

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, 2018

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 number)

Station Road, Longstanton, Cambridge, CB24 3DS, United Kingdom

(Address of principal executive offices)

43 London Wall, London, EC2M 5TF, United Kingdom

(Former address of principal executive offices)

Registrant's telephone number, including area code: 44-19-5426-2325

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§223.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes 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

(Do not check if a smaller reporting 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, 2018, 175,403,866 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)

<i>In millions, except per-share data</i>	Three months ended		Six months ended	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Net sales	\$ 780.6	\$ 754.0	\$ 1,513.2	\$ 1,437.3
Cost of goods sold	498.0	480.4	977.3	940.0
Gross profit	282.6	273.6	535.9	497.3
Selling, general and administrative	140.9	126.7	282.7	269.4
Research and development	19.1	17.7	37.9	36.8
Operating income	122.6	129.2	215.3	191.1
Other (income) expense:				
Loss on sale of business	0.9	—	6.2	—
Loss on early extinguishment of debt	17.1	101.4	17.1	101.4
Net interest expense	10.1	25.3	23.6	60.3
Other (income) expense	(4.2)	0.9	(3.8)	2.1
Income from continuing operations before income taxes	98.7	1.6	172.2	27.3
Provision for income taxes	20.8	5.0	35.9	18.0
Net income (loss) from continuing operations	77.9	(3.4)	136.3	9.3
(Loss) income from discontinued operations, net of tax	(36.4)	66.5	8.1	141.6
Gain from sale of discontinued operations, net of tax	—	200.6	—	200.6
Net income	\$ 41.5	\$ 263.7	\$ 144.4	\$ 351.5
Comprehensive income, net of tax				
Net income	\$ 41.5	\$ 263.7	\$ 144.4	\$ 351.5
Changes in cumulative translation adjustment (inclusive of divestiture of business reclassified to gain from sale of \$374.2 for the three and six months ended June 30, 2017)	22.8	392.6	25.2	468.3
Changes in market value of derivative financial instruments, net of tax	4.1	(0.9)	0.3	0.7
Comprehensive income	\$ 68.4	\$ 655.4	\$ 169.9	\$ 820.5
Earnings (loss) per ordinary share				
<i>Basic</i>				
Continuing operations	\$ 0.44	\$ (0.02)	\$ 0.77	\$ 0.05
Discontinued operations	(0.21)	1.47	0.04	1.88
Basic earnings per ordinary share	\$ 0.23	\$ 1.45	\$ 0.81	\$ 1.93
<i>Diluted</i>				
Continuing operations	\$ 0.44	\$ (0.02)	\$ 0.76	\$ 0.05
Discontinued operations	(0.21)	1.45	0.04	1.86
Diluted earnings per ordinary share	\$ 0.23	\$ 1.43	\$ 0.80	\$ 1.91
Weighted average ordinary shares outstanding				
Basic	176.9	181.7	178.1	181.9
Diluted	178.6	183.8	179.9	183.9
Cash dividends paid per ordinary share	\$ 0.35	\$ 0.345	\$ 0.70	\$ 0.69

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, 2018	December 31, 2017
Assets		
Current assets		
Cash and cash equivalents	\$ 78.7	\$ 86.3
Accounts and notes receivable, net of allowances of \$14.5 and \$14.2, respectively	422.1	483.1
Inventories	366.6	356.9
Other current assets	129.2	114.5
Current assets held for sale	—	708.0
Total current assets	996.6	1,748.8
Property, plant and equipment, net	270.6	279.8
Other assets		
Goodwill	2,088.8	2,112.8
Intangibles, net	296.5	321.8
Other non-current assets	153.5	180.9
Non-current assets held for sale	—	3,989.6
Total other assets	2,538.8	6,605.1
Total assets	\$ 3,806.0	\$ 8,633.7
Liabilities and Equity		
Current liabilities		
Accounts payable	\$ 275.1	\$ 321.5
Employee compensation and benefits	77.5	115.8
Other current liabilities	356.8	401.3
Current liabilities held for sale	—	360.8
Total current liabilities	709.4	1,199.4
Other liabilities		
Long-term debt	779.9	1,440.7
Pension and other post-retirement compensation and benefits	107.9	96.4
Deferred tax liabilities	118.4	108.6
Other non-current liabilities	201.5	213.8
Non-current liabilities held for sale	—	537.0
Total liabilities	1,917.1	3,595.9
Equity		
Ordinary shares \$0.01 par value, 426.0 authorized, 175.4 and 180.3 issued at June 30, 2018 and December 31, 2017, respectively	1.8	1.8
Additional paid-in capital	2,077.1	2,797.7
Retained earnings	27.9	2,481.7
Accumulated other comprehensive loss	(217.9)	(243.4)
Total equity	1,888.9	5,037.8
Total liabilities and equity	\$ 3,806.0	\$ 8,633.7

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, 2018	June 30, 2017
Operating activities		
Net income	\$ 144.4	\$ 351.5
Income from discontinued operations, net of tax	(8.1)	(141.6)
Gain from sale of discontinued operations, net of tax	—	(200.6)
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	(5.8)	(0.6)
Depreciation	24.9	25.3
Amortization	18.4	18.0
Deferred income taxes	10.1	(8.1)
Loss on sale of business	6.2	—
Share-based compensation	11.3	26.0
Loss on early extinguishment of debt	17.1	101.4
Changes in assets and liabilities, net of effects of business acquisitions		
Accounts and notes receivable	52.7	49.8
Inventories	(15.4)	(3.5)
Other current assets	(10.8)	0.4
Accounts payable	(45.9)	(40.2)
Employee compensation and benefits	(32.2)	(25.6)
Other current liabilities	3.5	(40.9)
Other non-current assets and liabilities	7.4	(26.4)
Net cash provided by (used for) operating activities of continuing operations	177.8	84.9
Net cash provided by (used for) operating activities of discontinued operations	(5.9)	70.4
Net cash provided by (used for) operating activities	171.9	155.3
Investing activities		
Capital expenditures	(20.3)	(18.7)
Proceeds from sale of property and equipment	(0.5)	—
(Payments due to) proceeds from the sale of businesses, net	(12.8)	2,765.6
Acquisitions, net of cash acquired	(0.9)	(45.9)
Net cash provided by (used for) investing activities of continuing operations	(34.5)	2,701.0
Net cash provided by (used for) investing activities of discontinued operations	(7.1)	(35.2)
Net cash provided by (used for) investing activities	(41.6)	2,665.8
Financing activities		
Net receipts (repayments) of short-term borrowings	—	(0.5)
Net receipts (repayments) of commercial paper and revolving long-term debt	30.2	(975.5)
Repayments of long-term debt	(675.1)	(1,659.3)
Premium paid on early extinguishment of debt	(16.0)	(94.9)
Transfer of cash to nVent	(74.2)	—
Distribution of cash from nVent	993.6	—
Shares issued to employees, net of shares withheld	6.3	29.5
Repurchases of ordinary shares	(300.0)	(100.0)
Dividends paid	(125.9)	(126.1)
Net cash provided by (used for) financing activities	(161.1)	(2,926.8)
Change in cash held for sale	27.0	(14.5)
Effect of exchange rate changes on cash and cash equivalents	(3.8)	45.0
Change in cash and cash equivalents	(7.6)	(75.2)
Cash and cash equivalents, beginning of period	86.3	216.9
Cash and cash equivalents, end of period	\$ 78.7	\$ 141.7

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, 2017	180.3	\$ 1.8	\$ 2,797.7	\$ 2,481.7	\$ (243.4)	\$ 5,037.8
Net income	—	—	—	144.4	—	144.4
Cumulative effect of accounting changes	—	—	—	(214.0)	—	(214.0)
Other comprehensive income, net of tax	—	—	—	—	73.4	73.4
Distribution to nVent	—	—	(438.2)	(2,290.7)	(47.9)	(2,776.8)
Dividends declared	—	—	—	(93.5)	—	(93.5)
Share repurchase	(5.5)	—	(300.0)	—	—	(300.0)
Exercise of options, net of shares tendered for payment	0.4	—	12.1	—	—	12.1
Issuance of restricted shares, net of cancellations	0.2	—	—	—	—	—
Shares surrendered by employees to pay taxes	—	—	(5.8)	—	—	(5.8)
Share-based compensation	—	—	11.3	—	—	11.3
Balance - June 30, 2018	175.4	\$ 1.8	\$ 2,077.1	\$ 27.9	\$ (217.9)	\$ 1,888.9

<i>In millions</i>	Ordinary shares		Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Total
	Number	Amount				
Balance - December 31, 2016	181.8	\$ 1.8	\$ 2,920.8	\$ 2,068.1	\$ (736.3)	\$ 4,254.4
Net income	—	—	—	351.5	—	351.5
Other comprehensive income, net of tax	—	—	—	—	469.0	469.0
Dividends declared	—	—	—	(126.9)	—	(126.9)
Share repurchase	(1.5)	—	(100.0)	—	—	(100.0)
Exercise of options, net of shares tendered for payment	1.0	—	36.5	—	—	36.5
Issuance of restricted shares, net of cancellations	0.3	—	—	—	—	—
Shares surrendered by employees to pay taxes	(0.1)	—	(7.0)	—	—	(7.0)
Share-based compensation	—	—	26.0	—	—	26.0
Balance - June 30, 2017	181.5	\$ 1.8	\$ 2,876.3	\$ 2,292.7	\$ (267.3)	\$ 4,903.5

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, 2017.

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.

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

Electrical separation

On April 30, 2018, Pentair completed the previously announced separation of its Electrical business from the rest of Pentair (the “Separation”) by means of a dividend in specie of the Electrical business, which was effected by the transfer of the Electrical business from Pentair to nVent Electric plc (“nVent”) and the issuance by nVent of ordinary shares directly to Pentair shareholders (the “Distribution”). On May 1, 2018, following the Separation and Distribution, nVent became an independent publicly traded company, trading on the New York Stock Exchange under the symbol “NVT.”

The Company did not retain any equity interest in nVent. nVent’s historical financial results are reflected in the Company’s condensed consolidated financial statements as a discontinued operation. Refer to Note 3 for further discussion.

In connection with the Distribution of nVent, the Company and nVent entered into several agreements covering administrative and tax matters to provide or obtain services on a transitional basis, as needed, for varying periods after the Distribution. The administrative agreements cover various services such as information technology, human resources and finance. The Company expects all services to be substantially complete within one year after the Distribution.

Adoption of new accounting standards

On January 1, 2018, we adopted Accounting Standards Update (“ASU”) No. 2017-07, “Retirement Benefits-Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.” As a result of the adoption, the interest cost, expected return on plan assets and net actuarial gain/loss components of net periodic pension and post-retirement benefit cost have been reclassified from *Selling, general and administrative expense* to *Other expense*. Only the service cost component remains in *Operating income* and will be eligible for capitalization in assets on a prospective basis.

The effect of the retrospective presentation change related to the net periodic cost of our defined benefit pension and other post-retirement plans on our Condensed Consolidated Statements of Operations and Comprehensive Income was a reclassification of \$1.4 million and \$2.7 million for the three and six months ended June 30, 2017, respectively, from *Selling, general and administrative expense* to *Other expense*.

On January 1, 2018, we adopted ASU No. 2016-16, “Accounting for Income Taxes: Intra-Entity Asset Transfers of Assets Other than Inventory.” The ASU requires the tax effects of all intra-entity sales of assets other than inventory to be recognized in the period in which the transaction occurs. The adoption resulted in a \$215.8 million cumulative-effect adjustment (of which \$174.6 million related to nVent) recorded in retained earnings as of the beginning of 2018. The adjustment reflects a \$254.3 million reduction of a prepaid long term tax asset, partially offset by the establishment of \$38.5 million of deferred tax assets.

On January 1, 2018, we adopted ASU No. 2014-09, “Revenue from Contracts with Customers” and the related amendments (“ASC 606” or “the new revenue standard”) using the modified retrospective method. The cumulative impact to our retained earnings at January 1, 2018 was not material. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. We expect the impact of the adoption of the new standard to be immaterial to our net income on an ongoing basis.

A majority of our net sales continue to be recognized when products are shipped from our manufacturing facilities or delivery has occurred, depending on terms of the sale. Under the new revenue standard, timing for recognition of certain revenue may be

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

accelerated such that a portion of revenue will be recognized prior to shipment or delivery dependent upon contract-specific terms.

The cumulative effect of the changes made to our January 1, 2018 Condensed Consolidated Balance Sheet from the modified retrospective adoption of ASU 2016-16 and ASU 2014-09 was as follows:

Condensed Consolidated Balance Sheets

<i>In millions</i>	Balance at December 31, 2017	Adjustments due to ASU 2016-16	Adjustments due to ASU 2014-09	Balance at January 1, 2018
<u>Assets</u>				
Accounts and notes receivable, net	\$ 483.1	\$ —	\$ 2.7	\$ 485.8
Inventories	356.9	—	(1.6)	355.3
Other current assets	114.5	—	1.6	116.1
Current assets held for sale	708.0	—	3.8	711.8
Other non-current assets	180.9	(44.9)	—	136.0
Non-current assets held for sale	3,989.6	(201.6)	—	3,788.0
<u>Liabilities</u>				
Other current liabilities	401.3	—	2.7	404.0
Deferred tax liabilities	108.6	(3.7)	0.1	105.0
Non-current liabilities held for sale	537.0	(27.0)	0.4	510.4
<u>Equity</u>				
Retained Earnings	2,481.7	(215.8)	1.8	2,267.7

New accounting standards issued but not yet adopted

In February 2016, the Financial Accounting Standards Board issued ASU 2016-02, “Leases” (“the new lease standard” or “ASC 842”), which requires an entity to recognize both assets and liabilities arising from financing and operating leases, along with additional qualitative and quantitative disclosures. The new lease standard requirements are effective for annual reporting periods beginning after December 15, 2018, including interim periods within that reporting period, and early adoption is permitted. The Company has begun evaluating the new lease standard, including the review and implementation of the necessary changes to our existing processes and systems that will be required to implement the new lease standard. While we are unable to quantify the impact at this time, we expect the primary impact upon adoption will be the recognition, on a discounted basis, of our minimum commitments under noncancelable operating leases on our consolidated balance sheets resulting in the recording of right of use assets and lease obligations. We currently do not expect ASC 842 to have a material effect on either our condensed consolidated statements of operations and comprehensive income or condensed consolidated statements of cash flows. We plan to adopt ASC 842 in the first quarter of 2019.

2. Revenue***Revenue recognition***

Revenue is recognized when control of the promised goods or services are transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for transferring those goods or providing services. We account for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

When determining whether the customer has obtained control of the goods or services, we consider any future performance obligations. Generally, there is no post-shipment obligation on product sold other than warranty obligations in the normal and ordinary course of business. In the event significant post-shipment obligations were to exist, revenue recognition would be deferred until Pentair has substantially accomplished what it must do to be entitled to the benefits represented by the revenues.

Pentair plc and Subsidiaries

Notes to condensed consolidated financial statements (unaudited)

Performance obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account in ASC 606. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The majority of our contracts have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts and, therefore, not distinct. For contracts with multiple performance obligations, standalone selling price is generally readily observable.

Our performance obligations are satisfied at a point in time or over time as work progresses. Revenue from goods and services transferred to customers at a point in time accounted for 93.3% and 93.5% of our revenue for the three months ended June 30, 2018 and 2017, respectively, and 93.1% and 93.6% of our revenue for the six months ended June 30, 2018 and 2017, respectively. Revenue on these contracts is recognized when obligations under the terms of the contract with our customer are satisfied; generally this occurs with the transfer of control upon shipment.

Revenue from products and services transferred to customers over time accounted for 6.7% and 6.5% of our revenue for the three months ended June 30, 2018 and 2017, respectively, and 6.9% and 6.4% of our revenue for the six months ended June 30, 2018 and 2017, respectively. For the majority of our revenue recognized over time, we use an input measure to determine progress towards completion. Under this method, sales and gross profit are recognized as work is performed generally based on the relationship between the actual costs incurred and the total estimated costs at completion ("the cost-to-cost method") or based on efforts for measuring progress towards completion in situations in which this approach is more representative of the progress on the contract than the cost-to-cost method. Contract costs include labor, material, overhead and, when appropriate, general and administrative expenses. Changes to the original estimates may be required during the life of the contract and such estimates are reviewed on a regular basis. Sales and gross profit are adjusted using the cumulative catch-up method for revisions in estimated total contract costs. These reviews have not resulted in adjustments that were significant to our results of operations. For performance obligations related to long term contracts, when estimates of total costs to be incurred on a performance obligation exceed total estimates of revenue to be earned, a provision for the entire loss on the performance obligation is recognized in the period the loss is determined.

On June 30, 2018, we had \$45.8 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.

Sales returns

The right of return may exist explicitly or implicitly with our customers. Our return policy allows for customer returns only upon our authorization. Goods returned must be product we continue to market and must be in salable condition. When the right of return exists, we adjust the transaction price for the estimated effect of returns. We estimate the expected returns based on historical sales levels, the timing and magnitude of historical sales return levels as a percent of sales, type of product, type of customer and a projection of this experience into the future.

Pricing and sales incentives

Our sales contracts may give customers the option to purchase additional goods or services priced at a discount. Options to acquire additional goods or services at a discount can come in many forms, such as customer programs and incentive offerings including pricing arrangements, promotions and other volume-based incentives.

We reduce the transaction price for certain customer programs and incentive offerings including pricing arrangements, promotions and other volume-based incentives that represent variable consideration. Sales incentives given to our customers are recorded using either the expected value method or most likely amount approach for estimating the amount of consideration to which Pentair shall be entitled. The expected value is the sum of probability-weighted amounts in a range of possible consideration amounts. An expected value is an appropriate estimate of the amount of variable consideration when there are a large number of contracts with similar characteristics. The most likely amount is the single most likely amount in a range of possible consideration amounts (that is, the single most likely outcome of the contract). The most likely amount is an appropriate estimate of the amount of variable consideration if the contract has limited possible outcomes (for example, an entity either achieves a performance bonus or does not).

Pricing is established at or prior to the time of sale with our customers and we record sales at the agreed-upon net selling price. However, one of our businesses allows customers to apply for a refund of a percentage of the original purchase price if they can demonstrate sales to a qualifying end customer. We use the expected value method to estimate the anticipated refund to be paid

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

based on historical experience and reduce sales for the probable cost of the discount. The cost of these refunds is recorded as a reduction of the transaction price.

Volume-based incentives involve rebates that are negotiated at or prior to the time of sale with the customer and are redeemable only if the customer achieves a specified cumulative level of sales or sales increase. Under these incentive programs, at the time of sale, we reforecast the most likely amount of the rebate to be paid based on forecasted sales levels. These forecasts are updated at least quarterly for each customer and the transaction price is reduced for the anticipated cost of the rebate. If the forecasted sales for a customer changes, the accrual for rebates is adjusted to reflect the new amount of rebates expected to be earned by the customer.

Shipping and handling costs

Amounts billed to customers for shipping and handling activities after the customer obtains control are treated as a promised service performance obligation and recorded in *Net sales* in the accompanying Condensed Consolidated Statements of Operations and Comprehensive Income. Shipping and handling costs incurred by Pentair for the delivery of goods to customers are considered a cost to fulfill the contract and are included in *Cost of goods sold* in the accompanying Condensed Consolidated Statements of Operations and Comprehensive Income.

Contract assets and liabilities

Contract assets consist of unbilled amounts resulting from sales under long-term contracts when the cost-to-cost method of revenue recognition is utilized and revenue recognized exceeds the amount billed to the customer, such as when the customer retains a small portion of the contract price until completion of the contract. We typically receive interim payments on sales under long-term contracts as work progresses, although for some contracts, we may be entitled to receive an advance payment. Contract liabilities consist of advanced payments, billings in excess of costs incurred and deferred revenue.

Contract assets are recorded within *Other current assets* and contract liabilities are recorded within *Other current liabilities* in the Condensed Consolidated Balance Sheets.

Contract assets and liabilities consisted of the following:

<i>In millions</i>	June 30, 2018	December 31, 2017	\$ Change	% Change
Contract assets	\$ 49.3	\$ 51.5	\$ (2.2)	(4.3)%
Contract liabilities	23.7	29.1	(5.4)	(18.6)%
Net contract assets	\$ 25.6	\$ 22.4	\$ 3.2	14.3 %

The \$3.2 million increase in net contract assets from December 31, 2017 to June 30, 2018 was primarily the result of timing of milestone payments. Approximately 60% of our contract liabilities at December 31, 2017 were recognized in revenue in the first half of 2018. There were no impairment losses recognized on our contract assets for the three and six months ended June 30, 2018.

Practical expedients and exemptions

We generally expense incremental costs of obtaining a contract when incurred because the amortization period would be less than one year. These costs primarily relate to sales commissions and are recorded in *Selling, general and administrative expense* in the Condensed Consolidated Statements of Operations and Comprehensive Income.

We do not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less. Further, we do not adjust the promised amount of consideration for the effects of a significant financing component if we expect, at contract inception, that the period between when we transfer a promised good or service to a customer and when the customer pays for that good or service will be one year or less.

Revenue by category

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

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

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, 2018	June 30, 2017	June 30, 2018	June 30, 2017
U.S.	\$ 504.2	\$ 469.3	\$ 956.6	\$ 900.4
Western Europe	103.8	99.6	214.1	194.9
Developing ⁽¹⁾	115.4	123.7	228.4	228.7
Other Developed ⁽²⁾	57.2	61.4	114.1	113.3
Consolidated net sales	\$ 780.6	\$ 754.0	\$ 1,513.2	\$ 1,437.3

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

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

Vertical market net sales information was as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Residential	\$ 437.5	\$ 421.8	\$ 849.7	\$ 809.6
Commercial	167.8	160.5	319.6	305.2
Industrial	175.3	171.7	343.9	322.5
Consolidated net sales	\$ 780.6	\$ 754.0	\$ 1,513.2	\$ 1,437.3

3. Discontinued Operations

Electrical separation

On April 30, 2018, the Company completed the previously announced separation of the Electrical business from the rest of Pentair by means of a dividend in specie of the Electrical business, which was effected by the transfer of the Electrical business from Pentair to nVent and the issuance by nVent of nVent ordinary shares directly to Pentair shareholders. We did not retain an equity interest in nVent.

The results of the Electrical business have been presented as discontinued operations and the related assets and liabilities were reclassified as held for sale for all periods presented. The Electrical business had been previously disclosed as a stand-alone reporting segment. Separation costs related to the Separation and Distribution were \$55.3 million and \$7.6 million for the three months ended June 30, 2018 and 2017, respectively, and \$79.9 million and \$7.6 million for the six months ended June 30, 2018 and 2017, respectively. These costs are reported in discontinued operations as they represent a cost directly related to the Separation and Distribution and were included within *(Loss) income from discontinued operations, net of tax* presented below.

Sale of Valves & Controls

On April 28, 2017, we completed the sale of the Valves & Controls business to Emerson Electric Co. for \$3.15 billion in cash. The sale resulted in a gain of \$181.1 million, net of tax. The results of the Valves & Controls business have been presented as discontinued operations. The Valves & Controls business was previously disclosed as a stand-alone reporting segment. Transaction costs of \$42.5 million and \$53.7 million related to the sale of Valves & Controls were incurred during the three and six months ended June 30, 2017, respectively, and were recorded within *Gain from sale of discontinued operations, net of tax* presented below.

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

Operating results of discontinued operations are summarized below:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Net sales	\$ 155.0	\$ 606.9	\$ 693.9	\$ 1,465.7
Cost of goods sold	93.8	375.4	424.0	947.0
Gross profit	61.2	231.5	269.9	518.7
Selling, general and administrative	93.1	136.5	231.0	324.9
Research and development	3.4	12.5	14.6	27.6
Operating (loss) income	\$ (35.3)	\$ 82.5	\$ 24.3	\$ 166.2
(Loss) income from discontinued operations before income taxes	\$ (37.9)	\$ 81.7	\$ 19.8	\$ 165.3
Income tax (benefit) provision	(1.5)	15.2	11.7	23.7
(Loss) income from discontinued operations, net of tax	\$ (36.4)	\$ 66.5	\$ 8.1	\$ 141.6
Gain from sale of discontinued operations before income taxes	\$ —	\$ 203.0	\$ —	\$ 203.0
Provision for income taxes	—	2.4	—	2.4
Gain from sale of discontinued operations, net of tax	\$ —	\$ 200.6	\$ —	\$ 200.6

The carrying amounts of major classes of assets and liabilities that were classified as held for sale on the Condensed Consolidated Balance Sheets were as follows:

<i>In millions</i>	December 31, 2017
Cash and cash equivalents	\$ 27.0
Accounts and notes receivable, net	348.5
Inventories	224.1
Other current assets	108.4
Current assets held for sale	\$ 708.0
Property, plant and equipment, net	\$ 265.8
Goodwill	2,238.2
Intangibles, net	1,236.6
Other non-current assets	249.0
Non-current assets held for sale	\$ 3,989.6
Accounts payable	\$ 174.1
Employee compensation and benefits	70.8
Other current liabilities	115.9
Current liabilities held for sale	\$ 360.8
Pension and other post-retirement compensation and benefits	\$ 189.2
Deferred tax liabilities	286.2
Other non-current liabilities	61.6
Non-current liabilities held for sale	\$ 537.0

Pentair plc and Subsidiaries

Notes to condensed consolidated financial statements (unaudited)

4. Share Plans

Total share-based compensation expense for the three and six months ended June 30, 2018 and 2017 was as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Restricted stock units	\$ 1.9	\$ 5.5	\$ 4.3	\$ 11.3
Stock options	1.0	2.0	2.2	6.5
Performance share units	2.4	2.1	4.8	8.2
Total share-based compensation expense	\$ 5.3	\$ 9.6	\$ 11.3	\$ 26.0

Of the total share-based compensation expense noted above, \$1.3 million and \$1.9 million for the three months ended June 30, 2018 and 2017, respectively, and \$3.4 million and \$4.3 million for the six months ended June 30, 2018 and 2017, respectively, was reported as part of *(Loss) income from discontinued operations, net of tax*.

