and 235 shares for the period May 24 - June 30 deemed surrendered to us by participants in our equity incentive plans to satisfy the exercise price or withholding of tax obligations related to the exercise of stock options and vesting of restricted and performance shares.
- (b) The average price paid in this column includes shares deemed surrendered to us by participants in our equity incentive plans to satisfy the exercise price for the exercise price of stock options and withholding tax obligations due upon stock option exercises and vesting of restricted and performance shares.
- (c) The number of shares in this column represents the number of shares repurchased as part of our publicly announced plans to repurchase our ordinary shares up to the maximum dollar limit authorized by the Board of Directors, discussed below.
- (d) In May 2018, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of \$750.0 million. The 2018 authorization expires on May 31, 2021. As of June 30, 2020, we had \$134.7 million available for share repurchases under this authorization. From time to time, we may enter into a Rule 10b5-1 trading plan for the purpose of repurchasing shares under this authorization.

ITEM 6. EXHIBITS

The exhibits listed in the following Exhibit Index are filed as part of this Quarterly Report on Form 10-Q.

Exhibit Index to Form 10-Q for the Period Ended June 30, 2020

- [4.1](#) Eighth Supplemental Indenture, dated as of June 22, 2020, among Pentair Finance S.à r.l., Pentair plc, Pentair Investments Switzerland GmbH and Wells Fargo Bank National Association as Trustee.
- [4.2](#) Seventh Supplemental Indenture, dated as of June 22, 2020, among Pentair Finance S.à r.l., Pentair plc, Pentair Investments Switzerland GmbH and U.S. Bank National Association as Trustee.
- [10.1](#) Pentair plc 2020 Share and Incentive Plan (Incorporated by reference to Appendix B to the Company's Definitive Proxy Statement on Schedule 14A filed on March 20, 2020 (File No. 001-11625)).
- [10.2](#) Form of Key Executive Employment and Severance Agreement for Robert P. Fishman, Jerome O. Pedretti, and Mario R. D'Ovidio (Incorporated by reference to Exhibit 10.3 in the Quarterly Report on Form 10-Q of Pentair plc for the quarter ended June 30, 2018 (File No. 001-11625)).
- [22](#) List of Guarantors and Subsidiary Issuers of Guaranteed Securities.
- [31.1](#) Certification of Chief Executive Officer.
- [31.2](#) Certification of Chief Financial Officer.
- [32.1](#) Certification of Chief Executive Officer, Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- [32.2](#) Certification of Chief Financial Officer, Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 101** The following materials from Pentair plc's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 are filed herewith, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Operations and Comprehensive Income for the three and six months ended June, 2020 and 2019, (ii) the Condensed Consolidated Balance Sheets as of June 30, 2020 and December 31, 2019, (iii) the Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2020 and 2019, (iv) the Condensed Consolidated Statements of Changes in Equity for the three and six months ended June 30, 2020 and 2019, and (v) Notes to Condensed Consolidated Financial Statements. The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.
- 104** Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

SIGNATURES

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, thereunto duly authorized, on July 23, 2020.