In May 2018, we issued our annual share-based compensation grants under the Pentair plc 2012 Stock and Incentive Plan to eligible employees. The total number of awards issued was approximately 0.8 million, of which 0.2 million were restricted stock units (“RSUs”), 0.5 million were stock options and 0.1 million were performance share units (“PSUs”). The weighted-average grant date fair value of the restricted stock units, stock options and performance share units issued was \$45.42, \$10.92, and \$45.42, respectively.

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:

	2018 Annual Grant
Risk-free interest rate	2.58%
Expected dividend yield	1.56%
Expected share price volatility	24.8%
Expected term (years)	6.1

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.

Electrical separation

In connection with the Separation and Distribution, the Company adjusted its outstanding equity awards on May 1, 2018 in accordance with the Employee Matters Agreement between Pentair and nVent. The outstanding awards will continue to vest over the original vesting period, which is generally three years from the grant date.

The restricted stock units, performance share units, and stock option awards issued before May 9, 2017 (the date of Pentair’s announcement of intention to separate its Water and Electrical businesses) were converted into awards of both Pentair and nVent regardless of which company the award holder was employed by immediately after the Separation. These awards were converted as follows:

- *Restricted stock units*: For every unvested Pentair RSU award held, the holder received one nVent RSU.
- *Performance share units*: Pentair PSUs were converted to Pentair RSUs immediately after the Distribution. The PSUs granted in 2016 were converted at rate of 125% of target and the PSUs granted in 2017 were converted at a rate of

Pentair plc and Subsidiaries

Notes to condensed consolidated financial statements (unaudited)

100% of target. For every converted RSU, the shareholder also received one nVent RSU. The converted RSUs retain the original vesting schedule of the awarded PSUs.

- *Stock options:* Every holder of unexercised (vested and unvested) Pentair stock options received both adjusted stock options of Pentair and stock options of nVent, with the number of underlying shares and the exercise price adjusted accordingly to preserve the overall intrinsic value of the awards. The number of Pentair stock options was converted based upon the ratio of Pentair's pre-Distribution stock price divided by the sum of the Pentair and nVent post-Distribution closing prices. The exercise price for the converted Pentair stock options was adjusted based on the Pentair post-Distribution closing price divided by the Pentair pre-Distribution closing price.

The number of new nVent stock options awarded is the same as the converted number of Pentair stock options calculated as described above. The exercise price for the new nVent stock options was calculated based on nVent's post-Distribution closing price divided by the Pentair pre-Distribution closing price.

Generally, unvested awards issued after May 9, 2017 were converted to awards of the company that the shareholder was employed by immediately after the Separation, with adjustments to the number of underlying shares as appropriate to preserve the intrinsic value of such awards immediately prior to the Distribution. The adjustment of the underlying shares was based on the ratio of Pentair's pre-Distribution stock price divided by the post-Distribution closing price of the respective company's ordinary shares. The exercise prices of the stock options were converted using the inverse ratio in a manner designed to preserve the intrinsic value of such awards.

5. Restructuring

During the six months ended June 30, 2018 and the year ended December 31, 2017, we initiated and continued execution of certain business restructuring initiatives aimed at reducing our fixed cost structure and realigning our business. Initiatives during the six months ended June 30, 2018 included the reduction in hourly and salaried headcount of 250 employees, which included 25 in Aquatic Systems, 100 in Filtration Solutions, and 125 in Flow Technologies. Initiatives during the year ended December 31, 2017 included the reduction in hourly and salaried headcount of approximately 250 employees, which included 50 in Aquatic Systems, 125 in Filtration Solutions and 75 in Flow Technologies.

Restructuring related costs included in *Selling, general and administrative* expenses in the Condensed Consolidated Statements of Operations and Comprehensive Income included costs for severance and other restructuring costs as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Severance and related costs	\$ 4.6	\$ 5.9	\$ 10.0	\$ 17.4
Other	20.4	—	20.6	0.1
Total restructuring costs	\$ 25.0	\$ 5.9	\$ 30.6	\$ 17.5

Other restructuring costs primarily consist of asset impairment and various contract termination costs.

Restructuring costs by reportable segment were as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Aquatic Systems	\$ 1.2	\$ —	\$ 3.0	\$ 1.6
Filtration Solutions	11.5	5.3	13.5	6.7
Flow Technologies	6.3	0.5	8.0	1.9
Other	6.0	0.1	6.1	7.3
Consolidated	\$ 25.0	\$ 5.9	\$ 30.6	\$ 17.5

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Notes to condensed consolidated financial statements (unaudited)

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, 2018:

<i>In millions</i>	June 30, 2018
Beginning balance	\$ 34.5
Costs incurred	10.0
Cash payments and other	(11.5)
Ending balance	\$ 33.0

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, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Net income	\$ 41.5	\$ 263.7	\$ 144.4	\$ 351.5
Net income from continuing operations	\$ 77.9	\$ (3.4)	\$ 136.3	\$ 9.3
Weighted average ordinary shares outstanding				
Basic	176.9	181.7	178.1	181.9
Dilutive impact of stock options, restricted stock units and performance share units	1.7	2.1	1.8	2.0
Diluted	178.6	183.8	179.9	183.9
Earnings (loss) per ordinary share				
Basic				
Continuing operations	\$ 0.44	\$ (0.02)	\$ 0.77	\$ 0.05
Discontinued operations	(0.21)	1.47	0.04	1.88
Basic earnings per ordinary share	\$ 0.23	\$ 1.45	\$ 0.81	\$ 1.93
Diluted				
Continuing operations	\$ 0.44	\$ (0.02)	\$ 0.76	\$ 0.05
Discontinued operations	(0.21)	1.45	0.04	1.86
Diluted earnings per ordinary share	\$ 0.23	\$ 1.43	\$ 0.80	\$ 1.91
Anti-dilutive stock options excluded from the calculation of diluted earnings per share	0.7	1.7	0.5	1.9

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

<i>In millions</i>	June 30, 2018	December 31, 2017
Inventories		
Raw materials and supplies	\$ 198.3	\$ 190.8
Work-in-process	62.9	57.9
Finished goods	105.4	108.2
Total inventories	\$ 366.6	\$ 356.9
Other current assets		
Cost in excess of billings	\$ 49.3	\$ 51.5
Prepaid expenses	56.3	51.4
Prepaid income taxes	14.0	7.8
Other current assets	9.6	3.8
Total other current assets	\$ 129.2	\$ 114.5
Property, plant and equipment, net		
Land and land improvements	\$ 33.9	\$ 33.5
Buildings and leasehold improvements	175.4	184.3
Machinery and equipment	607.0	609.6
Construction in progress	30.4	23.7
Total property, plant and equipment	846.7	851.1
Accumulated depreciation and amortization	576.1	571.3
Total property, plant and equipment, net	\$ 270.6	\$ 279.8
Other non-current assets		
Prepaid income taxes	\$ —	\$ 52.8
Deferred income taxes	29.9	29.0
Deferred compensation plan assets	24.9	23.2
Other non-current assets	98.7	75.9
Total other non-current assets	\$ 153.5	\$ 180.9
Other current liabilities		
Dividends payable	\$ 30.7	\$ 63.1
Accrued warranty	42.7	38.1
Accrued rebates	62.6	49.8
Billings in excess of cost	19.1	20.1
Income taxes payable	10.7	39.7
Accrued restructuring	33.0	34.5
Other current liabilities	158.0	156.0
Total other current liabilities	\$ 356.8	\$ 401.3
Other non-current liabilities		
Income taxes payable	\$ 50.9	\$ 61.3
Self-insurance liabilities	54.8	48.3
Deferred compensation plan liabilities	24.9	23.2
Foreign currency contract liabilities	39.8	47.2
Other non-current liabilities	31.1	33.8
Total other non-current liabilities	\$ 201.5	\$ 213.8

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 segment were as follows:

<i>In millions</i>	December 31, 2017	Foreign currency translation/other	June 30, 2018
Aquatic Systems	\$ 973.1	\$ 4.7	\$ 977.8
Filtration Solutions	472.1	(25.1)	447.0
Flow Technologies	667.6	(3.6)	664.0
Total goodwill	\$ 2,112.8	\$ (24.0)	\$ 2,088.8

Identifiable intangible assets consisted of the following:

<i>In millions</i>	June 30, 2018			December 31, 2017		
	Cost	Accumulated amortization	Net	Cost	Accumulated amortization	Net
Definite-life intangibles						
Customer relationships	\$ 351.2	\$ (237.7)	\$ 113.5	\$ 360.9	\$ (229.9)	\$ 131.0
Trade names	1.5	(1.5)	—	1.5	(1.4)	0.1
Proprietary technology and patents	115.4	(93.0)	22.4	117.0	(89.3)	27.7
Total definite-life intangibles	468.1	(332.2)	135.9	479.4	(320.6)	158.8
Indefinite-life intangibles						
Trade names	160.6	—	160.6	163.0	—	163.0
Total intangibles	\$ 628.7	\$ (332.2)	\$ 296.5	\$ 642.4	\$ (320.6)	\$ 321.8

Identifiable intangible asset amortization expense was \$9.1 million and \$9.3 million for the three months ended June 30, 2018 and 2017, respectively, and \$18.4 million and \$18.0 million for the six months ended June 30, 2018 and 2017, respectively.

Estimated future amortization expense for identifiable intangible assets during the remainder of 2018 and the next five years is as follows:

<i>In millions</i>	Q3-Q4					
	2018	2019	2020	2021	2022	2023
Estimated amortization expense	\$ 16.6	\$ 27.8	\$ 22.8	\$ 17.6	\$ 10.3	\$ 7.9

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, 2018	Maturity Year	June 30, 2018	December 31, 2017
Commercial paper	2.801%	2023	\$ 78.0	\$ 34.0
Revolving credit facilities	3.290%	2023	14.6	28.4
Senior notes - fixed rate ⁽¹⁾	2.900%	2018	—	255.3
Senior notes - fixed rate ⁽¹⁾	2.650%	2019	250.0	250.0
Senior notes - fixed rate - Euro ⁽¹⁾	2.450%	2019	157.9	594.4
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
Unamortized debt issuance costs and discounts	N/A	N/A	(6.0)	(6.8)
Long-term debt			\$ 779.9	\$ 1,440.7

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

On April 25, 2018, Pentair, Pentair Investments Switzerland GmbH (“PISG”), Pentair Finance S.à r.l. (“PFSA”) and Pentair, Inc. entered into a credit agreement, providing for a five-year \$800.0 million senior unsecured revolving credit facility (the “Senior Credit Facility”), with Pentair and PISG as guarantors and PFSA and Pentair, Inc. as borrowers. The Senior Credit Facility replaced PFSA’s existing credit facility under that certain Amended and Restated Credit Agreement, dated as of October 3, 2014. PFSA has the option to request to increase the Senior Credit Facility in an aggregate amount of up to \$300.0 million, subject to customary conditions, including the commitment of the participating lenders. 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.

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 \$78.0 million of commercial paper outstanding as of June 30, 2018 and \$34.0 million as of December 31, 2017, 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.

Our debt agreements contain certain financial covenants, 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 its 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, 2018, we were in compliance with all financial covenants in our debt agreements.

Total availability under the Senior Credit Facility was \$707.4 million as of June 30, 2018.

In addition to the Senior Credit Facility, we have various other credit facilities with an aggregate availability of \$24.6 million, of which there were no outstanding borrowings at June 30, 2018. Borrowings under these credit facilities bear interest at variable rates.

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

In June 2018, we used the \$993.6 million of cash received from nVent as a result of the Distribution to pay down commercial paper and revolving credit facilities, redeem the remaining \$255.3 million aggregate principal of our 2.9% fixed rate senior notes due 2018 and complete a cash tender offer in the amount of €363.4 million aggregate principal of our 2.45% senior notes due 2019. All costs associated with the repurchases of debt were recorded as a *Loss on the early extinguishment of debt*, including \$16.0 million premium paid on early extinguishment and \$1.1 million of unamortized deferred financing costs.

Debt outstanding, excluding unamortized issuance costs and discounts, at June 30, 2018 matures on a calendar year basis as follows:

<i>In millions</i>	Q3-Q4								Total
	2018	2019	2020	2021	2022	2023	Thereafter		
Contractual debt obligation maturities	\$ —	\$ 407.9	\$ 74.0	\$ 103.8	\$ 88.3	\$ 92.6	\$ 19.3	\$ 785.9	

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, 2018 and December 31, 2017, we had outstanding foreign currency derivative contracts with gross national U.S. dollar equivalent amounts of \$383.9 million and \$481.4 million, respectively. The impact of these contracts on the Condensed Consolidated Statements of Operations and Comprehensive Income was not material for any period presented.

Gains or losses on foreign currency contracts designated as hedges are reclassified out of Accumulated Other Comprehensive Loss (“AOCI”) and into *Selling, general and administrative* expense in the Condensed Consolidated Statements of Operations and Comprehensive Income upon settlement. Such reclassifications during the three and six months ended June 30, 2018 and 2017 were not material.

Net investment hedge

We have net investments in foreign subsidiaries that are subject to changes in the foreign currency exchange rate. In September 2015, we designated the €500 million 2.45% Senior Notes due 2019 (the “2019 Euro Notes”) as a net investment hedge for a portion of our net investment in our Euro denominated subsidiaries. In June 2018, the Company completed a tender offer for €363.4 million of the 2019 Euro Notes. The remaining €136.6 million of the 2019 Euro Notes have been re-designated as a net investment hedge in our Euro denominated subsidiaries. The gains/losses on the 2019 Euro Notes have been included as a component of the cumulative translation adjustment account within AOCI. As of June 30, 2018 and December 31, 2017, we had deferred foreign currency losses of \$3.5 million and \$29.6 million, respectively, in AOCI associated with the net investment hedge 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:

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Notes to condensed consolidated financial statements (unaudited)

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
- 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 based on observable inputs that are classified as Level 2 in the valuation hierarchy defined by the accounting guidance.

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, 2018		December 31, 2017	
	Recorded Amount	Fair Value	Recorded Amount	Fair Value
Variable rate debt	\$ 92.6	\$ 92.6	\$ 62.4	\$ 62.4
Fixed rate debt	693.3	697.9	1,385.1	1,424.0
Total debt	\$ 785.9	\$ 790.5	\$ 1,447.5	\$ 1,486.4

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

<i>In millions</i>	June 30, 2018			
	Level 1	Level 2	Level 3	Total
Recurring fair value measurements				
Foreign currency contract liabilities	\$ —	\$ (39.8)	\$ —	\$ (39.8)
Deferred compensation plan assets	21.2	3.7	—	24.9
Total recurring fair value measurements	\$ 21.2	\$ (36.1)	\$ —	\$ (14.9)

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Notes to condensed consolidated financial statements (unaudited)

In millions	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Recurring fair value measurements				
Foreign currency contract assets	\$ —	\$ 0.6	\$ —	\$ 0.6
Foreign currency contract liabilities	—	(47.2)	—	(47.2)
Deferred compensation plan assets	18.7	4.5	—	23.2
Total recurring fair value measurements	\$ 18.7	\$ (42.1)	\$ —	\$ (23.4)
Nonrecurring fair value measurements ⁽¹⁾				

⁽¹⁾ During the fourth quarter of 2017, we completed our annual intangible assets impairment review. As a result, we recorded a pre-tax non-cash impairment charge of \$8.8 million for a trade name intangible in 2017. The impairment charge reduced the carrying value of the impacted trade name intangible to \$10.8 million. The fair value of trade names is measured using the relief-from-royalty method. This method assumes the trade name has value to the extent that the owner is relieved of the obligation to pay royalties for the benefits received from them. This method requires us to estimate the future revenue for the related brands, the appropriate royalty rate and the weighted average cost of capital.

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, 2018 was 20.8%, compared to 65.9% for 2017. 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. The liability for uncertain tax positions was \$12.7 million and \$12.0 million at June 30, 2018 and December 31, 2017, 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.

U.S. tax reform

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the “Act”) was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a corporate tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the mandatory deemed repatriation of cumulative foreign earnings as of December 31, 2017. For 2018, the Company considered in its estimated annual effective tax rate additional provisions of the Act including changes to the deduction for executive compensation and interest expense, a tax on global intangible low-taxed income provisions (“GILTI”), the base erosion anti-abuse tax, and a deduction for foreign-derived intangible income. The Company has elected to treat tax on GILTI income as a period cost and has therefore included it in its annual estimated effective tax rate.

Given the significance of the Act, Staff Accounting Bulletin No. 118 (“SAB 118”) was issued to address the application of GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Act. SAB 118 allows registrants to record provisional amounts during a one year “measurement period.” The measurement period is deemed to have ended when the registrant has obtained, prepared, and analyzed the information necessary to finalize its accounting. During the measurement period, impacts of the law are expected to be recorded at the time a reasonable estimate for all or a portion of the effects can be made, and provisional amounts can be recognized and adjusted as information becomes available, prepared, or analyzed.

The Company calculated its best estimate of the impact of the Act in its December 31, 2017 income tax provision in accordance with its understanding of the Act and guidance available as of the date of the filing of the Annual Report on Form 10-K and as a result recorded a provisional income tax expense of \$2.7 million in the fourth quarter of 2017, the period in which the legislation was enacted. The provisional amount related to the remeasurement of certain deferred tax assets and liabilities based

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

on the rates at which they are expected to reverse in the future was a decrease to income tax expense of \$26.1 million. The remeasurement of deferred taxes requires further analysis regarding the state tax impacts of the remeasurement, the impact of the Act on the taxation of executive compensation arrangements, changes to tax capitalization provisions and other aspects of the Act that may impact our tax balances.

The amount related to the one-time transition tax on the mandatory deemed repatriation of foreign earnings was an increase to income tax expense of \$28.8 million. The determination of the transition tax requires additional analysis regarding the amount and composition of the Company's historical foreign earnings and foreign tax credit position, which is expected to be completed in the second half of 2018. No additional income taxes have been provided for any remaining undistributed foreign earnings not subject to the transition tax, or any additional outside basis difference inherent in these entities, as these amounts continue to be indefinitely reinvested in foreign operations.

12. Benefit Plans

Components of net periodic benefit cost for our pension plans for the three and six months ended June 30, 2018 and 2017 were as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Service cost	\$ 1.0	\$ 2.9	\$ 2.1	\$ 5.8
Interest cost	3.0	4.1	6.0	8.2
Expected return on plan assets	(2.2)	(2.9)	(4.5)	(5.8)
Net periodic benefit cost	\$ 1.8	\$ 4.1	\$ 3.6	\$ 8.2

As described in Note 1, during the first quarter of 2018, the Company adopted ASU 2017-07. As a result, service costs are classified as employee compensation costs within *Cost of goods sold* and *Selling, general and administrative expense* within the Condensed Consolidated Statements of Operations and Comprehensive Income. All other components of net periodic benefit cost are classified within *Other (income) expense* for the periods presented.

Components of net periodic benefit cost for our other post-retirement plans for the three and six months ended June 30, 2018 and 2017 were not material.

13. Shareholders' Equity**Share repurchases**

In December 2014, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of \$1.0 billion (the "2014 Authorization"). On May 8, 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"), replacing the 2014 Authorization. The 2018 Authorization expires on May 31, 2021. During the six months ended June 30, 2018, we repurchased 5.5 million of our shares for \$300.0 million, of which 2.2 million shares, or \$150.0 million, and 3.3 million shares, or \$150.0 million, were repurchased pursuant to the 2014 and 2018 Authorizations, respectively. As of June 30, 2018, we had \$600.0 million available for share repurchases under the 2018 Authorization.

Dividends payable

On May 8, 2018, the Board of Directors declared a quarterly cash dividend of \$0.35, which reflects an adjustment for the Distribution, payable on August 3, 2018 to shareholders of record at the close of business on July 20, 2018. As a result, the balance of dividends payable included in *Other current liabilities* on our Condensed Consolidated Balance Sheets was \$30.7 million and \$63.1 million at June 30, 2018 and December 31, 2017, respectively.

14. Segment Information

Effective May 1, 2018, we reorganized our business segments to reflect a new operating structure, 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 Water segment was separated into three reportable business segments:

Pentair plc and Subsidiaries

Notes to condensed consolidated financial statements (unaudited)

- **Aquatic Systems** — This segment manufactures and sells a complete line of energy-efficient residential and commercial pool equipment and accessories including pumps, filters, heaters, lights, automatic controls, automatic cleaners, maintenance equipment and pool accessories. Applications for our Aquatic Systems products include residential and commercial pool maintenance, pool repair, renovation, service and construction and aquaculture solutions.
- **Filtration Solutions** — This segment manufactures and sells water and fluid treatment products and systems, including pressure tanks and vessels, control valves, activated carbon products, conventional filtration products, point-of-entry and point-of-use systems, gas recovery solutions, membrane bioreactors, wastewater reuse systems and advanced membrane filtration and separation systems into the global residential, industrial and commercial markets. These products are used in a range of applications, including use in fluid filtration, ion exchange, desalination, food and beverage, food service and separation technologies for the oil and gas industry.
- **Flow Technologies** — This segment manufactures and sells products ranging from light duty diaphragm pumps to high-flow turbine pumps and solid handling pumps while serving the global residential, commercial and industrial markets. These pumps are used in a range of applications, including residential and municipal wells, water treatment, wastewater solids handling, pressure boosting, fluid delivery, circulation and transfer, fire suppression, flood control, agricultural irrigation and crop spray.

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.

Financial information by reportable segment is as follows:

<i>In millions</i>	Three months ended		Six months ended	
	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Net sales				
Aquatic Systems	\$ 276.2	\$ 253.7	\$ 516.6	\$ 476.2
Filtration Solutions	262.1	263.8	513.7	494.6
Flow Technologies	241.9	236.2	482.2	465.8
Other	0.4	0.3	0.7	0.7
Consolidated	\$ 780.6	\$ 754.0	\$ 1,513.2	\$ 1,437.3
Segment income (loss)				
Aquatic Systems	\$ 79.6	\$ 74.3	\$ 139.6	\$ 129.8
Filtration Solutions	52.3	49.0	86.0	73.0
Flow Technologies	44.4	40.3	83.1	73.4
Other	(12.2)	(12.0)	(27.6)	(27.6)
Consolidated	\$ 164.1	\$ 151.6	\$ 281.1	\$ 248.6

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

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, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Segment income	\$ 164.1	\$ 151.6	\$ 281.1	\$ 248.6
Restructuring and other	(25.0)	(5.9)	(30.6)	(17.5)
Intangible amortization	(9.1)	(9.3)	(18.4)	(18.0)
Loss on sale of business	(0.9)	—	(6.2)	—
Loss of early extinguishment of debt	(17.1)	(101.4)	(17.1)	(101.4)
Corporate allocations	(2.2)	(6.8)	(11.0)	(21.4)
Net interest expense	(10.1)	(25.3)	(23.6)	(60.3)
Other expense	(1.0)	(1.3)	(2.0)	(2.7)
Income from continuing operations before income taxes	\$ 98.7	\$ 1.6	\$ 172.2	\$ 27.3

15. Commitments and Contingencies***Warranties and guarantees***

In connection with the disposition of our businesses or product lines, we may agree to indemnify purchasers for various potential liabilities relating to the sold business, such as 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 obligation under such indemnifications is not explicitly stated and as a result, the overall amount of these obligations cannot be reasonably estimated. 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 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. In connection with the disposition of the Valves & Controls business, we agreed to indemnify Emerson Electric Co. for certain pre-closing tax liabilities. During the second quarter of 2017, we recorded a liability representing the fair value of our expected future obligation for this matter.

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.

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

The changes in the carrying amount of service and product warranties of continuing operations for the six months ended June 30, 2018 were as follows:

<i>In millions</i>	June 30, 2018
Beginning balance	\$ 38.1
Service and product warranty provision	32.6
Payments	(27.4)
Foreign currency translation	(0.6)
Ending balance	\$ 42.7

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 disposing of assets or businesses, we often provide representations, warranties and indemnities to cover various risks including unknown damage to the assets, environmental risks involved in the sale of real estate, liability to investigate and remediate environmental contamination at waste disposal sites and manufacturing facilities and unidentified tax liabilities and legal fees related to periods prior to disposition. We do not have the ability to reasonably estimate the potential liability due to the inchoate and unknown nature of these potential liabilities. However, we have no reason to believe that these uncertainties would have a material adverse effect on our financial position, results of operations or cash flows.

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, 2018 and December 31, 2017, the outstanding value of bonds, letters of credit and bank guarantees totaled \$117.5 million and \$129.2 million, respectively.

16. Supplemental Guarantor Information

Pentair plc (the "Parent Company Guarantor") and PISG (the "Subsidiary Guarantor"), fully and unconditionally, guarantee the 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 Subsidiary Guarantor. The guarantees provided by the Parent Company Guarantor and Subsidiary Guarantor are joint and several.

The following supplemental financial information sets forth the Company's Condensed Consolidating Statement of Operations and Comprehensive Income (Loss), Condensed Consolidating Balance Sheets and Condensed Consolidating Statement of Cash Flows by relevant group within the Company: Pentair plc and PISG as the guarantors, PFSA as issuer of the debt and all other non-guarantor subsidiaries. Condensed consolidating financial information for Pentair plc, PISG and PFSA on a stand-alone basis is presented using the equity method of accounting for subsidiaries.

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

Condensed Consolidating Statement of Operations and Comprehensive Income (Loss)
Three months ended June 30, 2018

<i>In millions</i>	Parent Company Guarantor	Subsidiary Guarantor	Subsidiary Issuer	Non-guarantor Subsidiaries	Eliminations	Consolidated Total
Net sales	\$ —	\$ —	\$ —	\$ 780.6	\$ —	\$ 780.6
Cost of goods sold	—	—	—	498.0	—	498.0
Gross profit	—	—	—	282.6	—	282.6
Selling, general and administrative	8.1	—	0.4	132.4	—	140.9
Research and development	—	—	—	19.1	—	19.1
Operating (loss) income	(8.1)	—	(0.4)	131.1	—	122.6
Loss (earnings) from continuing operations of investment in subsidiaries	(88.5)	(88.1)	(138.1)	—	314.7	—
Other (income) expense:						
Loss on sale of business	—	—	—	0.9	—	0.9
Loss on early extinguishment of debt	—	—	17.1	—	—	17.1
Net interest (income) expense	—	(0.4)	7.3	3.2	—	10.1
Other income	—	—	—	(4.2)	—	(4.2)
Income (loss) from continuing operations before income taxes	80.4	88.5	113.3	131.2	(314.7)	98.7
Provision for income taxes	2.5	—	—	18.3	—	20.8
Net income (loss) from continuing operations	77.9	88.5	113.3	112.9	(314.7)	77.9
Loss from discontinued operations, net of tax	—	—	—	(36.4)	—	(36.4)
(Loss) earnings from discontinued operations of investment in subsidiaries	(36.4)	(36.4)	(36.4)	—	109.2	—
Net income (loss)	\$ 41.5	\$ 52.1	\$ 76.9	\$ 76.5	\$ (205.5)	\$ 41.5
Comprehensive income (loss), net of tax						
Net income (loss)	\$ 41.5	\$ 52.1	\$ 76.9	\$ 76.5	\$ (205.5)	\$ 41.5
Changes in cumulative translation adjustment	22.8	22.8	22.8	22.8	(68.4)	22.8
Changes in market value of derivative financial instruments, net of tax	4.1	4.1	4.1	4.1	(12.3)	4.1
Comprehensive income (loss)	\$ 68.4	\$ 79.0	\$ 103.8	\$ 103.4	\$ (286.2)	\$ 68.4

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

Condensed Consolidating Statement of Operations and Comprehensive Income (Loss)
Six months ended June 30, 2018

<i>In millions</i>	Parent Company Guarantor	Subsidiary Guarantor	Subsidiary Issuer	Non-guarantor Subsidiaries	Eliminations	Consolidated Total
Net sales	\$ —	\$ —	\$ —	\$ 1,513.2	\$ —	\$ 1,513.2
Cost of goods sold	—	—	—	977.3	—	977.3
Gross profit	—	—	—	535.9	—	535.9
Selling, general and administrative	13.5	—	0.5	268.7	—	282.7
Research and development	—	—	—	37.9	—	37.9
Operating (loss) income	(13.5)	—	(0.5)	229.3	—	215.3
(Earnings) loss from continuing operations of investment in subsidiaries	(152.3)	(151.6)	(189.1)	—	493.0	—
Other (income) expense:						
Loss on sale of business	—	—	—	6.2	—	6.2
Loss on early extinguishment of debt	—	—	17.1	—	—	17.1
Net interest (income) expense	—	(0.7)	19.9	4.4	—	23.6
Other income	—	—	—	(3.8)	—	(3.8)
Income (loss) from continuing operations before income taxes	138.8	152.3	151.6	222.5	(493.0)	172.2
Provision for income taxes	2.5	—	—	33.4	—	35.9
Net income (loss) from continuing operations	136.3	152.3	151.6	189.1	(493.0)	136.3
Income from discontinued operations, net of tax	—	—	—	8.1	—	8.1
Earnings (loss) from discontinued operations of investment in subsidiaries	8.1	8.1	8.1	—	(24.3)	—
Net income (loss)	\$ 144.4	\$ 160.4	\$ 159.7	\$ 197.2	\$ (517.3)	\$ 144.4
Comprehensive income (loss), net of tax						
Net income (loss)	\$ 144.4	\$ 160.4	\$ 159.7	\$ 197.2	\$ (517.3)	\$ 144.4
Changes in cumulative translation adjustment	25.2	25.2	25.2	25.2	(75.6)	25.2
Changes in market value of derivative financial instruments, net of tax	0.3	0.3	0.3	0.3	(0.9)	0.3
Comprehensive income (loss)	\$ 169.9	\$ 185.9	\$ 185.2	\$ 222.7	\$ (593.8)	\$ 169.9

Pentair plc and Subsidiaries
Notes to condensed consolidated financial statements (unaudited)
Condensed Consolidating Balance Sheet
June 30, 2018

<i>In millions</i>	Parent Company Guarantor	Subsidiary Guarantor	Subsidiary Issuer	Non-guarantor Subsidiaries	Eliminations	Consolidated Total
Assets						
Current assets						
Cash and cash equivalents	\$ 0.1	\$ —	\$ 3.2	\$ 75.4	\$ —	\$ 78.7
Accounts and notes receivable, net	—	—	1.8	420.3	—	422.1
Inventories	—	—	—	366.6	—	366.6
Other current assets	3.3	—	1.3	128.3	(3.7)	129.2
Total current assets	3.4	—	6.3	990.6	(3.7)	996.6
Property, plant and equipment, net	—	—	—	270.6	—	270.6
Other assets						
Investments in subsidiaries	1,901.2	1,867.4	2,501.7	—	(6,270.3)	—
Goodwill	—	—	—	2,088.8	—	2,088.8
Intangibles, net	—	—	—	296.5	—	296.5
Other non-current assets	53.9	34.2	579.6	610.4	(1,124.6)	153.5
Total other assets	1,955.1	1,901.6	3,081.3	2,995.7	(7,394.9)	2,538.8
Total assets	\$ 1,958.5	\$ 1,901.6	\$ 3,087.6	\$ 4,256.9	\$ (7,398.6)	\$ 3,806.0
Liabilities and Equity						
Current liabilities						
Accounts payable	\$ 2.0	\$ —	\$ —	\$ 273.1	\$ —	\$ 275.1
Employee compensation and benefits	—	—	—	77.5	—	77.5
Other current liabilities	38.3	0.4	10.1	311.7	(3.7)	356.8
Total current liabilities	40.3	0.4	10.1	662.3	(3.7)	709.4
Other liabilities						
Long-term debt	—	—	1,210.3	694.2	(1,124.6)	779.9
Pension and other post-retirement compensation and benefits	—	—	—	107.9	—	107.9
Deferred tax liabilities	—	—	—	118.4	—	118.4
Other non-current liabilities	29.3	—	—	172.2	—	201.5
Total liabilities	69.6	0.4	1,220.4	1,755.0	(1,128.3)	1,917.1
Equity	1,888.9	1,901.2	1,867.2	2,501.9	(6,270.3)	1,888.9
Total liabilities and equity	\$ 1,958.5	\$ 1,901.6	\$ 3,087.6	\$ 4,256.9	\$ (7,398.6)	\$ 3,806.0

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

Condensed Consolidating Statement of Cash Flows
Six months ended June 30, 2018

<i>In millions</i>	Parent Company Guarantor	Subsidiary Guarantor	Subsidiary Issuer	Non-guarantor Subsidiaries	Eliminations	Consolidated Total
Operating activities						
Net cash provided by (used for) operating activities	\$ 101.1	\$ 162.2	\$ 177.5	\$ 272.6	\$ (541.5)	\$ 171.9
Investing activities						
Capital expenditures	—	—	—	(20.3)	—	(20.3)
Proceeds from sale of property and equipment	—	—	—	(0.5)	—	(0.5)
Payments due to sale of businesses, net	—	—	—	(12.8)	—	(12.8)
Acquisitions, net of cash acquired	—	—	—	(0.9)	—	(0.9)
Net intercompany loan activity	30.8	59.9	22.5	490.6	(603.8)	—
Net cash provided by (used for) investing activities of continuing operations	30.8	59.9	22.5	456.1	(603.8)	(34.5)
Net cash provided by (used for) investing activities of discontinued operations	—	—	—	(7.1)	—	(7.1)
Net cash provided by (used for) investing activities	30.8	59.9	22.5	449.0	(603.8)	(41.6)
Financing activities						
Net receipts (repayments) of commercial paper and revolving long-term debt	—	—	43.8	(13.6)	—	30.2
Repayments of long-term debt	—	—	(675.1)	—	—	(675.1)
Premium paid on early extinguishment of debt	—	—	(16.0)	—	—	(16.0)
Transfer of cash to nVent	—	—	—	(74.2)	—	(74.2)
Distribution from nVent spin-off	—	—	993.6	—	—	993.6
Net change in advances to subsidiaries	287.8	(222.1)	(517.0)	(694.0)	1,145.3	—
Shares issued to employees, net of shares withheld	6.3	—	—	—	—	6.3
Repurchases of ordinary shares	(300.0)	—	—	—	—	(300.0)
Dividends paid	(125.9)	—	—	—	—	(125.9)
Net cash provided by (used for) financing activities	(131.8)	(222.1)	(170.7)	(781.8)	1,145.3	(161.1)
Change in cash held for sale	—	—	—	27.0	—	27.0
Effect of exchange rate changes on cash and cash equivalents	—	—	(26.1)	22.3	—	(3.8)
Change in cash and cash equivalents	0.1	—	3.2	(10.9)	—	(7.6)
Cash and cash equivalents, beginning of period	—	—	—	86.3	—	86.3
Cash and cash equivalents, end of period	\$ 0.1	\$ —	\$ 3.2	\$ 75.4	\$ —	\$ 78.7

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

Condensed Consolidating Statement of Operations and Comprehensive Income (Loss)
Three months ended June 30, 2017

<i>In millions</i>	Parent Company Guarantor	Subsidiary Guarantor	Subsidiary Issuer	Non-guarantor Subsidiaries	Eliminations	Consolidated Total
Net sales	\$ —	\$ —	\$ —	\$ 754.0	\$ —	\$ 754.0
Cost of goods sold	—	—	—	480.4	—	480.4
Gross profit	—	—	—	273.6	—	273.6
Selling, general and administrative	4.3	0.1	0.1	122.2	—	126.7
Research and development	—	—	—	17.7	—	17.7
Operating (loss) income	(4.3)	(0.1)	(0.1)	133.7	—	129.2
(Earnings) loss from continuing operations of investment in subsidiaries	(0.9)	(1.0)	(139.2)	—	141.1	—
Other (income) expense:						
Loss on early extinguishment of debt	—	—	91.0	10.4	—	101.4
Net interest expense	—	—	21.9	3.4	—	25.3
Other expense	—	—	—	0.9	—	0.9
(Loss) income from continuing operations before income taxes	(3.4)	0.9	26.2	119.0	(141.1)	1.6
Provision for income taxes	—	—	—	5.0	—	5.0
Net (loss) income from continuing operations	(3.4)	0.9	26.2	114.0	(141.1)	(3.4)
Income from discontinued operations, net of tax	—	—	—	66.5	—	66.5
Gain from sale of discontinued operations, net of tax	—	—	—	200.6	—	200.6
Earnings (loss) from discontinued operations of investment in subsidiaries	267.1	267.1	267.1	—	(801.3)	—
Net income (loss)	\$ 263.7	\$ 268.0	\$ 293.3	\$ 381.1	\$ (942.4)	\$ 263.7
Comprehensive income (loss), net of tax						
Net income (loss)	\$ 263.7	\$ 268.0	\$ 293.3	\$ 381.1	\$ (942.4)	\$ 263.7
Changes in cumulative translation adjustment	392.6	392.6	392.6	392.6	(1,177.8)	392.6
Changes in market value of derivative financial instruments, net of tax	(0.9)	(0.9)	(0.9)	(0.9)	2.7	(0.9)
Comprehensive income (loss)	\$ 655.4	\$ 659.7	\$ 685.0	\$ 772.8	\$ (2,117.5)	\$ 655.4

Pentair plc and Subsidiaries

Notes to condensed consolidated financial statements (unaudited)

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

Condensed Consolidating Statement of Operations and Comprehensive Income (Loss)
Six months ended June 30, 2017

<i>In millions</i>	Parent Company Guarantor	Subsidiary Guarantor	Subsidiary Issuer	Non-guarantor Subsidiaries	Eliminations	Consolidated Total
Net sales	\$ —	\$ —	\$ —	\$ 1,437.3	\$ —	\$ 1,437.3
Cost of goods sold	—	—	—	940.0	—	940.0
Gross profit	—	—	—	497.3	—	497.3
Selling, general and administrative	2.7	0.2	0.4	266.1	—	269.4
Research and development	—	—	—	36.8	—	36.8
Operating (loss) income	(2.7)	(0.2)	(0.4)	194.4	—	191.1
(Earnings) loss from continuing operations of investment in subsidiaries	(12.0)	(12.2)	(179.1)	—	203.3	—
Other (income) expense:						
Loss on early extinguishment of debt	—	—	91.0	10.4	—	101.4
Net interest expense	—	—	50.3	10.0	—	60.3
Other expense	—	—	—	2.1	—	2.1
Income (loss) from continuing operations before income taxes	9.3	12.0	37.4	171.9	(203.3)	27.3
Provision for income taxes	—	—	—	18.0	—	18.0
Net income (loss) from continuing operations	9.3	12.0	37.4	153.9	(203.3)	9.3
Income from discontinued operations, net of tax	—	—	—	141.6	—	141.6
Gain from sale of discontinued operations, net of tax	—	—	—	200.6	—	200.6
Earnings (loss) from discontinued operations of investment in subsidiaries	342.2	342.2	342.2	—	(1,026.6)	—
Net income (loss)	\$ 351.5	\$ 354.2	\$ 379.6	\$ 496.1	\$ (1,229.9)	\$ 351.5
Comprehensive income (loss), net of tax						
Net income (loss)	\$ 351.5	\$ 354.2	\$ 379.6	\$ 496.1	\$ (1,229.9)	\$ 351.5
Changes in cumulative translation adjustment	468.3	468.3	468.3	468.3	(1,404.9)	468.3
Changes in market value of derivative financial instruments, net of tax	0.7	0.7	0.7	0.7	(2.1)	0.7
Comprehensive income (loss)	\$ 820.5	\$ 823.2	\$ 848.6	\$ 965.1	\$ (2,636.9)	\$ 820.5

Pentair plc and Subsidiaries
Notes to condensed consolidated financial statements (unaudited)
**Condensed Consolidating Balance Sheet
December 31, 2017**

<i>In millions</i>	Parent Company Guarantor	Subsidiary Guarantor	Subsidiary Issuer	Non-guarantor Subsidiaries	Eliminations	Consolidated Total
Assets						
Current assets						
Cash and cash equivalents	\$ —	\$ —	\$ —	\$ 86.3	\$ —	\$ 86.3
Accounts and notes receivable, net	—	—	—	483.1	—	483.1
Inventories	—	—	—	356.9	—	356.9
Other current assets	10.8	1.8	1.6	109.5	(9.2)	114.5
Current assets held for sale	—	—	—	708.0	—	708.0
Total current assets	10.8	1.8	1.6	1,743.8	(9.2)	1,748.8
Property, plant and equipment, net	—	—	—	279.8	—	279.8
Other assets						
Investments in subsidiaries	5,205.1	5,109.6	7,156.1	—	(17,470.8)	—
Goodwill	—	—	—	2,112.8	—	2,112.8
Intangibles, net	—	—	—	321.8	—	321.8
Long-term intercompany debt	—	94.1	614.0	(708.1)	—	—
Other non-current assets	2.2	—	—	2,159.4	(1,980.7)	180.9
Non-current assets held for sale	—	—	—	3,989.6	—	3,989.6
Total other assets	5,207.3	5,203.7	7,770.1	7,875.5	(19,451.5)	6,605.1
Total assets	\$ 5,218.1	\$ 5,205.5	\$ 7,771.7	\$ 9,899.1	\$ (19,460.7)	\$ 8,633.7
Liabilities and Equity						
Current liabilities						
Accounts payable	\$ 1.4	\$ —	\$ —	\$ 320.1	\$ —	\$ 321.5
Employee compensation and benefits	0.4	—	—	115.4	—	115.8
Other current liabilities	99.6	0.4	9.5	301.0	(9.2)	401.3
Current liabilities held for sale	—	—	—	360.8	—	360.8
Total current liabilities	101.4	0.4	9.5	1,097.3	(9.2)	1,199.4
Other liabilities						
Long-term debt	48.4	—	2,652.8	720.2	(1,980.7)	1,440.7
Pension and other post-retirement compensation and benefits	—	—	—	96.4	—	96.4
Deferred tax liabilities	—	—	—	108.6	—	108.6
Other non-current liabilities	30.5	—	—	183.3	—	213.8
Non-current liabilities held for sale	—	—	—	537.0	—	537.0
Total liabilities	180.3	0.4	2,662.3	2,742.8	(1,989.9)	3,595.9
Equity	5,037.8	5,205.1	5,109.4	7,156.3	(17,470.8)	5,037.8
Total liabilities and equity	\$ 5,218.1	\$ 5,205.5	\$ 7,771.7	\$ 9,899.1	\$ (19,460.7)	\$ 8,633.7

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

Condensed Consolidating Statement of Cash Flows
Six months ended June 30, 2017

<i>In millions</i>	Parent Company Guarantor	Subsidiary Guarantor	Subsidiary Issuer	Non-guarantor Subsidiaries	Eliminations	Consolidated Total
Operating activities						
Net cash provided by (used for) operating activities	\$ 165.9	\$ 353.5	\$ 384.6	\$ 481.2	\$ (1,229.9)	\$ 155.3
Investing activities						
Capital expenditures	—	—	—	(18.7)	—	(18.7)
Proceeds from sale of businesses, net	—	—	2,765.6	—	—	2,765.6
Acquisitions, net of cash acquired	—	—	—	(45.9)	—	(45.9)
Net intercompany loan activity	—	—	170.1	256.2	(426.3)	—
Net cash provided by (used for) investing activities of continuing operations	—	—	2,935.7	191.6	(426.3)	2,701.0
Net cash provided by (used for) investing activities of discontinued operations	—	—	—	(35.2)	—	(35.2)
Net cash provided by (used for) investing activities	—	—	2,935.7	156.4	(426.3)	2,665.8
Financing activities						
Net repayments of short-term borrowings	—	—	—	(0.5)	—	(0.5)
Net repayments of commercial paper and revolving long-term debt	—	—	(298.7)	(676.8)	—	(975.5)
Repayments of long-term debt	—	—	(1,567.8)	(91.5)	—	(1,659.3)
Premium paid on early extinguishment of debt	—	—	(86.0)	(8.9)	—	(94.9)
Net change in advances to subsidiaries	30.8	(353.5)	(1,363.2)	29.7	1,656.2	—
Shares issued to employees, net of shares withheld	29.5	—	—	—	—	29.5
Repurchases of ordinary shares	(100.0)	—	—	—	—	(100.0)
Dividends paid	(126.1)	—	—	—	—	(126.1)
Net cash provided by (used for) financing activities	(165.8)	(353.5)	(3,315.7)	(748.0)	1,656.2	(2,926.8)
Change in cash held for sale	—	—	—	(14.5)	—	(14.5)
Effect of exchange rate changes on cash and cash equivalents	—	—	46.4	(1.4)	—	45.0
Change in cash and cash equivalents	0.1	—	51.0	(126.3)	—	(75.2)
Cash and cash equivalents, beginning of period	—	—	—	216.9	—	216.9
Cash and cash equivalents, end of period	\$ 0.1	\$ —	\$ 51.0	\$ 90.6	\$ —	\$ 141.7

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,” “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 ability to realize the anticipated benefits from the Separation (as defined below); adverse effects on business operations or financial results and the market price of our shares as a result of the consummation of the Separation; the ability to operate independently following the Separation; overall global economic and business conditions impacting our business; the ability to achieve the benefits of our restructuring plans; the ability to successfully identify, finance, complete and integrate acquisitions; competition and pricing pressures in the markets we serve; the strength of housing and related markets; volatility in currency exchange rates and commodity prices, including the impact of tariffs; inability to generate savings from excellence in operations initiatives consisting of lean enterprise, supply management and cash flow practices; increased risks associated with operating foreign businesses; failure of markets to accept new product introductions and enhancements; the impact of changes in laws and regulations, including those that limit U.S. tax benefits; 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 Quarterly Report on Form 10-Q. 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 three reporting segments: Aquatic Systems, Filtration Solutions and Flow Technologies. For the first six months of 2018, the Aquatic Systems, Filtration Solutions and Flow Technologies segments represented approximately 34%, 34% and 32% of total revenues, respectively. We classify our operations into business segments based primarily on types of products offered and markets served:

- **Aquatic Systems** — This segment manufactures and sells a complete line of energy-efficient residential and commercial pool equipment and accessories including pumps, filters, heaters, lights, automatic controls, automatic cleaners, maintenance equipment and pool accessories. Applications for our Aquatic Systems products include residential and commercial pool maintenance, pool repair, renovation, service and construction and aquaculture solutions.
- **Filtration Solutions** — This segment manufactures and sells water and fluid treatment products and systems, including pressure tanks and vessels, control valves, activated carbon products, conventional filtration products, point-of-entry and point-of-use systems, gas recovery solutions, membrane bioreactors, wastewater reuse systems and advanced membrane filtration and separation systems into the global residential, industrial and commercial markets. These products are used in a range of applications, including use in fluid filtration, ion exchange, desalination, food and beverage, food service and separation technologies for the oil and gas industry.
- **Flow Technologies** — This segment manufactures and sells products ranging from light duty diaphragm pumps to high-flow turbine pumps and solid handling pumps while serving the global residential, commercial and industrial markets. These pumps are used in a range of applications, including residential and municipal wells, water treatment, wastewater solids handling, pressure boosting, fluid delivery, circulation and transfer, fire suppression, flood control, agricultural irrigation and crop spray.

On April 28, 2017, we completed the sale of our Valves & Controls business to Emerson Electric Co. for \$3.15 billion. The sale resulted in a gain of \$181.1 million, net of tax. The results of the Valves & Controls business have been presented as discontinued operations for all periods presented. The Valves & Controls business was previously disclosed as a stand-alone reporting segment.

On April 30, 2018, we completed the previously announced separation of our Electrical business from the rest of Pentair (the “Separation”) by means of a dividend in specie of the Electrical business, which was effected by the transfer of the Electrical business from Pentair to nVent and the issuance by nVent of nVent ordinary shares directly to Pentair shareholders (the “Distribution”). We did not retain an equity interest in nVent. The results of the Electrical business have been presented as discontinued operations for all periods presented. The Electrical business was previously disclosed as a stand-alone reporting segment.

Key Trends and Uncertainties Regarding Our Existing Business

The following trends and uncertainties affected our financial performance in 2017 and the first six months of 2018 and will likely impact our results in the future:

- During 2017 and the first six months of 2018, we continued execution of certain business restructuring initiatives aimed at reducing our fixed cost structure and realigned our business in contemplation of the Separation and Distribution of nVent. We expect these actions will contribute to margin growth in 2018.
- We have identified specific product and geographic market opportunities that we find attractive and continue to pursue, both within and outside the United States. We are reinforcing our businesses to more effectively address these opportunities through research and development and additional sales and marketing resources. Unless we successfully penetrate these markets, our 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 2018, our operating objectives include the following:

- Executing the nVent spin-off and focusing on one industry-leading pure-play Water company;
- Driving operating excellence through our Pentair Integrated Management System (“PIMS”) initiatives, with specific focus on sourcing and supply management, cash flow management and lean operations;
- Achieving differentiated revenue growth through new products and global and market expansion;
- Optimizing our technological capabilities to increasingly generate innovative new products; and
- Focusing on developing global talent in light of our global presence.

CONSOLIDATED RESULTS OF OPERATIONS

The consolidated results of operations for the three months ended June 30, 2018 and 2017 were as follows:

<i>In millions</i>	Three months ended			
	June 30, 2018	June 30, 2017	\$ Change	% / Point Change
Net sales	\$ 780.6	\$ 754.0	\$ 26.6	3.5 %
Cost of goods sold	498.0	480.4	17.6	3.7 %
Gross profit	282.6	273.6	9.0	3.3 %
<i>% of net sales</i>	36.2%	36.3%		(0.1) pts
Selling, general and administrative	140.9	126.7	14.2	11.2 %
<i>% of net sales</i>	18.1%	16.8%		1.3 pts
Research and development	19.1	17.7	1.4	7.9 %
<i>% of net sales</i>	2.4%	2.3%		0.1 pts
Operating income	122.6	129.2	(6.6)	(5.1)%
<i>% of net sales</i>	15.7%	17.1%		(1.4) pts
Loss on sale of business	0.9	—	0.9	N.M.
Loss on early extinguishment of debt	17.1	101.4	(84.3)	N.M.
Other (income) expense	(4.2)	0.9	(5.1)	N.M.
Net interest expense	10.1	25.3	(15.2)	(60.1)%
Income from continuing operations before income taxes	98.7	1.6	97.1	N.M.
Provision for income taxes	20.8	5.0	15.8	N.M.
<i>Effective tax rate</i>	21.1%	312.5%		N.M.