Pentair plc
Registrant

By /s/ Robert P. Fishman

Robert P. Fishman

Executive Vice President, Chief Financial Officer and Chief
Accounting Officer

PENTAIR FINANCE S.À R.L.,
(formerly known as PENTAIR FINANCE S.A.)
as Issuer

AND

PENTAIR PLC,
as Successor Parent Guarantor

AND

PENTAIR INVESTMENTS SWITZERLAND GMBH,
as Guarantor

AND

WELLS FARGO BANK, NATIONAL ASSOCIATION,
as Trustee

EIGHTH SUPPLEMENTAL INDENTURE
Dated as of June 22, 2020

THIS EIGHTH SUPPLEMENTAL INDENTURE is dated as of June 22, 2020, among PENTAIR FINANCE S.À R.L. (formerly known as PENTAIR FINANCE S.A.), a Luxembourg private limited liability company (*société à responsabilité limitée*) with a registered office at 26, boulevard Royal, L-2449 Luxembourg, Luxembourg and registered with the Luxembourg Trade and Companies Register under number B 166305 (the “**Company**”), PENTAIR PLC, an Irish public limited company (“**Successor Parent Guarantor**”), PENTAIR INVESTMENTS SWITZERLAND GMBH, a Switzerland limited liability company (“**SwissCo**”; together with Successor Parent Guarantor, the “**Guarantors**” and each a “**Guarantor**”), and WELLS FARGO BANK, NATIONAL ASSOCIATION, a national banking association, as trustee (the “**Trustee**”).

RECITALS

A. The Company, Pentair Ltd. (“**Initial Parent Guarantor**”), as predecessor to Successor Parent Guarantor, and the Trustee have heretofore executed and delivered an Indenture, dated as of September 24, 2012 (the “**Base Indenture**” and, as modified by supplemental indentures from time to time, the “**Indenture**”), providing for the issuance by the Company from time to time of its debt securities to be issued in one or more series, including (i) a series of 3.150% Senior Notes due 2022 issued under a Second Supplemental Indenture dated as of September 24, 2012, and (ii) a series of 5.000% Senior Notes due 2021 issued under a Fifth Supplemental Indenture dated as of December 18, 2012.

B. Pursuant to that certain Sixth Supplemental Indenture, dated as of May 20, 2014 (the “**Sixth Supplemental Indenture**”), among the Company, Initial Parent Guarantor, Successor Parent Guarantor, SwissCo and the Trustee, Successor Parent Guarantor assumed Initial Parent Guarantor’s obligations as a guarantor and SwissCo was added as an additional guarantor of the Company’s obligations as provided in Article XV of the Base Indenture.

C. Successor Parent Guarantor and SwissCo intend to effectuate the following series of transactions in connection with a corporate restructuring: (i) SwissCo would sell, transfer or otherwise dispose of all or substantially all of its assets to Successor Parent Guarantor (the “**Asset Divestiture**”); (ii) Successor Parent Guarantor would assume SwissCo’s obligations in respect of its Guarantee as contemplated herein; and (iii) SwissCo may subsequently liquidate or dissolve.

D. The Indenture does not restrict (and therefore permits) the Asset Divestiture and ancillary transactions, Section 10.02 of the Base Indenture (which is applicable to SwissCo pursuant to Section 4 of the Sixth Supplemental Indenture, which provides that SwissCo agreed to be bound by all applicable provisions of the Base Indenture and perform all of the obligations and agreements of a guarantor under the Base Indenture) provides that, as a result of the Asset Divestiture, SwissCo shall be discharged from its obligations and covenants under the Indenture, the Securities and its Guarantee and permits the subsequent liquidation and dissolution of SwissCo, and Section 15.03 of the Base Indenture permits the release of SwissCo’s obligations in respect of its Guarantee.

E. Pursuant to Section 9.01(h) of the Base Indenture, the parties hereto are authorized and permitted to execute and deliver this Eighth Supplemental Indenture.

F. This Supplemental Indenture shall not result in a material modification of the Notes for purposes of compliance with the Foreign Account Tax Compliance Act (or FATCA).

G. Pursuant to Section 9.05 of the Base Indenture, the Company (i) hereby requests the Trustee to execute this Eighth Supplemental Indenture and (ii) hereby provides the Trustee with a copy of the Board Resolutions authorizing the execution of this Eighth Supplemental Indenture attached hereto as Exhibit A.

NOW, THEREFORE, for and in consideration of the foregoing premises, the parties hereto mutually covenant and agree as follows:

ARTICLE I

Section 1.1 Assumption of Guarantee by Parent; Release of SwissCo's Obligations.