N.M. Not Meaningful

The consolidated results of operations for the six months ended June 30, 2018 and June 30, 2017 were as follows:

<i>In millions</i>	Six months ended			
	June 30, 2018	June 30, 2017	\$ Change	% / Point Change
Net sales	\$ 1,513.2	\$ 1,437.3	\$ 75.9	5.3 %
Cost of goods sold	977.3	940.0	37.3	4.0 %
Gross profit	535.9	497.3	38.6	7.8 %
<i>% of net sales</i>	35.4%	34.6%		0.8 pts
Selling, general and administrative	282.7	269.4	13.3	4.9 %
<i>% of net sales</i>	18.7%	18.7%		—%
Research and development	37.9	36.8	1.1	3.0 %
<i>% of net sales</i>	2.5%	2.6%		(0.1) pts
Operating income	215.3	191.1	24.2	12.7 %
<i>% of net sales</i>	14.2%	13.3%		0.9 pts
Loss on sale of business	6.2	—	6.2	N.M.
Loss on early extinguishment of debt	17.1	101.4	(84.3)	N.M.
Other (income) expense	(3.8)	2.1	(5.9)	N.M.
Net interest expense	23.6	60.3	(36.7)	(60.9)%
Income from continuing operations before income taxes	172.2	27.3	144.9	N.M.
Provision for income taxes	35.9	18.0	17.9	N.M.
<i>Effective tax rate</i>	20.8%	65.9%		(45.1) 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, 2018 over the prior year period	Six months ended June 30, 2018 over the prior year period
Volume	1.9 %	2.7 %
Price	1.0	0.9
Core growth	2.9	3.6
Acquisition (divestiture)	(0.9)	(0.5)
Currency	1.5	2.2
Total	3.5 %	5.3 %

The 3.5 and 5.3 percentage point increases in net sales in the second quarter and first half, respectively, of 2018 from 2017 were primarily driven by:

- increased sales volume in our residential, commercial and industrial businesses; and
- favorable foreign currency effects for the three months and six months ended June 30, 2018.

These increases were partially offset by:

- core sales declines due to the sale of certain businesses in the second quarter and first half of 2018.

Gross profit

The 0.1 percentage point decrease in gross profit as a percentage of sales in the second quarter of 2018 from 2017 was primarily driven by:

- inflationary increases related to certain raw materials;

This decrease was partially offset by:

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

The 0.8 percentage point increase in gross profit as a percentage of sales in the first half of 2018 from 2017 was primarily driven by:

- selective increases in selling prices to mitigate inflationary cost increases;
- favorable mix as a result of growth in higher margin product sales; and
- higher contribution margin as a result of savings generated from our PIMS initiatives including lean and supply management practices.

This increase was partially offset by:

- inflationary increases related to labor costs and certain raw materials.

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

The 1.3 percentage point increase in SG&A expense as a percentage of sales in the second quarter of 2018 from 2017 was primarily driven by:

- increased investment in sales and marketing to drive growth; and
- restructuring costs of \$25.0 million in the second quarter of 2018, compared to \$5.9 million in the second quarter of 2017.

This increase was partially offset by:

- savings generated from restructuring and other lean initiatives.

SG&A expense as a percentage of sales was flat in the first half of 2018 from 2017, primarily driven by:

- the reversal of a \$13.3 million indemnification liability in the first quarter of 2017 related to our 2012 transaction with Tyco (now known as Johnson Controls International plc) that did not recur in 2018;
- restructuring costs of \$30.6 million in the first half of 2018, compared to \$17.5 million in the first half of 2017; and
- savings generated from restructuring and other lean initiatives.

Net interest expense

The 60.1 and 60.9 percent decreases in net interest expense in the second quarter and first half, respectively, of 2018 from 2017 were primarily driven by:

- the impact of lower debt levels during the second quarter and first half of 2018, compared to the comparable periods in 2017. In June 2018, the proceeds from the Separation were utilized to repay the remaining \$255.3 million aggregate principal amount of our 2.9% fixed rate senior notes due 2018 and for the early extinguishment of €363.4 million aggregate principal amount of our 2.45% senior notes due 2019.

Loss on early extinguishment of debt

In June 2018, we redeemed the remaining \$255.3 million aggregate principal amount of our 2.9% fixed rate senior notes due 2018 and completed a cash tender offer in the amount of €363.4 million aggregate principal amount of our 2.45% senior notes due 2019. All costs associated with the repurchases of debt were recorded as a *Loss on the early extinguishment of debt*, including \$16.0 million premium paid on early extinguishment and \$1.1 million of unamortized deferred financing costs.

Provision for income taxes

The percentage point decreases in the effective tax rate in the second quarter and first half, respectively, of 2018 from 2017 were primarily driven by:

- the favorable impact of discrete items that occurred during the first half of 2018 compared to 2017;
- the tax impact and timing of losses incurred during the first half of 2018 compared to 2017;
- the mix of global earnings, including the impact of U.S. Tax Reform; and
- the impact of lower nondeductible interest expense allocated to continuing operations in 2018 compared to 2017.

SEGMENT RESULTS OF OPERATIONS

The summary that follows provides a discussion of the results of operations of each of our three reportable segments (Aquatic Systems, Filtration Solutions and Flow Technologies). Each of these segments is comprised of various product offerings that serve multiple end users.

We evaluate performance based on 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.

Aquatic Systems

The net sales and segment income for Aquatic Systems were as follows:

<i>In millions</i>	Three months ended			Six months ended		
	June 30, 2018	June 30, 2017	% / Point Change	June 30, 2018	June 30, 2017	% / Point Change
Net sales	\$ 276.2	\$ 253.7	8.9 %	\$ 516.6	\$ 476.2	8.5 %
Segment income	79.6	74.3	7.1 %	139.6	129.8	7.6 %
<i>% of net sales</i>	28.8%	29.3%	(0.5) pts	27.0%	27.3%	(0.3) pts

Net sales

The components of the change in Aquatic Systems net sales from the prior period were as follows:

	Three months ended June 30, 2018 over the prior year period	Six months ended June 30, 2018 over the prior year period
Volume	7.6 %	7.2 %
Price	1.9	1.4
Core growth	9.5	8.6
Acquisition (divestiture)	(0.9)	(0.6)
Currency	0.3	0.5
Total	8.9 %	8.5 %

The 8.9 and 8.5 percent increases in net sales for Aquatic Systems in the second quarter and first half, respectively, of 2018 from 2017 were primarily driven by:

- sales growth primarily as a result of increased volumes in the U.S and in our residential and commercial businesses;
- selective increases in selling prices; and
- favorable foreign currency effects.

These increases were partially offset by:

- core sales declines due to sale of certain businesses in the second quarter and first half of 2018.

Segment income

The components of the change in Aquatic Systems segment income from the prior period were as follows:

	Three months ended June 30, 2018 over the prior year period	Six months ended June 30, 2018 over the prior year period
Growth	1.3 pts	1.6 pts
Inflation	(2.4)	(2.5)
Productivity/Price	0.6	0.6
Total	(0.5) pts	(0.3) pts

The 0.5 and 0.3 percentage point decreases in segment income for Aquatic Systems as a percentage of net sales in the second quarter and first half, respectively, of 2018 from 2017 were primarily driven by:

- inflationary increases related to labor costs and certain raw materials.

These decreases were partially offset by:

- sales growth primarily as a result of increased volumes in the U.S and the residential and commercial businesses; and
- selective increases in selling prices.

Filtration Solutions

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

<i>In millions</i>	Three months ended			Six months ended		
	June 30, 2018	June 30, 2017	% / Point Change	June 30, 2018	June 30, 2017	% / Point Change
Net sales	\$ 262.1	\$ 263.8	(0.6)%	\$ 513.7	\$ 494.6	3.9%
Segment income	52.3	49.0	6.7 %	86.0	73.0	17.8%
<i>% of net sales</i>	20.0%	18.6%	1.4 pts	16.7%	14.8%	1.9 pts

Net sales

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

	Three months ended June 30, 2018 over the prior year period	Six months ended June 30, 2018 over the prior year period
Volume	(2.7)%	(0.1)%
Price	0.3	0.5
Core growth	(2.4)	0.4
Acquisition (divestiture)	(1.0)	(0.6)
Currency	2.8	4.1
Total	(0.6)%	3.9 %

The 0.6 percent decrease in net sales for Filtration Solutions in the second quarter of 2018 from 2017 was primarily driven by:

- decreased sales volume in our residential and commercial businesses; and
- sales declines across Europe and China.

This decrease was partially offset by:

- favorable foreign currency effects; and
- selective increases in selling prices to mitigate inflationary cost increases.

The 3.9 percent increase in net sales for Filtration Solutions in the first half of 2018 from 2017 was primarily driven by:

- favorable foreign currency effects; and
- selective increases in selling prices.

This increase was partially offset by:

- decreased sales volume in our residential and commercial businesses; and
- sales declines across Europe and China.

Segment income

The components of the change in Filtration Solutions segment income from the prior period were as follows:

	Three months ended June 30, 2018 over the prior year period	Six months ended June 30, 2018 over the prior year period
Growth	1.6 pts	1.4 pts
Inflation	(1.8)	(2.0)
Productivity/Price	1.6	2.5
Total	1.4 pts	1.9 pts

The 1.4 and 1.9 percentage point increases in segment income for Filtration Solutions as a percentage of net sales in the second quarter and first half, respectively, of 2018 from 2017 were primarily driven by:

- higher core sales volume in our industrial vertical; and
- selective increases in selling prices.

These increases were partially offset by:

- inflationary increases related to labor costs and certain raw materials.

Flow Technologies

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

<i>In millions</i>	Three months ended			Six months ended		
	June 30, 2018	June 30, 2017	% / Point Change	June 30, 2018	June 30, 2017	% / Point Change
Net sales	\$ 241.9	\$ 236.2	2.4%	\$ 482.2	\$ 465.8	3.5%
Segment income	44.4	40.3	10.2%	83.1	73.4	13.2%
% of net sales	18.4%	17.1%	1.3 pts	17.2%	15.8%	1.4 pts

Net sales

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

	Three months ended June 30, 2018 over the prior year period	Six months ended June 30, 2018 over the prior year period
Volume	0.8 %	1.0 %
Price	0.9	0.7
Core growth	1.7	1.7
Acquisition (divestiture)	(0.9)	(0.5)
Currency	1.6	2.3
Total	2.4 %	3.5 %

The 2.4 and 3.5 percent increases in net sales for Flow Technologies in the second quarter and first half, respectively, of 2018 from 2017 were primarily driven by:

- favorable foreign currency effects;
- higher sales volume in our commercial business; and
- selective increases in selling prices to mitigate inflationary cost increases.

These increases were partially offset by:

- decreased sales volume in our residential business.

Segment income

The components of the change in Flow Technologies segment income from the prior period were as follows:

	Three months ended June 30, 2018 over the prior year period	Six months ended June 30, 2018 over the prior year period
Growth	(0.5) pts	0.5 pts
Inflation	(2.0)	(2.1)
Productivity/Price	3.8	3.0
Total	1.3 pts	1.4 pts

The 1.3 and 1.4 percentage point increases in segment income for Flow Technologies as a percentage of net sales in the second quarter and first half, respectively, of 2018 from 2017 were primarily driven by:

- higher sales volume in our commercial businesses, which resulted in increased leverage on operating expenses; and
- cost control and savings generated from back-office consolidation, reduction in personnel and other lean initiatives.

These increases were partially offset by:

- inflationary increases related to labor costs and certain raw materials.

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 intended to issue commercial paper to fund our financing needs on a short-term basis and use our revolving credit facility as back-up liquidity to support commercial paper.

We are focusing on increasing our cash flow and repaying existing debt, while continuing to fund our research and development, marketing and capital investment initiatives. Our intent is to maintain investment grade credit ratings and a solid liquidity position.

We experience seasonal cash flows primarily due to seasonal demand in a number of markets. We generally borrow in the first quarter of our fiscal year for operational purposes, which usage reverses in the second quarter as the seasonality of our businesses peaks. 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.

Operating activities

Cash provided by operating activities of continuing operations was \$177.8 million in the first six months of 2018, compared to \$84.9 million in the same period of 2017.

The \$177.8 million in net cash provided by operating activities of continuing operations in the first six months of 2018 primarily reflects net income from continuing operations of \$196.7 million, net of non-cash depreciation and amortization and the loss on early extinguishment of debt, offset by a negative impact of \$48.1 million as a result of changes in net working capital.

The \$84.9 million in net cash provided by operating activities of continuing operations in the first six months of 2017 primarily reflects \$154.0 million of net income from continuing operations, net of non-cash depreciation and amortization, offset by a negative impact of \$60.0 million as a result of changes in net working capital.

Investing activities

Cash used for investing activities of continuing operations was \$34.5 million in the first six months of 2018, compared to \$2,701.0 million of cash provided by investing activities of continuing operation in the same period of 2017. Net cash used for investing activities of continuing operations in the first six months of 2018 primarily reflects capital expenditures of \$20.3 million, cash paid for the settlement of a working capital adjustment related to the sale of the Valves & Controls business and cash paid for acquisitions of \$0.9 million. Net cash provided by investing activities of continuing operations in the first six months of 2017 primarily reflects cash received from the sale of the Valves & Controls business, offset by capital expenditures of \$18.7 million and acquisitions, net of cash acquired, of \$45.9 million.

Financing activities

Net cash used for financing activities was \$161.1 million in the first six months of 2018, compared with \$2,926.8 million in the prior year period. As further described below, during the first six months of 2018, we utilized the \$993.6 million of cash distributed from the Separation to repay commercial paper and revolving long term debt and for the early extinguishment of certain series of fixed rate debt. Additionally, we repurchased \$150.0 million of shares during the first six months of 2018.

Net cash used for financing activities in the first six months 2017 primarily relates to the utilization of the proceeds from the sale of the Valves & Controls business to repay our commercial paper and revolving long term debt and for the early extinguishment of certain series of fixed rate debt. Additionally, we repurchased \$100 million of shares during the first six months of 2017.

On April 25, 2018, Pentair, Pentair Investments Switzerland GmbH (“PISG”), Pentair Finance S.à r.l. (“PFSA”) and Pentair, Inc. entered into a credit agreement, providing for a five-year \$800.0 million senior unsecured revolving credit facility (the “Senior Credit Facility”), with Pentair and PISG as guarantors and PFSA and Pentair, Inc. as borrowers. The Senior Credit Facility replaced PFSA’s existing credit facility under that certain Amended and Restated Credit Agreement, dated as of October 3, 2014. PFSA has the option to request to increase the Senior Credit Facility in an aggregate amount of up to \$300.0 million, subject to customary conditions, including the commitment of the participating lenders. 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.

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 \$78.0 million of commercial paper outstanding as of June 30, 2018 and \$34.0 million as of December 31, 2017, 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.

Our debt agreements contain certain financial covenants, 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 its 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, 2018, we were in compliance with all financial covenants in our debt agreements.

Total availability under the Senior Credit Facility was \$707.4 million as of June 30, 2018.

In addition to the Senior Credit Facility, we have various other credit facilities with an aggregate availability of \$24.6 million, of which there were no outstanding borrowings at June 30, 2018. Borrowings under these credit facilities bear interest at variable rates.

In June 2018, we used the cash received from nVent as a result of the Distribution to redeem the remaining \$255.3 million aggregate principal of our 2.9% fixed rate senior notes due 2018 and completed a cash tender offer in the amount of €363.4 million aggregate principal of our 2.45% senior notes due 2019. All costs associated with the repurchases of debt were recorded as a *Loss on the early extinguishment of debt*, including \$1.0 million of unamortized deferred financing costs.

As of June 30, 2018, we have \$45.8 million of cash held in certain countries in which the ability to repatriate is limited due to local regulations or significant potential tax consequences.

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 we have the ability and sufficient capacity to meet these cash requirements by using available cash and internally generated funds and to borrow under our committed and uncommitted credit facilities.

Share repurchases

In December 2014, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of \$1.0 billion (the “2014 Authorization”). On May 8, 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”), replacing the 2014 Authorization. The 2018 Authorization expires on May 31, 2021. During the six months ended June 30, 2018, we repurchased 5.5 million of our shares for \$300.0 million, of which 2.2 million shares, or \$150.0 million, and 3.3 million shares, or \$150.0 million, were repurchased pursuant to the 2014 and 2018 Authorizations, respectively. As of June 30, 2018, we had \$600.0 million available for share repurchases under the 2018 Authorization.

Dividends payable

On May 8, 2018, the Board of Directors declared a quarterly cash dividend of \$0.35, which reflects an adjustment for the Distribution, payable on August 3, 2018 to shareholders of record at the close of business on July 20, 2018. As a result, the balance of dividends payable included in *Other current liabilities* on our Condensed Consolidated Balance Sheets was \$30.7 million and \$63.1 million at June 30, 2018 and December 31, 2017, respectively.

We paid dividends in the first six months of 2018 of \$125.9 million, or \$0.70 per ordinary share, compared with \$126.1 million, or \$0.69 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 \$9.0 billion as of December 31, 2017.

Contractual obligations

The following summarizes our significant contractual debt and fixed-rate interest obligations that impact our liquidity. There have been no other material changes from the significant contractual obligations previously disclosed in Item 7 of our 2017 Annual Report on Form 10-K.

<i>In millions</i>	Q3-Q4							
	2018	2019	2020	2021	2022	2023	Thereafter	Total
Debt obligations	\$ —	\$ 407.9	\$ 74.0	\$ 103.8	\$ 88.3	\$ 92.6	\$ 19.3	\$ 785.9
Interest obligations on fixed-rate debt	\$ 10.9	\$ 21.8	\$ 11.4	\$ 6.2	\$ 3.6	\$ 0.8	\$ 2.4	\$ 57.1

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 that equals or exceeds 100 percent conversion of adjusted 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, 2018	June 30, 2017
Net cash provided by (used for) operating activities of continuing operations	\$ 177.8	\$ 84.9
Capital expenditures of continuing operations	(20.3)	(18.7)
Proceeds from sale of property and equipment of continuing operations	(0.5)	—
Free cash flow from continuing operations	\$ 157.0	\$ 66.2
Net cash provided by (used for) operating activities of discontinued operations	(5.9)	70.4
Capital expenditures of discontinued operations	(7.4)	(25.7)
Proceeds from sale of property and equipment of discontinued operations	2.3	4.1
Free cash flow	\$ 146.0	\$ 115.0

NEW ACCOUNTING STANDARDS

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

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 2017 Annual Report on Form 10-K, we identified the critical accounting policies which affect our more significant estimates and assumptions used in preparing our consolidated financial statements. Significant changes to our critical accounting estimates as a result of adopting ASC 606 are discussed below:

Revenues

Accounting for long-term contracts involves the use of various techniques to estimate total contract revenue and costs. Contract estimates are based on various assumptions to project the outcome of future events that may span multiple years. We review and update our contract-related estimates regularly. We recognize adjustments in estimated profit on contracts under the cumulative catch-up method. Under this method, the impact of the adjustment on profit recorded to date is recognized in the period the adjustment is identified.

There have been no other material changes to our critical accounting policies and estimates from those disclosed in our 2017 Annual Report on Form 10-K for the year ended December 31, 2017.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes in our market risk during the quarter ended June 30, 2018. For additional information, refer to Item 7A of our 2017 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, 2018 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, 2018 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, 2018 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 made parties to a number of actions filed or have been given notice of potential claims relating to the conduct of our business, including those pertaining to commercial disputes, product liability, asbestos, environmental, safety and health, patent infringement and employment 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 subsidiaries and numerous other 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 dozens to hundreds of corporate defendants. While we have observed an increase in the number of these lawsuits over the past several years, including lawsuits by plaintiffs with mesothelioma-related claims, a large percentage of these suits have not presented viable legal claims and, as a result, have been dismissed by the courts. 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, 2018, there were approximately 600 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 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, 2018, our recorded reserves for environmental matters were not material. We do not anticipate our remaining 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 ITEM 1A. of our 2017 Annual Report on Form 10-K, except that the spin-off of our Electrical business, nVent Electric plc, was completed on April 30, 2018. However, the risk factors under the caption “Risks Related to Our Proposed Separation of Our Water Business and Electrical Business by Spin-Off” previously disclosed in ITEM 1A. of our 2017 Annual Report on Form 10-K relating to such spin-off after its completion remain applicable.

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 2018:

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 28	1,537	\$ 69.07	—	\$ 450,000,172
April 29 - May 26	3,339,069	\$ 45.30	3,300,065	\$ 600,000,070
May 27 - June 30	3,773	\$ 32.51	—	\$ 600,000,070
Total	3,344,379		3,300,065	

- (a) The purchases in this column include 1,537 shares for the period April 1 - April 28, 39,004 shares for the period April 29 - May 26 and 3,773 shares for the period May 27 - June 30 deemed surrendered to us by participants in our 2012 Stock and Incentive Plan (the “2012 Plan”) and earlier stock incentive plans that are now outstanding under the 2012 Plan (collectively “the 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 the 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 December 2014, our Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of \$1.0 billion. On May 8, 2018, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of \$750.0 million, replacing the 2014 authorization. The 2018 authorization expires on May 31, 2021. We have \$600.0 million remaining availability for repurchases under the 2018 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, 2018

- [2.1](#) Separation and Distribution Agreement, dated as of April 27, 2018, by and between Pentair plc and nVent Electric plc (Incorporated by reference to Exhibit 2.1 in the Current Report on Form 8-K of Pentair plc filed with the Commission on April 30, 2018 (File No. 001-11625)).
- [2.2](#) Tax Matters Agreement, dated as of April 27, 2018, by and between Pentair plc and nVent Electric plc (Incorporated by reference to Exhibit 2.2 in the Current Report on Form 8-K of Pentair plc filed with the Commission on April 30, 2018 (File No. 001-11625)).
- [2.3](#) Transition Services Agreement, dated as of April 27, 2018, by and between Pentair plc and nVent Electric plc (Incorporated by reference to Exhibit 2.3 in the Current Report on Form 8-K of Pentair plc filed with the Commission on April 30, 2018 (File No. 001-11625)).
- [2.4](#) Employee Matters Agreement, dated as of April 27, 2018, by and between Pentair plc and nVent Electric plc (Incorporated by reference to Exhibit 2.4 in the Current Report on Form 8-K of Pentair plc filed with the Commission on April 30, 2018 (File No. 001-11625)).
- [4.1](#) Credit Agreement, dated as of April 25, 2018, among Pentair plc, Pentair Investments Switzerland GmbH, Pentair Finance S.à.r.l., Pentair, Inc. and the lenders and agents party thereto (Incorporated by reference to Exhibit 4.1 in the Current Report on Form 8-K of Pentair plc filed with the Commission on April 30, 2018 (File No. 001-11625)).
- [10.1](#) Form of Key Executive Employment and Severance Agreement for John L. Stauch and Mark C. Borin.
- [10.2](#) Form of Key Executive Employment and Severance Agreement for Karl R. Frykman and John H. Jacko.
- [10.3](#) Form of Key Executive Employment and Severance Agreement for Karla C. Robertson, Kelly A. Baker, Ademir Sarcevic and Philip M. Rolchigo.
- [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, 2018 are filed herewith, formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Operations and Comprehensive Income for the three and six months ended June 30, 2018 and 2017, (ii) the Condensed Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017, (iii) the Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2018 and 2017, (iv) the Condensed Consolidated Statements of Changes in Equity for the six months ended June 30, 2018 and 2017, and (v) Notes to Condensed Consolidated Financial Statements.

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 25, 2018.

Pentair plc

Registrant

By /s/ Mark C. Borin

Mark C. Borin

Executive Vice President and Chief Financial Officer

By /s/ Ademir Sarcevic

Ademir Sarcevic

Senior Vice President and Chief Accounting Officer

KEY EXECUTIVE EMPLOYMENT AND SEVERANCE AGREEMENT

THIS AGREEMENT, made and entered into as of the ___ day of _____, 201__, by and between Pentair plc, an Irish corporation limited by shares (hereinafter referred to as the “Company”), and _____ (hereinafter referred to as the “Executive”).

W I T N E S S E T H

WHEREAS, the Executive is employed by the Company and/or a subsidiary of the Company (hereinafter referred to collectively as the “Employer”) in a key executive capacity and the Executive’s services are valuable to the conduct of the business of the Company;

WHEREAS, the Company desires to continue to attract and retain dedicated and skilled management employees in a period of industry consolidation, consistent with achieving the best possible value for its shareholders in any change in control of the Company;

WHEREAS, the Company recognizes that circumstances may arise in which a change in control of the Company occurs, through acquisition or otherwise, thereby causing a potential conflict of interest between the Company’s needs for the Executive to remain focused on the Company’s business and for the necessary continuity in management prior to and following a change in control, and the Executive’s reasonable personal concerns regarding future employment with the Employer and economic protection in the event of loss of employment as a consequence of a change in control;

WHEREAS, the Company and the Executive are desirous that any proposal for a change in control or acquisition of the Company will be considered by the Executive objectively and with reference only to the best interests of the Company and its shareholders;

WHEREAS, the Executive will be in a better position to consider the Company’s best interests if the Executive is afforded reasonable economic security, as provided in this Agreement, against altered conditions of employment which could result from any such change in control or acquisition;

WHEREAS, the Executive possesses intimate knowledge of the business and affairs of the Company and has acquired certain confidential information and data with respect to the Company; and

WHEREAS, the Company desires to insure, insofar as possible, that it will continue to have the benefit of the Executive’s services and to protect its confidential information and goodwill.

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants and agreements hereinafter set forth, the parties hereto mutually covenant and agree as follows:

1. Definitions.

(a) 409A Affiliate. The term “409A Affiliate” means each entity that is required to be included in the Company’s controlled group of corporations within the meaning of Section 414(b) of the Code, or that is under common control with the Company within the meaning of Section 414(c) of the Code; *provided, however*, that the phrase “at least 50 percent” shall be used in place of the phrase “at least 80 percent” each place it appears therein or in the regulations thereunder.

(b) Accrued Benefits. The Executive’s “Accrued Benefits” shall include the following amounts, payable as described herein: (i) all base salary for the time period ending with the Termination Date; (ii) reimbursement for any and all monies advanced in connection with the Executive’s employment for reasonable and necessary expenses incurred by the Executive on behalf of the Employer for the time period ending with the Termination Date; (iii) any and all other cash earned through the Termination Date and deferred at the election of the Executive or pursuant to any deferred compensation plan then in effect; (iv) notwithstanding any provision of any cash bonus or cash incentive compensation plan applicable to the Executive, but subject to any irrevocable deferral election then in effect, a lump sum amount, in cash, equal to the sum of (A) any cash bonus or cash incentive compensation that has been allocated or awarded to the Executive for a fiscal year or other measuring period under the plan that ends prior to the Termination Date but has not yet been paid (pursuant to Section 5(e) or otherwise) and (B) a pro rata portion to the Termination Date of the aggregate value of all contingent bonus or incentive compensation awards to the Executive for all uncompleted periods under the plan calculated as to each such award as if the Goals with respect to such bonus or incentive compensation award had been attained; and (v) all other payments and benefits to which the Executive (or in the event of the Executive’s death, the Executive’s surviving spouse or other beneficiary) may be entitled on the Termination Date as compensatory fringe benefits or under the terms of any benefit plan of the Employer, excluding severance payments under any Employer severance policy, practice or agreement in effect on the Termination Date. Payment of Accrued Benefits shall be made promptly in accordance with the Company’s prevailing practice with respect to clauses (i) and (ii) or, with respect to clauses (iii), (iv) and (v), pursuant to the terms of the benefit plan or practice establishing such benefits; *provided* that payments pursuant to clause (iv)(B) shall be paid on the first day of the seventh month following the month in which the Executive’s Separation from Service occurs to the extent necessary for compliance with the requirements of Code Section 409A(a)(2)(B) relating to specified employees or, to the extent not so required, within ninety (90) days of the Executive’s Separation from Service.

(c) Act. The term “Act” means the Securities Exchange Act of 1934, as amended.

(d) Affiliate and Associate. The terms “Affiliate” and “Associate” shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Act.

(e) Annual Cash Compensation. The term “Annual Cash Compensation” shall mean the sum of (i) the Executive’s Annual Base Salary (determined as of the time of the Change in Control of the Company or, if higher, immediately prior to the date the Notice of Termination is given) plus (ii) an amount equal to the greatest of the Executive’s annual cash incentive target bonus for the fiscal year in which the Termination Date occurs, the annual cash incentive bonus the Executive received during the fiscal year prior to the Change in Control of the Company or the annual cash incentive bonus the Executive received with respect to the fiscal year prior to the Change

in Control of the Company (the aggregate amount set forth in clause (i) and clause (ii) shall hereafter be referred to as the “Annual Cash Compensation”).

(f) Beneficial Owner. A Person shall be deemed to be the “Beneficial Owner” of any securities:

(i) which such Person or any of such Person’s Affiliates or Associates has the right to acquire (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding, or upon the exercise of conversion rights, exchange rights, rights, warrants or options, or otherwise; *provided, however*, that a Person shall not be deemed the Beneficial Owner of, or to beneficially own, (A) securities tendered pursuant to a tender or exchange offer made by or on behalf of such Person or any of such Person’s Affiliates or Associates until such tendered securities are accepted for purchase, or (B) securities issuable upon exercise of any rights issued pursuant to the terms of any rights agreement of the Company, at any time before the issuance of such securities;

(ii) which such Person or any of such Person’s Affiliates or Associates, directly or indirectly, has the right to vote or dispose of or has “beneficial ownership” of (as determined pursuant to Rule 13d-3 of the General Rules and Regulations under the Act), including pursuant to any agreement, arrangement or understanding; *provided, however*, that a Person shall not be deemed the Beneficial Owner of, or to beneficially own, any security under this clause (ii) as a result of an agreement, arrangement or understanding to vote such security if the agreement, arrangement or understanding: (A) arises solely from a revocable proxy or consent given to such Person in response to a public proxy or consent solicitation made pursuant to, and in accordance with, the applicable rules and regulations under the Act and (B) is not also then reportable on a Schedule 13D under the Act (or any comparable or successor report); or

(iii) which are beneficially owned, directly or indirectly, by any other Person with which such Person or any of such Person’s Affiliates or Associates has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting (except pursuant to a revocable proxy as described in clause (ii) above) or disposing of any voting securities of the Company.

(g) Cause. “Cause” for termination by the Employer of the Executive’s employment shall be limited to (i) the engaging by the Executive in intentional conduct that the Company establishes, by clear and convincing evidence, has caused demonstrable and serious financial injury to the Employer, as evidenced by a determination in a binding and final judgment, order or decree of a court or administrative agency of competent jurisdiction, in effect after exhaustion or lapse of all rights of appeal, in an action, suit or proceeding, whether civil, criminal, administrative or investigative; (ii) the Executive’s conviction of a felony (as evidenced by binding and final judgment, order or decree of a court of competent jurisdiction, in effect after exhaustion of all rights of appeal); or (iii) continuing willful and unreasonable refusal by the Executive to perform the Executive’s duties or responsibilities (unless significantly changed without the Executive’s consent).

(h) Change in Control of the Company. A “Change in Control of the Company” shall be deemed to have occurred if an event set forth in any one of the following paragraphs shall have occurred:

(i) any Person (other than (A) the Company or any of its subsidiaries, (B) a trustee or other fiduciary holding securities under any employee benefit plan of the Company or any of its subsidiaries, (C) an underwriter temporarily holding securities pursuant to an offering of such securities or (D) a corporation owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of stock in the Company (“Excluded Persons”)) is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such Person any securities acquired directly from the Company or its Affiliates after the date of this Agreement, pursuant to express authorization by the Board that refers to this exception) representing 30% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company’s then outstanding voting securities; or

(ii) the following individuals cease for any reason to constitute a majority of the number of directors of the Company then serving: (A) individuals who, on the date of this Agreement constituted the Board and (B) any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including but not limited to a consent solicitation, relating to the election of directors of the Company, as such terms are used in Rule 14a 11 of Regulation 14A under the Act) whose appointment or election by the Board or nomination for election by the Company’s shareholders was approved by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors on the date of this Agreement, or whose appointment, election or nomination for election was previously so approved (collectively the “Continuing Directors”); *provided, however*, that individuals who are appointed to the Board pursuant to or in accordance with the terms of an agreement relating to a merger, consolidation, or share exchange involving the Company (or any direct or indirect subsidiary of the Company) shall not be Continuing Directors for purposes of this Agreement until after such individuals are first nominated for election by a vote of at least two-thirds (2/3) of the then Continuing Directors and are thereafter elected as directors by the shareholders of the Company at a meeting of shareholders held following consummation of such merger, consolidation, or share exchange; and, *provided further*, that in the event the failure of any such persons appointed to the Board to be Continuing Directors results in a Change in Control of the Company, the subsequent qualification of such persons as Continuing Directors shall not alter the fact that a Change in Control of the Company occurred; or

(iii) the consummation of a merger, consolidation or share exchange of the Company with any other corporation or the issuance of voting securities of the Company in connection with a merger, consolidation or share exchange of the Company (or any direct or indirect subsidiary of the Company), in each case, which requires approval of the shareholders of the Company, other than (A) a merger, consolidation or share exchange which would result in the voting securities of the Company outstanding immediately prior to such merger, consolidation or share exchange continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof) at least 50% of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger,

consolidation or share exchange, or (B) a merger, consolidation or share exchange effected to implement a recapitalization of the Company (or similar transaction) in which no Person (other than an Excluded Person) is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such Person any securities acquired directly from the Company or its Affiliates after the date of this Agreement, pursuant to express authorization by the Board that refers to this exception) representing 30% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding voting securities; or

(iv) the consummation of a plan of complete liquidation or dissolution of the Company or a sale or disposition by the Company of all or substantially all of the Company's assets (in one transaction or a series of related transactions within any period of 24 consecutive months), in each case, which requires approval of the shareholders of the Company, other than a sale or disposition by the Company of all or substantially all of the Company's assets to an entity at least 75% of the combined voting power of the voting securities of which are owned by Persons in substantially the same proportions as their ownership of the Company immediately prior to such sale.

Notwithstanding the foregoing, no "Change in Control of the Company" shall be deemed to have occurred if there is consummated any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to own, directly or indirectly, in the same proportions as their ownership in the Company, an entity that owns all or substantially all of the assets or voting securities of the Company immediately following such transaction or series of transactions.

(i) Code. The term "Code" means the Internal Revenue Code of 1986, including any amendments thereto or successor tax codes thereof. Any reference to a specific provision of the Code includes any regulations promulgated under such provision and any successor provision.

(j) Covered Termination. Subject to Section 2(b), the term "Covered Termination" means any Termination of Employment during the Employment Period where the Termination Date or the date Notice of Termination is delivered is any date prior to the end of the Employment Period.

(k) Employment Period. Subject to Section 2(b), the term "Employment Period" means a period commencing on the date of a Change in Control of the Company, and ending at 11:59 p.m. Central Time on the earlier of the second anniversary of such date or the Executive's Normal Retirement Date.

(l) Good Reason. The Executive shall have "Good Reason" for termination of employment in the event of any of the following without the Executive's prior written consent:

(i) any breach of this Agreement by the Employer, including specifically any breach by the Employer of the agreements contained in Section 3, Section 4, Section 5, or Section 6, other than an isolated, insubstantial and inadvertent failure not occurring in bad faith that the Employer remedies within ten (10) days after receipt of written notice thereof given by the Executive;

(ii) any reduction in the Executive's (A) base salary, (B) percentage of base salary available as cash incentive compensation or bonus opportunity, (C) grant date fair value of annual equity-based awards or (D) other benefits, in each case relative to those most favorable to the Executive in effect at any time during the 180-day period prior to the Change in Control of the Company or, to the extent more favorable to the Executive, those in effect at any time during the Employment Period;

(iii) the removal of the Executive from, or any failure to reelect or reappoint the Executive to, any of the positions held with the Employer on the date of the Change in Control of the Company or any other positions with the Employer to which the Executive shall thereafter be elected, appointed or assigned, except in the event that such removal or failure to reelect or reappoint relates to the termination by the Employer of the Executive's employment for Cause or by reason of disability pursuant to Section 12;

(iv) a good faith determination by the Executive that there has been a material adverse change in the Executive's working conditions or status with the Employer relative to the most favorable working conditions or status in effect during the 180-day period prior to the Change in Control of the Company, or, to the extent more favorable to the Executive, those in effect at any time during the Employment Period, including but not limited to (A) a significant change in the nature or scope of the Executive's authority, powers, functions, duties or responsibilities, or (B) a significant reduction in the level of support services, staff, secretarial and other assistance, office space and accoutrements, but in each case excluding for this purpose an isolated, insubstantial and inadvertent event not occurring in bad faith that the Employer remedies within ten (10) days after receipt of written notice thereof given by the Executive;

(v) the relocation of the Executive's principal place of employment to a location more than 50 miles from the Executive's principal place of employment on the date 180 days prior to the Change in Control of the Company (or if the Executive has not been employed for 180 days prior to the Change in Control of the Company, as in effect on the date the Executive entered into this Agreement);

(vi) the Employer requires the Executive to travel on Employer business 20% in excess of the average number of days per month the Executive was required to travel during the 180-day period prior to the Change in Control of the Company; or

(vii) failure by the Company to obtain the Agreement referred to in Section 17(a) as provided therein.

(m) Normal Retirement Date. The term "Normal Retirement Date" means the Executive's attainment of age sixty-five (65).

(n) Person. The term "Person" shall mean any individual, firm, partnership, corporation or other entity, including any successor (by merger or otherwise) of such entity, or a group of any of the foregoing acting in concert.

(o) Separation from Service. For purposes of this Agreement, the term "Separation from Service" means the Executive's Termination of Employment, or if the Executive continues to provide services following his or her Termination of Employment, such later date as is

considered a separation from service from the Company and its 409A Affiliates within the meaning of Code Section 409A. Specifically, if the Executive continues to provide services to the Company or a 409A Affiliate in a capacity other than as an employee, such shift in status is not automatically a Separation from Service.

(p) Termination of Employment. For purposes of this Agreement, the Executive's termination of employment shall be presumed to occur when the Company and Executive reasonably anticipate that no further services will be performed by the Executive for the Company and its 409A Affiliates or that the level of bona fide services the Executive will perform as an employee of the Company and its 409A Affiliates will permanently decrease to no more than 20% of the average level of bona fide services performed by the Executive (whether as an employee or independent contractor) for the Company and its 409A Affiliates over the immediately preceding 36-month period (or such lesser period of services). Whether the Executive has experienced a Termination of Employment shall be determined by the Employer in good faith and consistent with Section 409A of the Code. Notwithstanding the foregoing, if the Executive takes a leave of absence for purposes of military leave, sick leave or other bona fide reason, the Executive will not be deemed to have incurred a Separation from Service for the first 6 months of the leave of absence, or if longer, for so long as the Executive's right to reemployment is provided either by statute or by contract, including this Agreement; *provided that* if the leave of absence is due to a medically determinable physical or mental impairment that can be expected to result in death or last for a continuous period of not less than six months, where such impairment causes the Executive to be unable to perform the duties of his or her position of employment or any substantially similar position of employment, the leave may be extended by the Employer for up to 29 months without causing a Termination of Employment.

(q) Termination Date. Except as otherwise provided in Section 2(b), Section 10(b), and Section 17(a), the term "Termination Date" means (i) if the Executive's Termination of Employment is by the Executive's death, the date of death; (ii) if the Executive's Termination of Employment is by reason of voluntary early retirement, as agreed in writing by the Employer and the Executive, the date of such early retirement which is set forth in such written agreement; (iii) if the Executive's Termination of Employment is, for purposes of this Agreement, by reason of disability pursuant to Section 12, the earlier of thirty (30) days after the Notice of Termination is given or one day prior to the end of the Employment Period; (iv) if the Executive's Termination of Employment is by the Executive voluntarily (other than for Good Reason), the date the Notice of Termination is given; and (v) if the Executive's Termination of Employment is by the Employer (other than by reason of disability pursuant to Section 12) or by the Executive for Good Reason, the earlier of thirty (30) days after the Notice of Termination is given or one day prior to the end of the Employment Period. Notwithstanding the foregoing,

(A) If termination is for Cause pursuant to Section 1(g)(iii) and if the Executive has cured the conduct constituting such Cause as described by the Employer in its Notice of Termination within such 30-day or shorter period, then the Executive's employment hereunder shall continue as if the Employer had not delivered its Notice of Termination.

(B) If the Executive shall in good faith give a Notice of Termination for Good Reason and the Employer notifies the Executive that a dispute exists concerning the termination within the 15-day period following receipt thereof, then the Executive may elect to continue his or her employment during such dispute and

the Termination Date shall be determined under this paragraph. If the Executive so elects and it is thereafter determined that Good Reason did exist, the Termination Date shall be the earliest of (1) the date on which the dispute is finally determined, either (x) by mutual written agreement of the parties or (y) in accordance with Section 22, (2) the date of the Executive's death or (3) one day prior to the end of the Employment Period. If the Executive so elects and it is thereafter determined that Good Reason did not exist, then the employment of the Executive hereunder shall continue after such determination as if the Executive had not delivered the Notice of Termination asserting Good Reason and there shall be no Termination Date arising out of such Notice. In either case, this Agreement continues, until the Termination Date, if any, as if the Executive had not delivered the Notice of Termination except that, if it is finally determined that Good Reason did exist, the Executive shall in no case be denied the benefits described in Section 9 (including a Termination Payment) based on events occurring after the Executive delivered his Notice of Termination.

(C) Except as provided in Section 1(q)(B), if the party receiving the Notice of Termination notifies the other party that a dispute exists concerning the termination within the appropriate period following receipt thereof and it is finally determined that the reason asserted in such Notice of Termination did not exist, then (1) if such Notice was delivered by the Executive, the Executive will be deemed to have voluntarily terminated his employment and the Termination Date shall be the earlier of the date 15 days after the Notice of Termination is given or one day prior to the end of the Employment Period and (2) if delivered by the Company, the Company will be deemed to have terminated the Executive other than by reason of death, disability or Cause.

Capitalized terms used in this Agreement not defined in this Section 1 have the meanings assigned in the other sections of this Agreement. The definitions of the following terms may be found in the sections indicated:

<u>Term</u>	<u>Section</u>
Annual Base Salary	Section 5(a)
Base Period Income	Section 9(b)(iii)
Bonus Amount	Section 5(e)(i)
Bonus Plan	Section 5(e)
Company Incentive Plan	Section 5(e)(iii)
Excise Tax	Section 9(b)(i)
Expenses	Section 15
Goals	Section 5(e)(iii)
National Tax Counsel	Section 9(b)(ii)
Notice of Termination	Section 13
Plans	Section 9(c)(iv)
Termination Payment	Section 9(a)
Total Payments	Section 9(b)(i)

2. Termination or Cancellation Prior to Change in Control.

(a) Subject to Section 2(b), the Employer and the Executive shall each retain the right to terminate the employment of the Executive at any time and for any reason (or no reason) prior to a Change in Control of the Company. Subject to Section 2(b), in the event that prior to a Change in Control of the Company (i) the Executive's employment is terminated or (ii) as determined in writing by the Compensation Committee of the Board of Directors of the Company in its sole discretion, the Executive's authority, powers, functions, duties, responsibilities or pay grade are materially reduced, this Agreement shall be terminated and cancelled and of no further force and effect, and any and all rights and obligations of the parties hereunder shall cease.

(b) Anything in this Agreement to the contrary notwithstanding, if the Executive's employment with the Employer is terminated by the Employer (other than a termination due to the Executive's death or as a result of the Executive's disability (as determined under Section 12) during the period of 180 days prior to the date on which a Change in Control of the Company occurs, and if it is reasonably demonstrated by the Executive that such termination of employment (i) was at the request of a third party who has taken steps reasonably calculated to effect a Change in Control of the Company or (ii) otherwise arose in connection with or in anticipation of a Change in Control of the Company, then for all purposes of this Agreement such termination of employment shall be deemed a "Covered Termination," a "Notice of Termination" shall be deemed to have been given, and the "Employment Period" shall be deemed to have begun on the date of such termination which shall be deemed to be the "Termination Date" and the date of the Change of Control of the Company for purposes of this Agreement. Anything in this Agreement to the contrary notwithstanding, if the Executive's authority, powers, functions, duties, responsibilities or pay grade were reduced pursuant to Section 2(a)(ii) during the period of 180 days prior to the date on which the Change in Control of the Company occurs, and if it is reasonably demonstrated by the Executive that such reduction in authority, powers, functions, duties, responsibilities or pay grade (i) was at the request of a third party who has taken steps reasonably calculated to effect a Change in Control of the Company or (ii) otherwise arose in connection with or in anticipation of a Change in Control of the Company, then the termination and cancellation of this Agreement pursuant to Section 2(a) shall be deemed null and void, this Agreement shall be deemed to remain in full force and effect with any and all rights and obligations of the parties hereunder continuing and such reduction in authority, powers, functions, duties, responsibilities or pay grade shall be considered "Good Reason" for the Executive to terminate employment in connection with a Change in Control of the Company.

3. Employment Period. If a Change in Control of the Company occurs when the Executive is employed by the Employer, the Employer will continue thereafter to employ the Executive during the Employment Period, and the Executive will remain in the employ of the Employer in accordance with and subject to the terms and provisions of this Agreement. Any Termination of Employment during the Employment Period, whether by the Company or the Employer, shall be deemed a termination by the Company for purposes of this Agreement.

4. Duties. During the Employment Period, the Executive shall, in the same capacities and positions held by the Executive at the time of the Change in Control of the Company or in such other capacities and positions as may be agreed to by the Employer and the Executive in writing, devote the Executive's best efforts and all of the Executive's business time, attention and skill to the business and affairs of the Employer, as such business and affairs now exist and as they may hereafter be conducted.

5. Compensation. During the Employment Period, the Executive shall be compensated as follows:

(a) The Executive shall receive, at reasonable intervals (but not less often than monthly) and in accordance with such standard policies as may be in effect immediately prior to the Change in Control of the Company, an annual base salary in cash equivalent of not less than twelve times the Executive's highest monthly base salary for the twelve-month period immediately preceding the month in which the Change in Control of the Company occurs or, if higher, annual base salary at the rate in effect immediately prior to the Change in Control of the Company (which base salary shall, unless otherwise agreed in writing by the Executive or subject to any irrevocable deferral election then in effect, include the current receipt by the Executive of any amounts which, prior to the Change in Control of the Company, the Executive had elected to defer, whether such compensation is deferred under Section 401(k) of the Code or otherwise), subject to adjustment as hereinafter provided in Section 6 (such salary amount as adjusted upward from time to time is hereafter referred to as the "Annual Base Salary").

(b) The Executive shall receive fringe benefits at least equal in value to the highest value of such benefits provided for the Executive at any time during the 180-day period immediately prior to the Change in Control of the Company or, if more favorable to the Executive, those provided generally at any time during the Employment Period to any executives of the Employer of comparable status and position to the Executive; and shall be reimbursed, at such intervals and in accordance with such standard policies that are most favorable to the Executive that were in effect at any time during the 180-day period immediately prior to the Change in Control of the Company, for any and all monies advanced in connection with the Executive's employment for reasonable and necessary expenses incurred by the Executive on behalf of the Employer, including travel expenses.

(c) The Executive and/or the Executive's family, as the case may be, shall be included, to the extent eligible thereunder (which eligibility shall not be conditioned on the Executive's salary grade or on any other requirement which excludes persons of comparable status to the Executive unless such exclusion was in effect for such plan or an equivalent plan at any time during the 180-day period immediately prior to the Change in Control of the Company), in any and all plans providing benefits for the Employer's salaried employees in general, including but not limited to group life insurance, hospitalization, medical, dental, profit sharing and stock bonus plans; *provided, that*, (i) in no event shall the aggregate level of benefits under such plans in which the Executive is included be less than the aggregate level of benefits under plans of the Employer of the type referred to in this Section 5(c) in which the Executive was participating at any time during the 180-day period immediately prior to the Change in Control of the Company and (ii) in no event shall the aggregate level of benefits under such plans be less than the aggregate level of benefits under plans of the type referred to in this Section 5(c) provided at any time after the Change in Control of the Company to any executive of the Employer of comparable status and position to the Executive.

(d) The Executive shall annually be entitled to not less than the amount of paid vacation and not fewer than the highest number of paid holidays to which the Executive was entitled annually at any time during the 180-day period immediately prior to the Change in Control of the Company or such greater amount of paid vacation and number of paid holidays as may be made available annually to other executives of the Employer of comparable status and position to the Executive at any time during the Employment Period.

(e) The Executive shall be included in all plans providing additional benefits to executives of the Employer of comparable status and position to the Executive, including but not limited to short- or long-term cash-based incentive compensation plans (such plan or plans together, the “Bonus Plan”), deferred compensation plans, supplemental retirement plans, equity awards, and similar or comparable plans; *provided, that*, unless otherwise provided in clauses (i) or (ii) below, in no event shall the aggregate level of benefits under such plans or awards be less than the higher of (x) the highest aggregate level of benefits under plans of the Employer of the type referred to in this Section 5(e) in which the Executive was participating at any time during the 180-day period immediately prior to the Change in Control of the Company and (y) the aggregate levels of benefits under plans of the type referred to in this Section 5(e) provided at any time after the Change in Control of the Company to any executive of the Employer comparable in status and position to the Executive.

(i) With respect to the Bonus Plan, the amount of the compensation (the “Bonus Amount”) that the Executive is eligible to earn under the Bonus Plan if the threshold, target and maximum performance objectives are met shall be no less than the highest threshold, target and maximum amounts, respectively, that Executive was eligible to receive under awards outstanding under the Employer’s short- or long-term cash-based incentive compensation plan or plans as in effect at any time during the 180-day period immediately prior to the Change in Control of the Company; *provided that* the amount Executive is eligible to earn shall in no event be lower than the amount of short- or long-term cash-based incentive compensation that any executive of the Employer comparable in status and position to the Executive is eligible to earn. Payment of the Bonus Amount, if earned, shall not be affected by the Executive’s Termination of Employment after the end of the Employment Period.

(ii) With respect to equity awards, the Executive shall annually receive awards under one or more equity-based compensation plan or plans of the Employer. Such annual equity awards shall have a grant date fair value at least equal to the aggregate grant date fair value of the largest equity-based awards granted to the Executive at any time during the one-year period immediately prior to the Change in Control of the Company, measured, in each case, as a multiple of the Executive’s Annual Base Salary; *provided that*, solely for purposes of determining the grant date fair value of the largest equity-based awards granted to the Executive during such one-year period immediately prior to the Change in Control of the Company, any inducement awards or other awards that are intended to be non-recurring shall be disregarded or, to the extent such awards are intended to replace more than one annual award, shall be pro-rated so that only a one-year portion of the award shall be counted; and *provided further* that the grant date fair value of the equity awards granted to the Executive shall in no event be lower than the grant date fair value of the annual equity-based awards granted to any executive of the Employer comparable in status and position to the Executive.