Effective as of the consummation of the Asset Divestiture:

(a) Successor Parent Guarantor (i) expressly assumes all of SwissCo's obligations under its Guarantee and the due and punctual performance and observance of all of the other covenants and agreements of the Indenture to be performed or observed by SwissCo; and (ii) shall succeed to, and be substituted for, SwissCo, and may exercise every right and power of SwissCo, under the Indenture with the same effect as if Successor Parent Guarantor had been named as SwissCo under the Indenture; and

(b) all obligations and covenants of SwissCo under its Guarantee shall be automatically terminated, discharged and released and of no further force and effect.

ARTICLE II

MISCELLANEOUS

Section 2.1 Definitions.

Capitalized terms used but not defined in this Eighth Supplemental Indenture shall have the meanings ascribed thereto in the Base Indenture.

Section 2.2 Confirmation of Indenture.

The Base Indenture, as supplemented and amended by this Eighth Supplemental Indenture, is in all respects ratified and confirmed, and the Base Indenture, this Eighth Supplemental Indenture and all indentures supplemental thereto shall be read, taken and construed as one and the same instrument.

Section 2.3 Concerning the Trustee.

In carrying out the Trustee's responsibilities hereunder, the Trustee shall have all of the rights, protections, indemnities and immunities which it possesses under the Base Indenture. The

recitals contained in this Eighth Supplemental Indenture shall be taken as the statements of the Company, and the Trustee assumes no responsibility for their correctness. The Trustee shall not be responsible for and makes no representations as to (i) the validity or sufficiency of this Eighth Supplemental Indenture, (ii) the proper authorization hereof by each Guarantor and the Company by action or otherwise, (iii) the due execution hereof by each Guarantor and the Company or (iv) the consequences of any amendment herein provided for.

Section 2.4 Governing Law.

This Eighth Supplemental Indenture shall be deemed to be a contract made under the internal laws of the State of New York, and for all purposes shall be construed in accordance with the laws of said State without regard to conflicts of law principles (except for Sections 5-1401 and 5-1402 of the New York General Obligations Law) that would require the application of any other law. This Eighth Supplemental Indenture is subject to the provisions of the Trust Indenture Act of 1939 that are required to be part of this Eighth Supplemental Indenture and shall, to the extent applicable, be governed by such provisions. The application of articles 470-3 to 470-19 of the Luxembourg law on commercial companies dated 10 August 1915, as amended, to the Base Indenture is excluded.

Section 2.5 Separability.

In case any one or more of the provisions contained in this Eighth Supplemental Indenture shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Eighth Supplemental Indenture, but this Eighth Supplemental Indenture shall be construed as if such invalid or illegal or unenforceable provision had never been contained herein or therein.

Section 2.6 Counterparts.

This Eighth Supplemental Indenture may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute but one and the same instrument. The exchange of copies of this Eighth Supplemental Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Eighth Supplemental Indenture as to the parties hereto and may be used in lieu of the original Eighth Supplemental Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes. This Eighth Supplemental Indenture shall be valid, binding, and enforceable against a party when executed and delivered by an authorized individual on behalf of the party by means of (i) an original manual signature; (ii) a faxed, scanned, or photocopied manual signature, or (iii) any other electronic signature permitted by the federal Electronic Signatures in Global and National Commerce Act, state enactments of the Uniform Electronic Transactions Act, and/or any other relevant electronic signatures law, including any relevant provisions of the New York Uniform Commercial Code (collectively, “**Signature Law**”), in each case to the extent applicable. Each faxed, scanned, or photocopied manual signature, or other electronic signature, shall for all purposes have the same validity, legal effect, and admissibility in evidence as an original manual signature. Each party hereto shall be entitled to conclusively rely upon, and shall have no liability with respect to, any faxed, scanned, or photocopied manual signature, or other electronic signature, of any other party and shall have no duty to

investigate, confirm or otherwise verify the validity or authenticity thereof. For the avoidance of doubt, original manual signatures shall be used for execution or indorsement of writings when required under the UCC or other Signature Law due to the character or intended character of the writings.