(iii) To the extent any compensation that the Executive has an opportunity to earn after a Change in Control of the Company is subject to achieving performance objectives, such performance objectives shall be established and communicated in writing to the Executive within the first ninety (90) days of the performance period and shall be reasonably related to the business of the Employer (the “Goals”). All Goals shall be attainable with approximately the same degree of probability as the most attainable goals under the Employer’s performance-based compensation plan or plans as in effect at any time

during the 180-day period immediately prior to the Change in Control of the Company (whether one or more, the “Company Incentive Plan”) and in view of the Employer’s existing and projected financial and business circumstances applicable at the time, and shall have a performance period that is no longer than the performance period corresponding to the most analogous type of compensation under the Company Incentive Plan.

6. Annual Compensation Adjustments. During the Employment Period, the Board of Directors of the Company (or an appropriate committee thereof) will consider and appraise, at least annually, the contributions of the Executive to the Company, and in accordance with the Company’s practice prior to the Change in Control of the Company, due consideration shall be given to the upward adjustment of the Executive’s Annual Base Salary, at least annually, (a) commensurate with increases generally given to other executives of the Employer of comparable status and position to the Executive, and (b) as the scope of the Company’s operations or the Executive’s duties expand.

7. Termination For Cause or Without Good Reason. If there is a Covered Termination for Cause or due to the Executive’s voluntarily terminating his or her employment other than for Good Reason (any such terminations to be subject to the procedures set forth in Section 13), then the Executive shall be entitled to receive only Accrued Benefits.

8. Termination Giving Rise to a Termination Payment and Certain Other Benefits. If there is a Covered Termination by the Executive for Good Reason, or by the Company other than by reason of (i) death, (ii) disability pursuant to Section 12, or (iii) Cause (any such terminations to be subject to the procedures set forth in Section 13), then (A) the Executive shall be entitled to receive Accrued Benefits and, in lieu of further base salary for periods following the Termination Date, as liquidated damages and additional severance pay and in consideration of the covenant of the Executive set forth in Section 14(a), the Termination Payment pursuant to Section 9(a), (B) all equity-based and cash incentive awards then held by the Executive that were granted prior to the Change in Control of the Company shall be subject to the terms of the 2012 Stock and Incentive Awards Plan or a successor incentive compensation plan under which the awards were granted and (C) all equity-based and cash incentive awards then held by the Executive that were granted on or after the Change in Control of the Company shall vest or be earned in full immediately upon such Covered Termination, with the amount or value of any performance-based awards determined based on the deemed achievement of all applicable performance conditions at 100% of target, without pro-ration.

9. Payments Upon Termination.

(a) Termination Payment. The “Termination Payment” shall be an amount equal to the Annual Cash Compensation times two and one-half. The Termination Payment shall be paid to the Executive in cash equivalent (i) on the first day of the seventh month following the month in which the Executive’s Separation from Service occurs, without interest thereon, to the extent necessary for compliance with the requirements of Code Section 409A(a)(2)(B) relating to specified employees or (ii) to the extent not so required, within ten (10) business days after the Termination Date. Notwithstanding the foregoing, in the event the Executive’s Termination Date is pursuant to Section 2(b), the Termination Payment shall be paid within ten (10) business days after the date of the Change in Control of the Company (as defined without reference to Section 2(b)), without interest. Such lump sum payment shall not be reduced by any present value or similar factor, and the Executive shall not be required to mitigate the amount of the Termination Payment by securing other employment or otherwise, nor will such Termination Payment be reduced by reason of the Executive

securing other employment or for any other reason, except as provided in subsection (b) below. The Termination Payment shall be in lieu of, and acceptance by the Executive of the Termination Payment shall constitute the Executive's release of any rights of the Executive to, any other cash severance payments under any Company severance policy, practice or agreement.

(b) 280G Provision.

(i) Notwithstanding any other provision of this Agreement, if any portion of the Termination Payment or any other payment or other benefit to the Executive under this Agreement, or under any other agreement with or plan of the Employer or any 409A Affiliate (in the aggregate, "Total Payments"), would constitute an "excess parachute payment" (as defined below) and would, but for this Section 9(b)(i), result in the imposition on the Executive of an excise tax under Code Section 4999 (the "Excise Tax"), then the Total Payments to be made to the Executive shall either be (A) delivered in full, or (B) delivered in a reduced amount that is One Dollar (\$1.00) less than the amount that would cause any portion of such Total Payments to be subject to the Excise Tax, whichever of the foregoing results in the receipt by the Executive of the greatest benefit on an after-tax basis (taking into account the applicable federal, state and local income taxes and the Excise Tax).

(ii) Within forty (40) days following the Executive's Termination of Employment or notice by one party to the other of its belief that there is a payment or benefit due the Executive that will result in an excess parachute payment, the Executive and the Company, at the Company's expense, shall obtain the opinion (which need not be unqualified) of nationally recognized tax counsel ("National Tax Counsel") selected by the Company's independent auditors and reasonably acceptable to the Executive (which may be regular outside counsel to the Company), which opinion sets forth (A) the amount of the Base Period Income (as defined below), (B) the amount and present value of Total Payments, (C) the amount and present value of any excess parachute payments determined without regard to any reduction of Total Payments pursuant to Section 9(b)(i), and (D) the net after-tax proceeds to the Executive, taking into account the tax imposed under Code Section 4999 if (1) the Total Payments were reduced in accordance with Section 9(b)(i)(B), or (2) the Total Payments were not so reduced. The opinion of National Tax Counsel shall be addressed to the Company and the Executive and shall be binding upon the Company and the Executive. If such National Tax Counsel opinion determines that clause (B) of Section 9(b)(i) applies, then the payments hereunder or any other payment or benefit determined by such counsel to be includable in Total Payments shall be reduced or eliminated so that under the bases of calculations set forth in such opinion there will be no excess parachute payment. In such event, payments or benefits included in the Total Payments shall be reduced or eliminated by applying the following principles, in order: (x) the payment or benefit with the higher ratio of the parachute payment value to present economic value (determined using reasonable actuarial assumptions) shall be reduced or eliminated before a payment or benefit with a lower ratio; (y) the payment or benefit with the later possible payment date shall be reduced or eliminated before a payment or benefit with an earlier payment date; and (z) cash payments shall be reduced prior to non-cash benefits; *provided* that if the foregoing order of reduction or elimination would violate Code Section 409A, then the reduction shall be made pro rata among the payments or benefits included in the Total Payments (on the basis of the relative present value of the parachute payments).

(iii) For purposes of this Agreement, (A) the terms “excess parachute payment” and “parachute payments” shall have the meanings assigned to them in Section 280G of the Code and such “parachute payments” shall be valued as provided therein, (B) present value for purposes of this Agreement shall be calculated in accordance with Section 1274(b)(2) of the Code, (C) the term “Base Period Income” means an amount equal to the Executive’s “annualized includable compensation for the base period” as defined in Section 280G(d)(1) of the Code, (D) for purposes of the National Tax Counsel opinion, the value of any noncash benefits or any deferred payment or benefit shall be determined by the Company’s independent auditors in accordance with the principles of Section 280G(d)(3) and (4) of the Code, which determination shall be evidenced in a certificate of such auditors addressed to the Company and the Executive, and (E) the Executive shall be deemed to pay federal income tax and employment taxes at the highest marginal rate of federal income and employment taxation, and state and local income taxes at the highest marginal rate of taxation in the state or locality of the Executive’s domicile (determined in both cases in the calendar year in which the Covered Termination occurs or notice described in Section 9(b)(ii) is given, whichever is earlier), net of the maximum reduction in federal income taxes that may be obtained from the deduction of such state and local taxes. If the National Tax Counsel so requests in connection with the opinion required by this Section 9(b), the Executive and the Company shall obtain, at the Company’s expense, and the National Tax Counsel may rely on, the advice of a firm of recognized executive compensation consultants as to the reasonableness of any item of compensation to be received by the Executive solely with respect to its status under Section 280G of the Code and the regulations thereunder.

(iv) The Company agrees to bear all costs associated with, and to indemnify and hold harmless, the National Tax Counsel of and from any and all claims, damages, and expenses resulting from or relating to its determinations pursuant to this Section 9(b), except for claims, damages or expenses resulting from the gross negligence or willful misconduct of such firm.

(v) This Section 9(b) shall be amended to comply with any amendment or successor provision to Sections 280G or 4999 of the Code. If such provisions are repealed without successor, then this Section 9(b) shall be cancelled without further effect.

(c) Additional Benefits. If there is a Covered Termination and the Executive is entitled to Accrued Benefits and the Termination Payment, then the Company shall provide to the Executive the following additional benefits:

(i) The Executive shall receive until the end of the second calendar year following the calendar year in which the Executive’s Separation from Service occurs, at the expense of the Company, outplacement services, on an individualized basis at a level of service commensurate with the Executive’s status with the Company immediately prior to the date of the Change in Control of the Company (or, if higher, immediately prior to the Executive’s Termination of Employment), provided by a nationally recognized executive placement firm selected by the Company; *provided that* the cost to the Company of such services shall not exceed 10% of the Executive’s Annual Base Salary.

(ii) Until the earlier of the end of the Employment Period or such time as the Executive has obtained new employment and is covered by benefits which in the aggregate are at least equal in value to the following benefits, the Executive shall continue to

be covered, at the expense of the Company, by the same or equivalent life insurance, hospitalization, medical and dental coverage as was required hereunder with respect to the Executive immediately prior to the date the Notice of Termination is given, subject to the following:

(A) Following the end of the COBRA continuation period, if such hospitalization, medical or dental coverage is provided under a health plan that is subject to Section 105(h) of the Code, benefits payable under such health plan shall comply with the requirements of Treasury regulation section 1.409A-3(i)(1)(iv) and, if necessary, the Company shall amend such health plan to comply therewith. If the Executive is entitled to the Termination Payment pursuant to Section 2(b), then within ten (10) days following the Change in Control of the Company (determined without regard to Section 2(b)), the Company shall reimburse the Executive for any COBRA premiums the Executive paid for his or her hospitalization, medical and dental coverage under COBRA from the Executive's Termination Date through the date of the Change in Control of the Company (determined without regard to Section 2(b)).

(B) To the extent required to comply with Code Section 409A, during the first six months following the Executive's Separation from Service, the Executive shall pay the Company for any life insurance coverage that provides a benefit in excess of \$50,000 under a group term life insurance policy.. After the end of such six month period, the Company shall make a cash equivalent payment to the Executive equal to the aggregate premiums paid by the Executive for such coverage, and thereafter such coverage shall be provided at the expense of the Company for the remainder of the period as set forth above; *provided that* this clause (B) shall cease to apply if on the date of the Executive's Separation from Service, neither the Company nor any other entity that is considered a "service recipient" with respect to the Executive within the meaning of Code Section 409A has any stock which is publicly traded on an established securities market (within the meaning of Treasury Regulation Section 1.897-1(m)) or otherwise.

(iii) The Company shall bear up to \$15,000 in the aggregate of fees and expenses of consultants and/or legal or accounting advisors engaged by the Executive to advise the Executive as to matters relating to the computation of benefits due and payable under this Section 9.

(iv) The Company shall cause the Executive to be fully and immediately vested in his accrued benefit under the Pentair, Inc. Supplemental Executive Retirement Plan ("SERP") and in any nonqualified defined contribution retirement plan of the Employer. The amount of benefits under the SERP shall be determined as if the Executive had completed additional years of Benefit Service (as such term is defined in the SERP) equal to the lesser of (A) three years or (B) the greater of (x) seven minus the years of Benefit Service credited to such Executive under the SERP, determined without regard to the terms of this Agreement, as of the end of the calendar year which includes the date of the Change in Control of the Company, or (y) zero.

10. Death.

(a) Except as provided in Section 10(b), in the event of a Covered Termination due to the Executive's death, the Executive's estate, heirs and beneficiaries shall receive all the Executive's Accrued Benefits through the Termination Date.

(b) In the event the Executive dies after a Notice of Termination is given (i) by the Company or (ii) by the Executive for Good Reason, the Executive's estate, heirs and beneficiaries shall be entitled to the benefits described in Section 10(a) and, subject to the provisions of this Agreement, to such Termination Payment as the Executive would have been entitled to had the Executive lived, except that the Termination Payment shall be paid within 90 days following the date of the Executive's death, without interest thereon. For purposes of this Section 10(b), the Termination Date shall be the earlier of 30 days following the giving of the Notice of Termination, subject to extension pursuant to Section 1(g), or one day prior to the end of the Employment Period.

11. Retirement. If, during the Employment Period, the Executive and the Employer shall execute an agreement providing for the early retirement of the Executive from the Employer, or the Executive shall otherwise give notice that he is voluntarily choosing to retire early from the Employer, the Executive shall receive Accrued Benefits through the Termination Date; *provided, that* if the Executive's employment is terminated by the Executive for Good Reason or by the Company other than by reason of death, disability or Cause and the Executive also, in connection with such termination, elects voluntary early retirement, the Executive shall also be entitled to receive a Termination Payment pursuant to Section 9.

12. Termination for Disability. If, during the Employment Period, as a result of the Executive's disability due to physical or mental illness or injury (regardless of whether such illness or injury is job-related), the Executive shall have been absent from the Executive's duties hereunder on a full-time basis for a period of six consecutive months and, within 30 days after the Company notifies the Executive in writing that it intends to terminate the Executive's employment (which notice shall not constitute the Notice of Termination contemplated below), the Executive shall not have returned to the performance of the Executive's duties hereunder on a full-time basis, the Company may terminate the Executive's employment for purposes of this Agreement pursuant to a Notice of Termination given in accordance with Section 13. If the Executive's employment is terminated on account of the Executive's disability in accordance with this Section, the Executive shall receive Accrued Benefits through the Termination Date and shall remain eligible for all benefits provided by any long term disability programs of the Employer in effect at the time of such termination.

13. Termination Notice and Procedure. Any Covered Termination by the Company or the Executive (other than a termination of the Executive's employment that is a Covered Termination by virtue of Section 2(b)) shall be communicated by a written notice of termination ("Notice of Termination") to the Executive, if such Notice is given by the Company, and to the Company, if such Notice is given by the Executive, all in accordance with the following procedures and those set forth in Section 24:

(a) If such termination is for disability, Cause or Good Reason, the Notice of Termination shall indicate in reasonable detail the facts and circumstances alleged to provide a basis for such termination.

(b) Any Notice of Termination by the Company shall have been approved, prior to the giving thereof to the Executive, by a resolution duly adopted by a majority of the directors of the Company (or any successor corporation) then in office.

(c) If the Notice is given by the Executive for Good Reason, the Executive may cease performing his duties hereunder on or after the date fifteen (15) days after the delivery of Notice of Termination and shall in any event cease employment on the Termination Date. If the Notice is given by the Company, then the Executive may cease performing his duties hereunder on the date of receipt of the Notice of Termination, subject to the Executive's rights hereunder.

(d) The Executive shall have thirty (30) days, or such longer period as the Company may determine to be appropriate, to cure any conduct or act, if curable, alleged to provide grounds for termination of the Executive's employment for Cause under this Agreement pursuant to Section 1(g)(iii).

(e) The recipient of any Notice of Termination shall personally deliver or mail in accordance with Section 24 written notice of any dispute relating to such Notice of Termination to the party giving such Notice within 15 days after receipt thereof; *provided, however*, that if the Executive's conduct or act alleged to provide grounds for termination by the Company for Cause is curable, then such period shall be 30 days. After the expiration of such period, the contents of the Notice of Termination shall become final and not subject to dispute.

14. Further Obligations of the Executive.

(a) Competition. The Executive agrees that, in the event of any Covered Termination where the Executive is entitled to Accrued Benefits and the Termination Payment, the Executive shall not, for a period expiring one year after the Termination Date, without the prior written approval of the Company's Board of Directors, (i) solicit for employment an employee of the Company or its subsidiaries or (ii) participate in the management of, be employed by or own any business enterprise at a location anywhere in the World that engages in substantial competition with the Company or its subsidiaries, where such enterprise's revenues from any competitive activities amount to 10% or more of such enterprise's net revenues and sales for its most recently completed fiscal year; *provided, however*, that nothing in this Section 14(a) shall prohibit the Executive from owning stock or other securities of a competitor amounting to less than five percent (5%) of the outstanding capital stock of such competitor.

(b) Confidentiality. During and following the Executive's employment by the Company, the Executive shall hold in confidence and not directly or indirectly disclose or use or copy or make lists of any confidential information or proprietary data of the Company (including that of the Employer), except to the extent authorized in writing by the Board of Directors of the Company or required by any court or administrative agency, other than to an employee of the Company or a person to whom disclosure is reasonably necessary or appropriate in connection with the performance by the Executive of duties as an executive of the Company. Confidential information shall not include any information known generally to the public or any information of a type not otherwise considered confidential by persons engaged in the same business or a business similar to that of the Company. All records, files, documents and materials, or copies thereof, relating to the business of the Company which the Executive shall prepare, or use, or come into contact with, shall be and remain the sole property of the Company and shall be promptly returned to the Company upon termination of employment with the Company. Notwithstanding anything to the

contrary herein, however, nothing in this Agreement prohibits the Executive from reporting possible violations of local, state, foreign or federal law or regulation, or related facts, to any governmental agency or entity or making other reports or disclosures that, in each case, the Executive believes are protected under the whistleblower provisions of local, state, foreign or federal law or regulation. Without limitation, the Executive may report possible violations of law or regulation and related facts to the U.S. Department of Justice, the Securities and Exchange Commission, Congress, and any agency Inspector General. The Executive does not need the prior authorization of the Company (including, but not limited to, its law department) to make any such reports or disclosures, and the Executive does not need to notify the Company that the Executive has made such reports or disclosures. Making such reports or disclosures does not in any way have adverse consequences to the Executive under this Agreement.

15. Expenses and Interest. If, after a Change in Control of the Company, (a) a dispute arises with respect to the enforcement of the Executive's rights under this Agreement or (b) any legal or arbitration proceeding shall be brought to enforce or interpret any provision contained herein or to recover damages for breach hereof, in either case so long as the Executive is not acting in bad faith, then the Company shall reimburse the Executive for any reasonable attorneys' fees and necessary costs and disbursements incurred as a result of the dispute, legal or arbitration proceeding ("Expenses"), and prejudgment interest on any money judgment or arbitration award obtained by the Executive calculated at the rate of interest announced by U.S. Bank National Association, Minneapolis, Minnesota, from time to time at its prime or base lending rate from the date that payments to him or her should have been made under this Agreement. Within ten days after the Executive's written request therefore (but in no event later than the end of the calendar year following the calendar year in which such Expense is incurred), the Company shall reimburse the Executive, or such other person or entity as the Executive may designate in writing to the Company, the Executive's reasonable Expenses.

16. Payment Obligations Absolute. The Company's obligation during and after the Employment Period to pay the Executive the amounts and to make the benefit and other arrangements provided herein shall be absolute and unconditional and shall not be affected by any circumstances, including, without limitation, any setoff, counterclaim, recoupment, defense or other right which the Company may have against him or her or anyone else. Except as provided in Section 15, all amounts payable by the Company hereunder shall be paid without notice or demand. Each and every payment made hereunder by the Company shall be final, and the Company will not seek to recover all or any part of such payment from the Executive, or from whomsoever may be entitled thereto, for any reason whatsoever.

17. Successors.

(a) If the Company sells, assigns or transfers all or substantially all of its business and assets to any Person or if the Company merges into or consolidates or otherwise combines (where the Company does not survive such combination) with any Person (any such event, a "Sale of Business"), then the Company shall assign all of its right, title and interest in this Agreement as of the date of such event to such Person, and the Company shall cause such Person, by written agreement in form and substance reasonably satisfactory to the Executive, to expressly assume and agree to perform from and after the date of such assignment all of the terms, conditions and provisions imposed by this Agreement upon the Company. Failure of the Company to obtain such written agreement prior to the effective date of such Sale of Business shall be a breach of this Agreement constituting "Good Reason" hereunder, except that for purposes of implementing the

foregoing the date upon which such Sale of Business becomes effective shall be deemed the Termination Date. In case of such assignment by the Company and of assumption and agreement by such Person, as used in this Agreement, "Company" shall thereafter mean such Person which executes and delivers the agreement provided for in this Section 17 or which otherwise becomes bound by all the terms and provisions of this Agreement by operation of law, and this Agreement shall inure to the benefit of, and be enforceable by, such Person. The Executive shall, in his or her discretion, be entitled to proceed against any or all of such Persons, any Person which theretofore was such a successor to the Company and the Company (as so defined) in any action to enforce any rights of the Executive hereunder. Except as provided in this Section 17(a), this Agreement shall not be assignable by the Company. This Agreement shall not be terminated by the voluntary or involuntary dissolution of the Company.

(b) This Agreement and all rights of the Executive shall inure to the benefit of and be enforceable by the Executive's personal or legal representatives, executors, administrators, heirs and beneficiaries. All amounts payable to the Executive under Sections 3, 7, 8, 9, 10, 11, 12 and 15 if the Executive had lived shall be paid, in the event of the Executive's death, to the Executive's estate, heirs and representatives; *provided, however*, that the foregoing shall not be construed to modify any terms of any benefit plan of the Employer, as such terms are in effect on the date of the Change in Control of the Company, that expressly govern benefits under such plan in the event of the Executive's death.

18. Severability. The provisions of this Agreement shall be regarded as divisible, and if any of said provisions or any part hereof are declared invalid or unenforceable by a court of competent jurisdiction, the validity and enforceability of the remainder of such provisions or parts hereof and the applicability thereof shall not be affected thereby.

19. Contents of Agreement; Waiver of Rights; Amendment. This Agreement sets forth the entire understanding between the parties hereto with respect to the subject matter hereof and shall supersede in all respects, and the Executive hereby waives all rights under, any prior or other agreement or understanding between the parties with respect to such subject matter, including, but not limited to any Key Executive Employment and Severance Agreement between the Company and the Executive entered into prior to the date hereof. This Agreement may not be amended or modified at any time except by written instrument executed by the Company and the Executive.

20. Withholding. The Company shall be entitled to withhold from amounts to be paid to the Executive hereunder any federal, state or local withholding or other taxes or charges which it is from time to time required to withhold; *provided, that* the amount so withheld shall not exceed the minimum amount required to be withheld by law. In addition, if prior to the date of payment of the Termination Payment hereunder, the Federal Insurance Contributions Act (FICA) tax imposed under Sections 3101, 3121(a) and 3121(v)(2), where applicable, becomes due with respect to any payment or benefit to be provided hereunder, the Employer may provide for an immediate payment of the amount needed to pay the Executive's portion of such tax (plus an amount equal to the taxes that will be due on such amount) and the Executive's Termination Payment shall be reduced accordingly. The Employer shall be entitled to rely on an opinion of the National Tax Counsel if any question as to the amount or requirement of any such withholding shall arise.

21. Certain Rules of Construction. No party shall be considered as being responsible for the drafting of this Agreement for the purpose of applying any rule construing ambiguities against the drafter or otherwise. No draft of this Agreement shall be taken into account

in construing this Agreement. Any provision of this Agreement which requires an agreement in writing shall be deemed to require that the writing in question be signed by the Executive and an authorized representative of the Company.

22. Governing Law; Resolution of Disputes. This Agreement and the rights and obligations hereunder shall be governed by and construed in accordance with the laws of the State of Minnesota, without reference to the conflict of law principles thereof. Any dispute arising out of this Agreement shall, at the Executive's election, be determined by arbitration under the rules of the American Arbitration Association then in effect (in which case both parties shall be bound by the arbitration award) or by litigation. Whether the dispute is to be settled by arbitration or litigation, the venue for the arbitration or litigation shall be Minneapolis, Minnesota or, at the Executive's election, if the Executive is not then residing or working in the Minneapolis, Minnesota metropolitan area, in the judicial district encompassing the city in which the Executive resides; *provided, that*, if the Executive is not then residing in the United States, the election of the Executive with respect to such venue shall be either Minneapolis, Minnesota or in the judicial district encompassing that city in the United States among the thirty cities having the largest population (as determined by the most recent United States Census data available at the Termination Date) which is closest to the Executive's residence. The parties consent to personal jurisdiction in each trial court in the selected venue having subject matter jurisdiction notwithstanding their residence or situs, and each party irrevocably consents to service of process in the manner provided hereunder for the giving of notices.

23. Additional Section 409A Provisions. (%2) If, after the date of a Change in Control of the Company, any payment amount or the value of any benefit under this Agreement is required to be included in the Executive's income prior to the date such amount is actually paid or the benefit provided as a result of the failure of this Agreement (or any other arrangement that is required to be aggregated with this Agreement under Code Section 409A) to comply with Code Section 409A, then the Executive shall receive a distribution, in a lump sum, within 90 days after the date it is finally determined that the Agreement (or such other arrangement that is required to be aggregated with this Agreement) fails to meet the requirements of Section 409A of the Code; such distribution shall equal the amount required to be included in the Executive's income as a result of such failure and shall reduce the amount of payments or benefits otherwise due hereunder.

(b) The Company and the Executive intend the terms of this Agreement to be in compliance with Section 409A of the Code. The Company does not guarantee the tax treatment or tax consequences associated with any payment or benefit, including but not limited to consequences related to Section 409A of the Code. To the maximum extent permissible, any ambiguous terms of this Agreement shall be interpreted in a manner that avoids a violation of Section 409A of the Code.

(c) If the Executive believes he or she is entitled to a payment or benefit pursuant to the terms of this Agreement that was not timely paid or provided, and such payment or benefit is considered deferred compensation subject to the requirements of Section 409A of the Code, the Executive acknowledges that to avoid an additional tax on such payment or benefit pursuant to the provisions of Section 409A of the Code, the Executive must make a reasonable, good faith effort to collect such payment or benefit no later than 90 days after the latest date upon which the payment could have been timely made or benefit timely provided without violating Section 409A of the Code, and if not paid or provided, must take further enforcement measures within 180 days after such latest date.

24. Notice. Notices given pursuant to this Agreement shall be in writing and, except as otherwise provided by Section 13(d), shall be deemed given when actually received by the Executive or actually received by the Company's Secretary or any officer of the Company other than the Executive. If mailed, such notices shall be mailed by United States registered or certified mail, return receipt requested, addressee only, postage prepaid, if to the Company, to Pentair plc, c/o Pentair, Inc., Attention: Secretary (or Chief Executive Officer, if the Executive is then Secretary), 5500 Wayzata Blvd., Suite 800, Golden Valley, Minnesota 55416, or if to the Executive, at the address set forth below the Executive's signature to this Agreement, or to such other address as the party to be notified shall have theretofore given to the other party in writing.

25. No Waiver. No waiver by either party at any time of any breach by the other party of, or compliance with, any condition or provision of this Agreement to be performed by the other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same time or any prior or subsequent time.

26. Headings. The headings herein contained are for reference only and shall not affect the meaning or interpretation of any provision of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

PENTAIR PLC

By: _____

Its:

Attest: _____

Its:

EXECUTIVE:

Address:

KEY EXECUTIVE EMPLOYMENT AND SEVERANCE AGREEMENT

THIS AGREEMENT, made and entered into as of the ___ day of _____, 201__, by and between Pentair plc, an Irish corporation limited by shares (hereinafter referred to as the “Company”), and _____ (hereinafter referred to as the “Executive”).

WITNESSETH

WHEREAS, the Executive is employed by the Company and/or a subsidiary of the Company (hereinafter referred to collectively as the “Employer”) in a key executive capacity and the Executive’s services are valuable to the conduct of the business of the Company;

WHEREAS, the Company desires to continue to attract and retain dedicated and skilled management employees in a period of industry consolidation, consistent with achieving the best possible value for its shareholders in any change in control of the Company;

WHEREAS, the Company recognizes that circumstances may arise in which a change in control of the Company occurs, through acquisition or otherwise, thereby causing a potential conflict of interest between the Company’s needs for the Executive to remain focused on the Company’s business and for the necessary continuity in management prior to and following a change in control, and the Executive’s reasonable personal concerns regarding future employment with the Employer and economic protection in the event of loss of employment as a consequence of a change in control;

WHEREAS, the Company and the Executive are desirous that any proposal for a change in control or acquisition of the Company will be considered by the Executive objectively and with reference only to the best interests of the Company and its shareholders;

WHEREAS, the Executive will be in a better position to consider the Company’s best interests if the Executive is afforded reasonable economic security, as provided in this Agreement, against altered conditions of employment which could result from any such change in control or acquisition;

WHEREAS, the Executive possesses intimate knowledge of the business and affairs of the Company and has acquired certain confidential information and data with respect to the Company; and

WHEREAS, the Company desires to insure, insofar as possible, that it will continue to have the benefit of the Executive’s services and to protect its confidential information and goodwill.

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants and agreements hereinafter set forth, the parties hereto mutually covenant and agree as follows:

1. Definitions.

(a) 409A Affiliate. The term “409A Affiliate” means each entity that is required to be included in the Company’s controlled group of corporations within the meaning of Section 414(b) of the Code, or that is under common control with the Company within the meaning of Section 414(c) of the Code; *provided, however*, that the phrase “at least 50 percent” shall be used in place of the phrase “at least 80 percent” each place it appears therein or in the regulations thereunder.

(b) Accrued Benefits. The Executive’s “Accrued Benefits” shall include the following amounts, payable as described herein: (i) all base salary for the time period ending with the Termination Date; (ii) reimbursement for any and all monies advanced in connection with the Executive’s employment for reasonable and necessary expenses incurred by the Executive on behalf of the Employer for the time period ending with the Termination Date; (iii) any and all other cash earned through the Termination Date and deferred at the election of the Executive or pursuant to any deferred compensation plan then in effect; (iv) notwithstanding any provision of any cash bonus or cash incentive compensation plan applicable to the Executive, but subject to any irrevocable deferral election then in effect, a lump sum amount, in cash, equal to the sum of (A) any cash bonus or cash incentive compensation that has been allocated or awarded to the Executive for a fiscal year or other measuring period under the plan that ends prior to the Termination Date but has not yet been paid (pursuant to Section 5(e) or otherwise) and (B) a pro rata portion to the Termination Date of the aggregate value of all contingent bonus or incentive compensation awards to the Executive for all uncompleted periods under the plan calculated as to each such award as if the Goals with respect to such bonus or incentive compensation award had been attained; and (v) all other payments and benefits to which the Executive (or in the event of the Executive’s death, the Executive’s surviving spouse or other beneficiary) may be entitled on the Termination Date as compensatory fringe benefits or under the terms of any benefit plan of the Employer, excluding severance payments under any Employer severance policy, practice or agreement in effect on the Termination Date. Payment of Accrued Benefits shall be made promptly in accordance with the Company’s prevailing practice with respect to clauses (i) and (ii) or, with respect to clauses (iii), (iv) and (v), pursuant to the terms of the benefit plan or practice establishing such benefits; *provided* that payments pursuant to clause (iv)(B) shall be paid on the first day of the seventh month following the month in which the Executive’s Separation from Service occurs to the extent necessary for compliance with the requirements of Code Section 409A(a)(2)(B) relating to specified employees or, to the extent not so required, within ninety (90) days of the Executive’s Separation from Service.

(c) Act. The term “Act” means the Securities Exchange Act of 1934, as amended.

(d) Affiliate and Associate. The terms “Affiliate” and “Associate” shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Act.

(e) Annual Cash Compensation. The term “Annual Cash Compensation” shall mean the sum of (i) the Executive’s Annual Base Salary (determined as of the time of the Change in Control of the Company or, if higher, immediately prior to the date the Notice of Termination is given) plus (ii) an amount equal to the greatest of the Executive’s annual cash incentive target bonus for the fiscal year in which the Termination Date occurs, the annual cash incentive bonus the Executive received during the fiscal year prior to the Change in Control of the Company or the annual cash incentive bonus the Executive received with respect to the fiscal year prior to the Change in Control of the Company (the aggregate amount set forth in clause (i) and clause (ii) shall hereafter be referred to as the “Annual Cash Compensation”).

(f) Beneficial Owner. A Person shall be deemed to be the “Beneficial Owner” of any securities:

(i) which such Person or any of such Person’s Affiliates or Associates has the right to acquire (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding, or upon the exercise of conversion rights, exchange rights, rights, warrants or options, or otherwise; *provided, however*, that a Person shall not be deemed the Beneficial Owner of, or to beneficially own, (A) securities tendered pursuant to a tender or exchange offer made by or on behalf of such Person or any of such Person’s Affiliates or Associates until such tendered securities are accepted for purchase, or (B) securities issuable upon exercise of any rights issued pursuant to the terms of any rights agreement of the Company, at any time before the issuance of such securities;

(ii) which such Person or any of such Person’s Affiliates or Associates, directly or indirectly, has the right to vote or dispose of or has “beneficial ownership” of (as determined pursuant to Rule 13d-3 of the General Rules and Regulations under the Act), including pursuant to any agreement, arrangement or understanding; *provided, however*, that a Person shall not be deemed the Beneficial Owner of, or to beneficially own, any security under this clause (ii) as a result of an agreement, arrangement or understanding to vote such security if the agreement, arrangement or understanding: (A) arises solely from a revocable proxy or consent given to such Person in response to a public proxy or consent solicitation made pursuant to, and in accordance with, the applicable rules and regulations under the Act and (B) is not also then reportable on a Schedule 13D under the Act (or any comparable or successor report); or

(iii) which are beneficially owned, directly or indirectly, by any other Person with which such Person or any of such Person’s Affiliates or Associates has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting (except pursuant to a revocable proxy as described in clause (ii) above) or disposing of any voting securities of the Company.

(g) Cause. “Cause” for termination by the Employer of the Executive’s employment shall be limited to (i) the engaging by the Executive in intentional conduct that the Company establishes, by clear and convincing evidence, has caused demonstrable and serious financial injury to the Employer, as evidenced by a determination in a binding and final judgment, order or decree of a court or administrative agency of competent jurisdiction, in effect after exhaustion or lapse of all rights of appeal, in an action, suit or proceeding, whether civil, criminal, administrative or investigative; (ii) the Executive’s conviction of a felony (as evidenced by binding and final judgment, order or decree of a court of competent jurisdiction, in effect after exhaustion of all rights of appeal); or (iii) continuing willful and unreasonable refusal by the Executive to perform the Executive’s duties or responsibilities (unless significantly changed without the Executive’s consent).

(h) Change in Control of the Company. A “Change in Control of the Company” shall be deemed to have occurred if an event set forth in any one of the following paragraphs shall have occurred:

(i) any Person (other than (A) the Company or any of its subsidiaries, (B) a trustee or other fiduciary holding securities under any employee benefit plan of the Company or any of its subsidiaries, (C) an underwriter temporarily holding securities pursuant to an offering of such securities or (D) a corporation owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of stock in the Company (“Excluded Persons”)) is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such Person any securities acquired directly from the Company or its Affiliates after the date of this Agreement, pursuant to express authorization by the Board that refers to this exception) representing 30% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company’s then outstanding voting securities; or

(ii) the following individuals cease for any reason to constitute a majority of the number of directors of the Company then serving: (A) individuals who, on the date of this Agreement constituted the Board and (B) any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including but not limited to a consent solicitation, relating to the election of directors of the Company, as such terms are used in Rule 14a 11 of Regulation 14A under the Act) whose appointment or election by the Board or nomination for election by the Company’s shareholders was approved by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors on the date of this Agreement, or whose appointment, election or nomination for election was previously so approved (collectively the “Continuing Directors”); *provided, however*, that individuals who are appointed to the Board pursuant to or in accordance with the terms of an agreement relating to a merger, consolidation, or share exchange involving the Company (or any direct or indirect subsidiary of the Company) shall not be Continuing Directors for purposes of this Agreement until after such individuals are first nominated for election by a vote of at least two-thirds (2/3) of the then Continuing Directors and are thereafter elected as directors by the shareholders of the Company at a meeting of shareholders held following consummation of such merger, consolidation, or share exchange; and, *provided further*, that in the event the failure of any such persons appointed to the Board to be Continuing Directors results in a Change in Control of the Company, the subsequent qualification of such persons as Continuing Directors shall not alter the fact that a Change in Control of the Company occurred; or

(iii) the consummation of a merger, consolidation or share exchange of the Company with any other corporation or the issuance of voting securities of the Company in connection with a merger, consolidation or share exchange of the Company (or any direct or indirect subsidiary of the Company), in each case, which requires approval of the shareholders of the Company, other than (A) a merger, consolidation or share exchange which would result in the voting securities of the Company outstanding immediately prior to such merger, consolidation or share exchange continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof) at least 50% of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger, consolidation or share exchange, or (B) a merger, consolidation or share exchange effected to implement a recapitalization of the Company (or similar transaction) in which no Person (other than an Excluded Person) is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such Person

any securities acquired directly from the Company or its Affiliates after the date of this Agreement, pursuant to express authorization by the Board that refers to this exception) representing 30% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding voting securities; or

(iv) the consummation of a plan of complete liquidation or dissolution of the Company or a sale or disposition by the Company of all or substantially all of the Company's assets (in one transaction or a series of related transactions within any period of 24 consecutive months), in each case, which requires approval of the shareholders of the Company, other than a sale or disposition by the Company of all or substantially all of the Company's assets to an entity at least 75% of the combined voting power of the voting securities of which are owned by Persons in substantially the same proportions as their ownership of the Company immediately prior to such sale.

Notwithstanding the foregoing, no "Change in Control of the Company" shall be deemed to have occurred if there is consummated any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to own, directly or indirectly, in the same proportions as their ownership in the Company, an entity that owns all or substantially all of the assets or voting securities of the Company immediately following such transaction or series of transactions.

(i) Code. The term "Code" means the Internal Revenue Code of 1986, including any amendments thereto or successor tax codes thereof. Any reference to a specific provision of the Code includes any regulations promulgated under such provision and any successor provision.

(j) Covered Termination. Subject to Section 2(b), the term "Covered Termination" means any Termination of Employment during the Employment Period where the Termination Date or the date Notice of Termination is delivered is any date prior to the end of the Employment Period.

(k) Employment Period. Subject to Section 2(b), the term "Employment Period" means a period commencing on the date of a Change in Control of the Company, and ending at 11:59 p.m. Central Time on the earlier of the second anniversary of such date or the Executive's Normal Retirement Date.

(l) Good Reason. The Executive shall have "Good Reason" for termination of employment in the event of any of the following without the Executive's prior written consent:

(i) any breach of this Agreement by the Employer, including specifically any breach by the Employer of the agreements contained in Section 3, Section 4, Section 5, or Section 6, other than an isolated, insubstantial and inadvertent failure not occurring in bad faith that the Employer remedies within ten (10) days after receipt of written notice thereof given by the Executive;

(ii) any reduction in the Executive's (A) base salary, (B) percentage of base salary available as cash incentive compensation or bonus opportunity, (C) grant date fair value of annual equity-based awards or (D) other benefits, in each case relative to those most favorable to the Executive in effect at any time during the 180-day period prior to the Change

in Control of the Company or, to the extent more favorable to the Executive, those in effect at any time during the Employment Period;

(iii) the removal of the Executive from, or any failure to reelect or reappoint the Executive to, any of the positions held with the Employer on the date of the Change in Control of the Company or any other positions with the Employer to which the Executive shall thereafter be elected, appointed or assigned, except in the event that such removal or failure to reelect or reappoint relates to the termination by the Employer of the Executive's employment for Cause or by reason of disability pursuant to Section 12;

(iv) a good faith determination by the Executive that there has been a material adverse change in the Executive's working conditions or status with the Employer relative to the most favorable working conditions or status in effect during the 180-day period prior to the Change in Control of the Company, or, to the extent more favorable to the Executive, those in effect at any time during the Employment Period, including but not limited to (A) a significant change in the nature or scope of the Executive's authority, powers, functions, duties or responsibilities, or (B) a significant reduction in the level of support services, staff, secretarial and other assistance, office space and accoutrements, but in each case excluding for this purpose an isolated, insubstantial and inadvertent event not occurring in bad faith that the Employer remedies within ten (10) days after receipt of written notice thereof given by the Executive;

(v) the relocation of the Executive's principal place of employment to a location more than 50 miles from the Executive's principal place of employment on the date 180 days prior to the Change in Control of the Company (or if the Executive has not been employed for 180 days prior to the Change in Control of the Company, as in effect on the date the Executive entered into this Agreement);

(vi) the Employer requires the Executive to travel on Employer business 20% in excess of the average number of days per month the Executive was required to travel during the 180-day period prior to the Change in Control of the Company; or

(vii) failure by the Company to obtain the Agreement referred to in Section 17(a) as provided therein.

(m) Normal Retirement Date. The term "Normal Retirement Date" means the Executive's attainment of age sixty-five (65).

(n) Person. The term "Person" shall mean any individual, firm, partnership, corporation or other entity, including any successor (by merger or otherwise) of such entity, or a group of any of the foregoing acting in concert.

(o) Separation from Service. For purposes of this Agreement, the term "Separation from Service" means the Executive's Termination of Employment, or if the Executive continues to provide services following his or her Termination of Employment, such later date as is considered a separation from service from the Company and its 409A Affiliates within the meaning of Code Section 409A. Specifically, if the Executive continues to provide services to the Company or a 409A Affiliate in a capacity other than as an employee, such shift in status is not automatically a Separation from Service.

(p) Termination of Employment. For purposes of this Agreement, the Executive's termination of employment shall be presumed to occur when the Company and Executive reasonably anticipate that no further services will be performed by the Executive for the Company and its 409A Affiliates or that the level of bona fide services the Executive will perform as an employee of the Company and its 409A Affiliates will permanently decrease to no more than 20% of the average level of bona fide services performed by the Executive (whether as an employee or independent contractor) for the Company and its 409A Affiliates over the immediately preceding 36-month period (or such lesser period of services). Whether the Executive has experienced a Termination of Employment shall be determined by the Employer in good faith and consistent with Section 409A of the Code. Notwithstanding the foregoing, if the Executive takes a leave of absence for purposes of military leave, sick leave or other bona fide reason, the Executive will not be deemed to have incurred a Separation from Service for the first 6 months of the leave of absence, or if longer, for so long as the Executive's right to reemployment is provided either by statute or by contract, including this Agreement; *provided that* if the leave of absence is due to a medically determinable physical or mental impairment that can be expected to result in death or last for a continuous period of not less than six months, where such impairment causes the Executive to be unable to perform the duties of his or her position of employment or any substantially similar position of employment, the leave may be extended by the Employer for up to 29 months without causing a Termination of Employment.

(q) Termination Date. Except as otherwise provided in Section 2(b), Section 10(b), and Section 17(a), the term "Termination Date" means (i) if the Executive's Termination of Employment is by the Executive's death, the date of death; (ii) if the Executive's Termination of Employment is by reason of voluntary early retirement, as agreed in writing by the Employer and the Executive, the date of such early retirement which is set forth in such written agreement; (iii) if the Executive's Termination of Employment is, for purposes of this Agreement, by reason of disability pursuant to Section 12, the earlier of thirty (30) days after the Notice of Termination is given or one day prior to the end of the Employment Period; (iv) if the Executive's Termination of Employment is by the Executive voluntarily (other than for Good Reason), the date the Notice of Termination is given; and (v) if the Executive's Termination of Employment is by the Employer (other than by reason of disability pursuant to Section 12) or by the Executive for Good Reason, the earlier of thirty (30) days after the Notice of Termination is given or one day prior to the end of the Employment Period. Notwithstanding the foregoing,

(A) If termination is for Cause pursuant to Section 1(g)(iii) and if the Executive has cured the conduct constituting such Cause as described by the Employer in its Notice of Termination within such 30-day or shorter period, then the Executive's employment hereunder shall continue as if the Employer had not delivered its Notice of Termination.

(B) If the Executive shall in good faith give a Notice of Termination for Good Reason and the Employer notifies the Executive that a dispute exists concerning the termination within the 15-day period following receipt thereof, then the Executive may elect to continue his or her employment during such dispute and the Termination Date shall be determined under this paragraph. If the Executive so elects and it is thereafter determined that Good Reason did exist, the Termination Date shall be the earliest of (1) the date on which the dispute is finally determined, either (x) by mutual written agreement of the parties or (y) in accordance with Section 22, (2) the date of the Executive's death or (3) one day prior to the end of the

Employment Period. If the Executive so elects and it is thereafter determined that Good Reason did not exist, then the employment of the Executive hereunder shall continue after such determination as if the Executive had not delivered the Notice of Termination asserting Good Reason and there shall be no Termination Date arising out of such Notice. In either case, this Agreement continues, until the Termination Date, if any, as if the Executive had not delivered the Notice of Termination except that, if it is finally determined that Good Reason did exist, the Executive shall in no case be denied the benefits described in Section 9 (including a Termination Payment) based on events occurring after the Executive delivered his Notice of Termination.

(C) Except as provided in Section 1(q)(B), if the party receiving the Notice of Termination notifies the other party that a dispute exists concerning the termination within the appropriate period following receipt thereof and it is finally determined that the reason asserted in such Notice of Termination did not exist, then (1) if such Notice was delivered by the Executive, the Executive will be deemed to have voluntarily terminated his employment and the Termination Date shall be the earlier of the date 15 days after the Notice of Termination is given or one day prior to the end of the Employment Period and (2) if delivered by the Company, the Company will be deemed to have terminated the Executive other than by reason of death, disability or Cause.

Capitalized terms used in this Agreement not defined in this Section 1 have the meanings assigned in the other sections of this Agreement. The definitions of the following terms may be found in the sections indicated:

<u>Term</u>	<u>Section</u>
Annual Base Salary	Section 5(a)
Base Period Income	Section 9(b)(iii)
Bonus Amount	Section 5(e)(i)
Bonus Plan	Section 5(e)
Company Incentive Plan	Section 5(e)(iii)
Excise Tax	Section 9(b)(i)
Expenses	Section 15
Goals	Section 5(e)(iii)
National Tax Counsel	Section 9(b)(ii)
Notice of Termination	Section 13
Plans	Section 9(c)(iv)
Termination Payment	Section 9(a)
Total Payments	Section 9(b)(i)

2. Termination or Cancellation Prior to Change in Control.

(a) Subject to Section 2(b), the Employer and the Executive shall each retain the right to terminate the employment of the Executive at any time and for any reason (or no reason) prior to a Change in Control of the Company. Subject to Section 2(b), in the event that prior to a

Change in Control of the Company (i) the Executive's employment is terminated or (ii) as determined in writing by the Compensation Committee of the Board of Directors of the Company in its sole discretion, the Executive's authority, powers, functions, duties, responsibilities or pay grade are materially reduced, this Agreement shall be terminated and cancelled and of no further force and effect, and any and all rights and obligations of the parties hereunder shall cease.

(b) Anything in this Agreement to the contrary notwithstanding, if the Executive's employment with the Employer is terminated by the Employer (other than a termination due to the Executive's death or as a result of the Executive's disability (as determined under Section 12) during the period of 180 days prior to the date on which a Change in Control of the Company occurs, and if it is reasonably demonstrated by the Executive that such termination of employment (i) was at the request of a third party who has taken steps reasonably calculated to effect a Change in Control of the Company or (ii) otherwise arose in connection with or in anticipation of a Change in Control of the Company, then for all purposes of this Agreement such termination of employment shall be deemed a "Covered Termination," a "Notice of Termination" shall be deemed to have been given, and the "Employment Period" shall be deemed to have begun on the date of such termination which shall be deemed to be the "Termination Date" and the date of the Change of Control of the Company for purposes of this Agreement. Anything in this Agreement to the contrary notwithstanding, if the Executive's authority, powers, functions, duties, responsibilities or pay grade were reduced pursuant to Section 2(a)(ii) during the period of 180 days prior to the date on which the Change in Control of the Company occurs, and if it is reasonably demonstrated by the Executive that such reduction in authority, powers, functions, duties, responsibilities or pay grade (i) was at the request of a third party who has taken steps reasonably calculated to effect a Change in Control of the Company or (ii) otherwise arose in connection with or in anticipation of a Change in Control of the Company, then the termination and cancellation of this Agreement pursuant to Section 2(a) shall be deemed null and void, this Agreement shall be deemed to remain in full force and effect with any and all rights and obligations of the parties hereunder continuing and such reduction in authority, powers, functions, duties, responsibilities or pay grade shall be considered "Good Reason" for the Executive to terminate employment in connection with a Change in Control of the Company.

3. Employment Period. If a Change in Control of the Company occurs when the Executive is employed by the Employer, the Employer will continue thereafter to employ the Executive during the Employment Period, and the Executive will remain in the employ of the Employer in accordance with and subject to the terms and provisions of this Agreement. Any Termination of Employment during the Employment Period, whether by the Company or the Employer, shall be deemed a termination by the Company for purposes of this Agreement.

4. Duties. During the Employment Period, the Executive shall, in the same capacities and positions held by the Executive at the time of the Change in Control of the Company or in such other capacities and positions as may be agreed to by the Employer and the Executive in writing, devote the Executive's best efforts and all of the Executive's business time, attention and skill to the business and affairs of the Employer, as such business and affairs now exist and as they may hereafter be conducted.

5. Compensation. During the Employment Period, the Executive shall be compensated as follows:

(a) The Executive shall receive, at reasonable intervals (but not less often than monthly) and in accordance with such standard policies as may be in effect immediately prior to the

Change in Control of the Company, an annual base salary in cash equivalent of not less than twelve times the Executive's highest monthly base salary for the twelve-month period immediately preceding the month in which the Change in Control of the Company occurs or, if higher, annual base salary at the rate in effect immediately prior to the Change in Control of the Company (which base salary shall, unless otherwise agreed in writing by the Executive or subject to any irrevocable deferral election then in effect, include the current receipt by the Executive of any amounts which, prior to the Change in Control of the Company, the Executive had elected to defer, whether such compensation is deferred under Section 401(k) of the Code or otherwise), subject to adjustment as hereinafter provided in Section 6 (such salary amount as adjusted upward from time to time is hereafter referred to as the "Annual Base Salary").

(b) The Executive shall receive fringe benefits at least equal in value to the highest value of such benefits provided for the Executive at any time during the 180-day period immediately prior to the Change in Control of the Company or, if more favorable to the Executive, those provided generally at any time during the Employment Period to any executives of the Employer of comparable status and position to the Executive; and shall be reimbursed, at such intervals and in accordance with such standard policies that are most favorable to the Executive that were in effect at any time during the 180-day period immediately prior to the Change in Control of the Company, for any and all monies advanced in connection with the Executive's employment for reasonable and necessary expenses incurred by the Executive on behalf of the Employer, including travel expenses.