Section 2.7 No Benefit.

Nothing in this Eighth Supplemental Indenture, express or implied, shall give to any Person other than the parties hereto and their successors or assigns, and the Holders of Securities issued under the Base Indenture, any benefit or legal or equitable rights, remedy or claim under this Eighth Supplemental Indenture or the Base Indenture.

Section 2.8 Amendments and Supplemental Indentures.

This Eighth Supplemental Indenture is subject to the provisions regarding supplemental indentures and amendments set forth in Article IX of the Base Indenture, as amended by this Eighth Supplemental Indenture.

Section 2.9 Legal, Valid and Binding Obligation.

The Guarantors and the Company hereby represent and warrant that, assuming the due authorization, execution and delivery of this Eighth Supplemental Indenture by the Trustee, this Eighth Supplemental Indenture is the legal, valid and binding obligation of the Guarantors and the Company enforceable against the Guarantors and the Company in accordance with its terms, subject to bankruptcy, insolvency, reorganization and other laws of general applicability relating to or affecting the enforcement of creditors' rights and to general equity principles.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this Eighth Supplemental Indenture to be duly executed as of the day and year first above written.

**PENTAIR FINANCE S.À R.L.,
as Issuer**

By: /s/ James C. Lucas
Name: James C. Lucas
Title: Manager

**PENTAIR PLC,
as Successor Parent Guarantor**

By: /s/ Andrew G. Smyth
Name: Andrew G. Smyth
Title: Authorized Representative

**PENTAIR INVESTMENTS SWITZERLAND GMBH,
as Guarantor**

By: /s/ Milena Rabstein-Kratzer
Name: Milena Rabstein-Kratzer
Title: Managing Officer

**WELLS FARGO BANK, NATIONAL ASSOCIATION,
as Trustee**

By: /s/ Stefan Victory
Name: Stefan Victory
Title: Vice President

EXHIBIT A

[See attached.]

PENTAIR FINANCE S.À R.L.,
(formerly known as PENTAIR FINANCE S.A.)
as Issuer

AND

PENTAIR PLC,
as Parent and Guarantor

AND

PENTAIR INVESTMENTS SWITZERLAND GMBH,
as Guarantor

AND

U.S. BANK NATIONAL ASSOCIATION,
as Trustee

SEVENTH SUPPLEMENTAL INDENTURE
Dated as of June 22, 2020

THIS SEVENTH SUPPLEMENTAL INDENTURE is dated as of June 22, 2020, among PENTAIR FINANCE S.À R.L. (formerly known as PENTAIR FINANCE S.A.), a Luxembourg private limited liability company (*société à responsabilité limitée*) with a registered office at 26, boulevard Royal, L-2449 Luxembourg, Luxembourg and registered with the Luxembourg Trade and Companies Register under number B 166305 (the “**Company**”), PENTAIR PLC, an Irish public limited company (“**Parent**”), PENTAIR INVESTMENTS SWITZERLAND GMBH, a Switzerland limited liability company (“**SwissCo**”; together with Parent, the “**Guarantors**” and each a “**Guarantor**”), and U.S. BANK NATIONAL ASSOCIATION, a national banking association, as trustee (the “**Trustee**”).

RECITALS

A. The Company, the Guarantors and the Trustee have heretofore executed and delivered an Indenture, dated as of September 16, 2015 (the “**Base Indenture**” and, as modified by supplemental indentures from time to time, the “**Indenture**”), providing for the issuance by the Company from time to time of its debt securities to be issued in one or more series, including (i) a series of 3.625% Senior Notes due 2020 issued under a Second Supplemental Indenture dated as of September 16, 2015, (ii) a series of 4.650% Senior Notes due 2025 issued under a Third Supplemental Indenture dated as of September 16, 2015 and (iii) a series of 4.500% Senior Notes due 2029 issued under a Sixth Supplemental Indenture dated as of June 21, 2019.

B. Parent and SwissCo intend to effectuate the following series of transactions in connection with a corporate restructuring: (i) SwissCo would sell, convey, transfer or otherwise dispose of all or substantially all of its assets to Parent (the “**Asset Divestiture**”); (ii) Parent would assume SwissCo’s obligations under the Guarantee in Article XV of the Base Indenture as contemplated herein; and (iii) SwissCo may subsequently liquidate or dissolve.

C. Sections 10.01, 10.02 and 15.03 of the Base Indenture, as applicable, permit the Asset Divestiture and ancillary transactions and the release of SwissCo’s obligations in respect of the Indenture, the Securities and the Guarantees.

D. Pursuant to Section 9.01(h) of the Base Indenture, the parties hereto are authorized and permitted to execute and deliver this Seventh Supplemental Indenture.

NOW, THEREFORE, for and in consideration of the foregoing premises, the parties hereto mutually covenant and agree as follows:

ARTICLE I

Section 1.1 Assumption of Guarantee by Parent; Release of SwissCo’s Obligations.

Effective as of the consummation of the Asset Divestiture:

(a) Parent (i) expressly assumes all of SwissCo’s obligations under its Guarantee in Article XV of the Base Indenture and the due and punctual performance and observance of all of the other covenants and agreements of the Indenture to be performed or observed by SwissCo; and (ii) shall succeed to, and be substituted for, SwissCo, and may exercise every right and power of SwissCo, under the Indenture with the same effect as if Parent had been named as SwissCo under the Indenture; and

(b) all obligations and covenants of SwissCo under the Indenture, the Securities and the Guarantees shall be automatically terminated, discharged and released and of no further force and effect.

ARTICLE II

MISCELLANEOUS

Section 2.1 Definitions.

Capitalized terms used but not defined in this Seventh Supplemental Indenture shall have the meanings ascribed thereto in the Base Indenture.

Section 2.2 Confirmation of Indenture.

The Base Indenture, as supplemented and amended by this Seventh Supplemental Indenture, is in all respects ratified and confirmed, and the Base Indenture, this Seventh Supplemental Indenture and all indentures supplemental thereto shall be read, taken and construed as one and the same instrument.

Section 2.3 Concerning the Trustee.

In carrying out the Trustee's responsibilities hereunder, the Trustee shall have all of the rights, protections and immunities which it possesses under the Base Indenture. The recitals contained in this Seventh Supplemental Indenture shall be taken as the statements of the Company, and the Trustee assumes no responsibility for their correctness. The Trustee shall not be responsible for and makes no representations as to (i) the validity or sufficiency of this Seventh Supplemental Indenture, (ii) the proper authorization hereof by each Guarantor and the Company by action or otherwise, (iii) the due execution hereof by each Guarantor and the Company or (iv) the consequences of any amendment herein provided for.

Section 2.4 Governing Law.

This Seventh Supplemental Indenture shall be deemed to be a contract made under the internal laws of the State of New York, and for all purposes shall be construed in accordance with the laws of said State without regard to conflicts of law principles (except for Sections 5-1401 and 5-1402 of the New York General Obligations Law) that would require the application of any other law. This Seventh Supplemental Indenture is subject to the provisions of the Trust Indenture Act of 1939 that are required to be part of this Seventh Supplemental Indenture and shall, to the extent applicable, be governed by such provisions. The application of articles 470-3 to 470-19 of the Luxembourg law on commercial companies dated 10 August 1915, as amended, to the Base Indenture is excluded.

Section 2.5 Separability.

In case any one or more of the provisions contained in this Seventh Supplemental Indenture shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Seventh Supplemental Indenture, but this Seventh Supplemental Indenture shall be construed as if such invalid or illegal or unenforceable provision had never been contained herein or therein.

Section 2.6 Counterparts.

This Seventh Supplemental Indenture may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute but one and the same instrument. The exchange of copies of this Seventh Supplemental Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Seventh Supplemental Indenture as to the parties hereto and may be used in lieu of the original Seventh Supplemental Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

Section 2.7 No Benefit.

Nothing in this Seventh Supplemental Indenture, express or implied, shall give to any Person other than the parties hereto and their successors or assigns, and the Holders of Securities issued under the Base Indenture, any benefit or legal or equitable rights, remedy or claim under this Seventh Supplemental Indenture or the Base Indenture.

Section 2.8 Amendments and Supplemental Indentures.

This Seventh Supplemental Indenture is subject to the provisions regarding supplemental indentures and amendments set forth in Article IX of the Base Indenture, as amended by this Seventh Supplemental Indenture.

Section 2.9 Legal, Valid and Binding Obligation.

The Guarantors and the Company hereby represent and warrant that, assuming the due authorization, execution and delivery of this Seventh Supplemental Indenture by the Trustee, this Seventh Supplemental Indenture is the legal, valid and binding obligation of the Guarantors and the Company enforceable against the Guarantors and the Company in accordance with its terms, subject to bankruptcy, insolvency, reorganization and other laws of general applicability relating to or affecting the enforcement of creditors' rights and to general equity principles.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this Seventh Supplemental Indenture to be duly executed as of the day and year first above written.

**PENTAIR FINANCE S.À R.L.,
as Issuer**

By: /s/ James C. Lucas
Name: James C. Lucas
Title: Manager

**PENTAIR PLC,
as Parent and Guarantor**

By: /s/ Andrew G. Smyth
Name: Andrew G. Smyth
Title: Authorized Representative

**PENTAIR INVESTMENTS SWITZERLAND GMBH,
as Guarantor**

By: /s/ Milena Rabstein-Kratzer
Name: Milena Rabstein-Kratzer
Title: Managing Officer

**U.S. BANK NATIONAL ASSOCIATION,
as Trustee**

By: /s/ Richard Prokosch
Name: Richard Prokosch
Title: Vice President

**List of Guarantors and Subsidiary Issuers of Guaranteed Securities
as of June 30, 2020**

The following is a list of guarantors of the 3.625% Senior Notes due 2020, 5.000% Senior Notes due 2021, 3.150% Senior Notes due 2022, 4.650% Senior Notes due 2025, and 4.500% Senior Notes due 2029 issued by Pentair Finance S.à r.l., which is a wholly-owned subsidiary of Pentair plc:

Name of Guarantor	Jurisdiction of Incorporation
Pentair plc	Ireland

Certification

I, John L. Stauch, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Pentair plc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 23, 2020

/s/ John L. Stauch

John L. Stauch

President and Chief Executive Officer

Certification

I, Robert P. Fishman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Pentair plc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 23, 2020

/s/ Robert P. Fishman

Robert P. Fishman

Executive Vice President, Chief Financial Officer and Chief Accounting Officer

**Certification of CEO Pursuant To
18 U.S.C. Section 1350,
As Adopted Pursuant To
Section 906 Of The Sarbanes-Oxley Act Of 2002**

In connection with the Quarterly Report of Pentair plc (the "Company") on Form 10-Q for the period ended June 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John L. Stauch, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that based on my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: July 23, 2020

/s/ John L. Stauch

John L. Stauch

President and Chief Executive Officer

**Certification of CFO Pursuant To
18 U.S.C. Section 1350,
As Adopted Pursuant To
Section 906 Of The Sarbanes-Oxley Act Of 2002**

In connection with the Quarterly Report of Pentair plc (the "Company") on Form 10-Q for the period ended June 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert P. Fishman, Executive Vice President, Chief Financial Officer and Chief Accounting Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that based on my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: July 23, 2020

/s/ Robert P. Fishman

Robert P. Fishman

Executive Vice President, Chief Financial Officer and Chief Accounting
Officer