(c) The Executive and/or the Executive's family, as the case may be, shall be included, to the extent eligible thereunder (which eligibility shall not be conditioned on the Executive's salary grade or on any other requirement which excludes persons of comparable status to the Executive unless such exclusion was in effect for such plan or an equivalent plan at any time during the 180-day period immediately prior to the Change in Control of the Company), in any and all plans providing benefits for the Employer's salaried employees in general, including but not limited to group life insurance, hospitalization, medical, dental, profit sharing and stock bonus plans; *provided, that*, (i) in no event shall the aggregate level of benefits under such plans in which the Executive is included be less than the aggregate level of benefits under plans of the Employer of the type referred to in this Section 5(c) in which the Executive was participating at any time during the 180-day period immediately prior to the Change in Control of the Company and (ii) in no event shall the aggregate level of benefits under such plans be less than the aggregate level of benefits under plans of the type referred to in this Section 5(c) provided at any time after the Change in Control of the Company to any executive of the Employer of comparable status and position to the Executive.

(d) The Executive shall annually be entitled to not less than the amount of paid vacation and not fewer than the highest number of paid holidays to which the Executive was entitled annually at any time during the 180-day period immediately prior to the Change in Control of the Company or such greater amount of paid vacation and number of paid holidays as may be made available annually to other executives of the Employer of comparable status and position to the Executive at any time during the Employment Period.

(e) The Executive shall be included in all plans providing additional benefits to executives of the Employer of comparable status and position to the Executive, including but not limited to short- or long-term cash-based incentive compensation plans (such plan or plans together, the "Bonus Plan"), deferred compensation plans, supplemental retirement plans, equity awards, and similar or comparable plans; *provided, that*, unless otherwise provided in clauses (i) or (ii) below, in

no event shall the aggregate level of benefits under such plans or awards be less than the higher of (x) the highest aggregate level of benefits under plans of the Employer of the type referred to in this Section 5(e) in which the Executive was participating at any time during the 180-day period immediately prior to the Change in Control of the Company and (y) the aggregate levels of benefits under plans of the type referred to in this Section 5(e) provided at any time after the Change in Control of the Company to any executive of the Employer comparable in status and position to the Executive.

(i) With respect to the Bonus Plan, the amount of the compensation (the “Bonus Amount”) that the Executive is eligible to earn under the Bonus Plan if the threshold, target and maximum performance objectives are met shall be no less than the highest threshold, target and maximum amounts, respectively, that Executive was eligible to receive under awards outstanding under the Employer’s short- or long-term cash-based incentive compensation plan or plans as in effect at any time during the 180-day period immediately prior to the Change in Control of the Company; *provided that* the amount Executive is eligible to earn shall in no event be lower than the amount of short- or long-term cash-based incentive compensation that any executive of the Employer comparable in status and position to the Executive is eligible to earn. Payment of the Bonus Amount, if earned, shall not be affected by the Executive’s Termination of Employment after the end of the Employment Period.

(ii) With respect to equity awards, the Executive shall annually receive awards under one or more equity-based compensation plan or plans of the Employer. Such annual equity awards shall have a grant date fair value at least equal to the aggregate grant date fair value of the largest equity-based awards granted to the Executive at any time during the one-year period immediately prior to the Change in Control of the Company, measured, in each case, as a multiple of the Executive’s Annual Base Salary; *provided that*, solely for purposes of determining the grant date fair value of the largest equity-based awards granted to the Executive during such one-year period immediately prior to the Change in Control of the Company, any inducement awards or other awards that are intended to be non-recurring shall be disregarded or, to the extent such awards are intended to replace more than one annual award, shall be pro-rated so that only a one-year portion of the award shall be counted; and *provided further* that the grant date fair value of the equity awards granted to the Executive shall in no event be lower than the grant date fair value of the annual equity-based awards granted to any executive of the Employer comparable in status and position to the Executive.

(iii) To the extent any compensation that the Executive has an opportunity to earn after a Change in Control of the Company is subject to achieving performance objectives, such performance objectives shall be established and communicated in writing to the Executive within the first ninety (90) days of the performance period and shall be reasonably related to the business of the Employer (the “Goals”). All Goals shall be attainable with approximately the same degree of probability as the most attainable goals under the Employer’s performance-based compensation plan or plans as in effect at any time during the 180-day period immediately prior to the Change in Control of the Company (whether one or more, the “Company Incentive Plan”) and in view of the Employer’s existing and projected financial and business circumstances applicable at the time, and shall have a performance period that is no longer than the performance period corresponding to the most analogous type of compensation under the Company Incentive Plan.

6. Annual Compensation Adjustments. During the Employment Period, the Board of Directors of the Company (or an appropriate committee thereof) will consider and appraise, at least annually, the contributions of the Executive to the Company, and in accordance with the Company's practice prior to the Change in Control of the Company, due consideration shall be given to the upward adjustment of the Executive's Annual Base Salary, at least annually, (a) commensurate with increases generally given to other executives of the Employer of comparable status and position to the Executive, and (b) as the scope of the Company's operations or the Executive's duties expand.

7. Termination For Cause or Without Good Reason. If there is a Covered Termination for Cause or due to the Executive's voluntarily terminating his or her employment other than for Good Reason (any such terminations to be subject to the procedures set forth in Section 13), then the Executive shall be entitled to receive only Accrued Benefits.

8. Termination Giving Rise to a Termination Payment and Certain Other Benefits. If there is a Covered Termination by the Executive for Good Reason, or by the Company other than by reason of (i) death, (ii) disability pursuant to Section 12, or (iii) Cause (any such terminations to be subject to the procedures set forth in Section 13), then (A) the Executive shall be entitled to receive Accrued Benefits and, in lieu of further base salary for periods following the Termination Date, as liquidated damages and additional severance pay and in consideration of the covenant of the Executive set forth in Section 14(a), the Termination Payment pursuant to Section 9(a), (B) all equity-based and cash incentive awards then held by the Executive that were granted prior to the Change in Control of the Company shall be subject to the terms of the 2012 Stock and Incentive Awards Plan or a successor incentive compensation plan under which the awards were granted and (C) all equity-based and cash incentive awards then held by the Executive that were granted on or after the Change in Control of the Company shall vest or be earned in full immediately upon such Covered Termination, with the amount or value of any performance-based awards determined based on the deemed achievement of all applicable performance conditions at 100% of target, without pro-ration.

9. Payments Upon Termination.

(a) Termination Payment. The "Termination Payment" shall be an amount equal to the Annual Cash Compensation times two. The Termination Payment shall be paid to the Executive in cash equivalent (i) on the first day of the seventh month following the month in which the Executive's Separation from Service occurs, without interest thereon, to the extent necessary for compliance with the requirements of Code Section 409A(a)(2)(B) relating to specified employees or (ii) to the extent not so required, within ten (10) business days after the Termination Date. Notwithstanding the foregoing, in the event the Executive's Termination Date is pursuant to Section 2(b), the Termination Payment shall be paid within ten (10) business days after the date of the Change in Control of the Company (as defined without reference to Section 2(b)), without interest. Such lump sum payment shall not be reduced by any present value or similar factor, and the Executive shall not be required to mitigate the amount of the Termination Payment by securing other employment or otherwise, nor will such Termination Payment be reduced by reason of the Executive securing other employment or for any other reason, except as provided in subsection (b) below. The Termination Payment shall be in lieu of, and acceptance by the Executive of the Termination Payment shall constitute the Executive's release of any rights of the Executive to, any other cash severance payments under any Company severance policy, practice or agreement.

(b) 280G Provision.

(i) Notwithstanding any other provision of this Agreement, if any portion of the Termination Payment or any other payment or other benefit to the Executive under this Agreement, or under any other agreement with or plan of the Employer or any 409A Affiliate (in the aggregate, "Total Payments"), would constitute an "excess parachute payment" (as defined below) and would, but for this Section 9(b)(i), result in the imposition on the Executive of an excise tax under Code Section 4999 (the "Excise Tax"), then the Total Payments to be made to the Executive shall either be (A) delivered in full, or (B) delivered in a reduced amount that is One Dollar (\$1.00) less than the amount that would cause any portion of such Total Payments to be subject to the Excise Tax, whichever of the foregoing results in the receipt by the Executive of the greatest benefit on an after-tax basis (taking into account the applicable federal, state and local income taxes and the Excise Tax).

(ii) Within forty (40) days following the Executive's Termination of Employment or notice by one party to the other of its belief that there is a payment or benefit due the Executive that will result in an excess parachute payment, the Executive and the Company, at the Company's expense, shall obtain the opinion (which need not be unqualified) of nationally recognized tax counsel ("National Tax Counsel") selected by the Company's independent auditors and reasonably acceptable to the Executive (which may be regular outside counsel to the Company), which opinion sets forth (A) the amount of the Base Period Income (as defined below), (B) the amount and present value of Total Payments, (C) the amount and present value of any excess parachute payments determined without regard to any reduction of Total Payments pursuant to Section 9(b)(i), and (D) the net after-tax proceeds to the Executive, taking into account the tax imposed under Code Section 4999 if (1) the Total Payments were reduced in accordance with Section 9(b)(i)(B), or (2) the Total Payments were not so reduced. The opinion of National Tax Counsel shall be addressed to the Company and the Executive and shall be binding upon the Company and the Executive. If such National Tax Counsel opinion determines that clause (B) of Section 9(b)(i) applies, then the payments hereunder or any other payment or benefit determined by such counsel to be includable in Total Payments shall be reduced or eliminated so that under the bases of calculations set forth in such opinion there will be no excess parachute payment. In such event, payments or benefits included in the Total Payments shall be reduced or eliminated by applying the following principles, in order: (x) the payment or benefit with the higher ratio of the parachute payment value to present economic value (determined using reasonable actuarial assumptions) shall be reduced or eliminated before a payment or benefit with a lower ratio; (y) the payment or benefit with the later possible payment date shall be reduced or eliminated before a payment or benefit with an earlier payment date; and (z) cash payments shall be reduced prior to non-cash benefits; *provided* that if the foregoing order of reduction or elimination would violate Code Section 409A, then the reduction shall be made pro rata among the payments or benefits included in the Total Payments (on the basis of the relative present value of the parachute payments).

(iii) For purposes of this Agreement, (A) the terms "excess parachute payment" and "parachute payments" shall have the meanings assigned to them in Section 280G of the Code and such "parachute payments" shall be valued as provided therein, (B) present value for purposes of this Agreement shall be calculated in accordance with Section 1274(b)(2) of the Code, (C) the term "Base Period Income" means an amount equal to the Executive's "annualized includable compensation for the base period" as defined in Section

280G(d)(1) of the Code, (D) for purposes of the National Tax Counsel opinion, the value of any noncash benefits or any deferred payment or benefit shall be determined by the Company's independent auditors in accordance with the principles of Section 280G(d)(3) and (4) of the Code, which determination shall be evidenced in a certificate of such auditors addressed to the Company and the Executive, and (E) the Executive shall be deemed to pay federal income tax and employment taxes at the highest marginal rate of federal income and employment taxation, and state and local income taxes at the highest marginal rate of taxation in the state or locality of the Executive's domicile (determined in both cases in the calendar year in which the Covered Termination occurs or notice described in Section 9(b)(ii) is given, whichever is earlier), net of the maximum reduction in federal income taxes that may be obtained from the deduction of such state and local taxes. If the National Tax Counsel so requests in connection with the opinion required by this Section 9(b), the Executive and the Company shall obtain, at the Company's expense, and the National Tax Counsel may rely on, the advice of a firm of recognized executive compensation consultants as to the reasonableness of any item of compensation to be received by the Executive solely with respect to its status under Section 280G of the Code and the regulations thereunder.

(iv) The Company agrees to bear all costs associated with, and to indemnify and hold harmless, the National Tax Counsel of and from any and all claims, damages, and expenses resulting from or relating to its determinations pursuant to this Section 9(b), except for claims, damages or expenses resulting from the gross negligence or willful misconduct of such firm.

(v) This Section 9(b) shall be amended to comply with any amendment or successor provision to Sections 280G or 4999 of the Code. If such provisions are repealed without successor, then this Section 9(b) shall be cancelled without further effect.

(c) Additional Benefits. If there is a Covered Termination and the Executive is entitled to Accrued Benefits and the Termination Payment, then the Company shall provide to the Executive the following additional benefits:

(i) The Executive shall receive until the end of the second calendar year following the calendar year in which the Executive's Separation from Service occurs, at the expense of the Company, outplacement services, on an individualized basis at a level of service commensurate with the Executive's status with the Company immediately prior to the date of the Change in Control of the Company (or, if higher, immediately prior to the Executive's Termination of Employment), provided by a nationally recognized executive placement firm selected by the Company; *provided that* the cost to the Company of such services shall not exceed 10% of the Executive's Annual Base Salary.

(ii) Until the earlier of the end of the Employment Period or such time as the Executive has obtained new employment and is covered by benefits which in the aggregate are at least equal in value to the following benefits, the Executive shall continue to be covered, at the expense of the Company, by the same or equivalent life insurance, hospitalization, medical and dental coverage as was required hereunder with respect to the Executive immediately prior to the date the Notice of Termination is given, subject to the following:

(A) Following the end of the COBRA continuation period, if such hospitalization, medical or dental coverage is provided under a health plan that is subject to Section 105(h) of the Code, benefits payable under such health plan shall comply with the requirements of Treasury regulation section 1.409A-3(i)(1)(iv) and, if necessary, the Company shall amend such health plan to comply therewith. If the Executive is entitled to the Termination Payment pursuant to Section 2(b), then within ten (10) days following the Change in Control of the Company (determined without regard to Section 2(b)), the Company shall reimburse the Executive for any COBRA premiums the Executive paid for his or her hospitalization, medical and dental coverage under COBRA from the Executive's Termination Date through the date of the Change in Control of the Company (determined without regard to Section 2(b)).

(B) To the extent required to comply with Code Section 409A, during the first six months following the Executive's Separation from Service, the Executive shall pay the Company for any life insurance coverage that provides a benefit in excess of \$50,000 under a group term life insurance policy.. After the end of such six month period, the Company shall make a cash equivalent payment to the Executive equal to the aggregate premiums paid by the Executive for such coverage, and thereafter such coverage shall be provided at the expense of the Company for the remainder of the period as set forth above; *provided that* this clause (B) shall cease to apply if on the date of the Executive's Separation from Service, neither the Company nor any other entity that is considered a "service recipient" with respect to the Executive within the meaning of Code Section 409A has any stock which is publicly traded on an established securities market (within the meaning of Treasury Regulation Section 1.897-1(m)) or otherwise.

(iii) The Company shall bear up to \$15,000 in the aggregate of fees and expenses of consultants and/or legal or accounting advisors engaged by the Executive to advise the Executive as to matters relating to the computation of benefits due and payable under this Section 9.

(iv) The Company shall cause the Executive to be fully and immediately vested in his accrued benefit under the Pentair, Inc. Supplemental Executive Retirement Plan ("SERP") and in any nonqualified defined contribution retirement plan of the Employer. The amount of benefits under the SERP shall be determined as if the Executive had completed additional years of Benefit Service (as such term is defined in the SERP) equal to the lesser of (A) three years or (B) the greater of (x) seven minus the years of Benefit Service credited to such Executive under the SERP, determined without regard to the terms of this Agreement, as of the end of the calendar year which includes the date of the Change in Control of the Company, or (y) zero.

10. Death.

(a) Except as provided in Section 10(b), in the event of a Covered Termination due to the Executive's death, the Executive's estate, heirs and beneficiaries shall receive all the Executive's Accrued Benefits through the Termination Date.

(b) In the event the Executive dies after a Notice of Termination is given (i) by the Company or (ii) by the Executive for Good Reason, the Executive's estate, heirs and beneficiaries shall be entitled to the benefits described in Section 10(a) and, subject to the provisions of this Agreement, to such Termination Payment as the Executive would have been entitled to had the Executive lived, except that the Termination Payment shall be paid within 90 days following the date of the Executive's death, without interest thereon. For purposes of this Section 10(b), the Termination Date shall be the earlier of 30 days following the giving of the Notice of Termination, subject to extension pursuant to Section 1(g), or one day prior to the end of the Employment Period.

11. Retirement. If, during the Employment Period, the Executive and the Employer shall execute an agreement providing for the early retirement of the Executive from the Employer, or the Executive shall otherwise give notice that he is voluntarily choosing to retire early from the Employer, the Executive shall receive Accrued Benefits through the Termination Date; *provided, that* if the Executive's employment is terminated by the Executive for Good Reason or by the Company other than by reason of death, disability or Cause and the Executive also, in connection with such termination, elects voluntary early retirement, the Executive shall also be entitled to receive a Termination Payment pursuant to Section 9.

12. Termination for Disability. If, during the Employment Period, as a result of the Executive's disability due to physical or mental illness or injury (regardless of whether such illness or injury is job-related), the Executive shall have been absent from the Executive's duties hereunder on a full-time basis for a period of six consecutive months and, within 30 days after the Company notifies the Executive in writing that it intends to terminate the Executive's employment (which notice shall not constitute the Notice of Termination contemplated below), the Executive shall not have returned to the performance of the Executive's duties hereunder on a full-time basis, the Company may terminate the Executive's employment for purposes of this Agreement pursuant to a Notice of Termination given in accordance with Section 13. If the Executive's employment is terminated on account of the Executive's disability in accordance with this Section, the Executive shall receive Accrued Benefits through the Termination Date and shall remain eligible for all benefits provided by any long term disability programs of the Employer in effect at the time of such termination.

13. Termination Notice and Procedure. Any Covered Termination by the Company or the Executive (other than a termination of the Executive's employment that is a Covered Termination by virtue of Section 2(b)) shall be communicated by a written notice of termination ("Notice of Termination") to the Executive, if such Notice is given by the Company, and to the Company, if such Notice is given by the Executive, all in accordance with the following procedures and those set forth in Section 24:

(a) If such termination is for disability, Cause or Good Reason, the Notice of Termination shall indicate in reasonable detail the facts and circumstances alleged to provide a basis for such termination.

(b) Any Notice of Termination by the Company shall have been approved, prior to the giving thereof to the Executive, by a resolution duly adopted by a majority of the directors of the Company (or any successor corporation) then in office.

(c) If the Notice is given by the Executive for Good Reason, the Executive may cease performing his duties hereunder on or after the date fifteen (15) days after the delivery of Notice of Termination and shall in any event cease employment on the Termination Date. If the Notice is given by the Company, then the Executive may cease performing his duties hereunder on the date of receipt of the Notice of Termination, subject to the Executive's rights hereunder.

(d) The Executive shall have thirty (30) days, or such longer period as the Company may determine to be appropriate, to cure any conduct or act, if curable, alleged to provide grounds for termination of the Executive's employment for Cause under this Agreement pursuant to Section 1(g)(iii).

(e) The recipient of any Notice of Termination shall personally deliver or mail in accordance with Section 24 written notice of any dispute relating to such Notice of Termination to the party giving such Notice within 15 days after receipt thereof; *provided, however*, that if the Executive's conduct or act alleged to provide grounds for termination by the Company for Cause is curable, then such period shall be 30 days. After the expiration of such period, the contents of the Notice of Termination shall become final and not subject to dispute.

14. Further Obligations of the Executive.

(a) Competition. The Executive agrees that, in the event of any Covered Termination where the Executive is entitled to Accrued Benefits and the Termination Payment, the Executive shall not, for a period expiring one year after the Termination Date, without the prior written approval of the Company's Board of Directors, (i) solicit for employment an employee of the Company or its subsidiaries or (ii) participate in the management of, be employed by or own any business enterprise at a location anywhere in the World that engages in substantial competition with the Company or its subsidiaries, where such enterprise's revenues from any competitive activities amount to 10% or more of such enterprise's net revenues and sales for its most recently completed fiscal year; *provided, however*, that nothing in this Section 14(a) shall prohibit the Executive from owning stock or other securities of a competitor amounting to less than five percent (5%) of the outstanding capital stock of such competitor.

(b) Confidentiality. During and following the Executive's employment by the Company, the Executive shall hold in confidence and not directly or indirectly disclose or use or copy or make lists of any confidential information or proprietary data of the Company (including that of the Employer), except to the extent authorized in writing by the Board of Directors of the Company or required by any court or administrative agency, other than to an employee of the Company or a person to whom disclosure is reasonably necessary or appropriate in connection with the performance by the Executive of duties as an executive of the Company. Confidential information shall not include any information known generally to the public or any information of a type not otherwise considered confidential by persons engaged in the same business or a business similar to that of the Company. All records, files, documents and materials, or copies thereof, relating to the business of the Company which the Executive shall prepare, or use, or come into contact with, shall be and remain the sole property of the Company and shall be promptly returned to the Company upon termination of employment with the Company. Notwithstanding anything to the

contrary herein, however, nothing in this Agreement prohibits the Executive from reporting possible violations of local, state, foreign or federal law or regulation, or related facts, to any governmental agency or entity or making other reports or disclosures that, in each case, the Executive believes are protected under the whistleblower provisions of local, state, foreign or federal law or regulation. Without limitation, the Executive may report possible violations of law or regulation and related facts to the U.S. Department of Justice, the Securities and Exchange Commission, Congress, and any agency Inspector General. The Executive does not need the prior authorization of the Company (including, but not limited to, its law department) to make any such reports or disclosures, and the Executive does not need to notify the Company that the Executive has made such reports or disclosures. Making such reports or disclosures does not in any way have adverse consequences to the Executive under this Agreement.

15. Expenses and Interest. If, after a Change in Control of the Company, (a) a dispute arises with respect to the enforcement of the Executive's rights under this Agreement or (b) any legal or arbitration proceeding shall be brought to enforce or interpret any provision contained herein or to recover damages for breach hereof, in either case so long as the Executive is not acting in bad faith, then the Company shall reimburse the Executive for any reasonable attorneys' fees and necessary costs and disbursements incurred as a result of the dispute, legal or arbitration proceeding ("Expenses"), and prejudgment interest on any money judgment or arbitration award obtained by the Executive calculated at the rate of interest announced by U.S. Bank National Association, Minneapolis, Minnesota, from time to time at its prime or base lending rate from the date that payments to him or her should have been made under this Agreement. Within ten days after the Executive's written request therefore (but in no event later than the end of the calendar year following the calendar year in which such Expense is incurred), the Company shall reimburse the Executive, or such other person or entity as the Executive may designate in writing to the Company, the Executive's reasonable Expenses.

16. Payment Obligations Absolute. The Company's obligation during and after the Employment Period to pay the Executive the amounts and to make the benefit and other arrangements provided herein shall be absolute and unconditional and shall not be affected by any circumstances, including, without limitation, any setoff, counterclaim, recoupment, defense or other right which the Company may have against him or her or anyone else. Except as provided in Section 15, all amounts payable by the Company hereunder shall be paid without notice or demand. Each and every payment made hereunder by the Company shall be final, and the Company will not seek to recover all or any part of such payment from the Executive, or from whomsoever may be entitled thereto, for any reason whatsoever.

17. Successors.

(a) If the Company sells, assigns or transfers all or substantially all of its business and assets to any Person or if the Company merges into or consolidates or otherwise combines (where the Company does not survive such combination) with any Person (any such event, a "Sale of Business"), then the Company shall assign all of its right, title and interest in this Agreement as of the date of such event to such Person, and the Company shall cause such Person, by written agreement in form and substance reasonably satisfactory to the Executive, to expressly assume and agree to perform from and after the date of such assignment all of the terms, conditions and provisions imposed by this Agreement upon the Company. Failure of the Company to obtain such written agreement prior to the effective date of such Sale of Business shall be a breach of this Agreement constituting "Good Reason" hereunder, except that for purposes of implementing the

foregoing the date upon which such Sale of Business becomes effective shall be deemed the Termination Date. In case of such assignment by the Company and of assumption and agreement by such Person, as used in this Agreement, "Company" shall thereafter mean such Person which executes and delivers the agreement provided for in this Section 17 or which otherwise becomes bound by all the terms and provisions of this Agreement by operation of law, and this Agreement shall inure to the benefit of, and be enforceable by, such Person. The Executive shall, in his or her discretion, be entitled to proceed against any or all of such Persons, any Person which theretofore was such a successor to the Company and the Company (as so defined) in any action to enforce any rights of the Executive hereunder. Except as provided in this Section 17(a), this Agreement shall not be assignable by the Company. This Agreement shall not be terminated by the voluntary or involuntary dissolution of the Company.

(b) This Agreement and all rights of the Executive shall inure to the benefit of and be enforceable by the Executive's personal or legal representatives, executors, administrators, heirs and beneficiaries. All amounts payable to the Executive under Sections 3, 7, 8, 9, 10, 11, 12 and 15 if the Executive had lived shall be paid, in the event of the Executive's death, to the Executive's estate, heirs and representatives; *provided, however*, that the foregoing shall not be construed to modify any terms of any benefit plan of the Employer, as such terms are in effect on the date of the Change in Control of the Company, that expressly govern benefits under such plan in the event of the Executive's death.

18. Severability. The provisions of this Agreement shall be regarded as divisible, and if any of said provisions or any part hereof are declared invalid or unenforceable by a court of competent jurisdiction, the validity and enforceability of the remainder of such provisions or parts hereof and the applicability thereof shall not be affected thereby.

19. Contents of Agreement; Waiver of Rights; Amendment. This Agreement sets forth the entire understanding between the parties hereto with respect to the subject matter hereof and shall supersede in all respects, and the Executive hereby waives all rights under, any prior or other agreement or understanding between the parties with respect to such subject matter, including, but not limited to any Key Executive Employment and Severance Agreement between the Company and the Executive entered into prior to the date hereof. This Agreement may not be amended or modified at any time except by written instrument executed by the Company and the Executive.

20. Withholding. The Company shall be entitled to withhold from amounts to be paid to the Executive hereunder any federal, state or local withholding or other taxes or charges which it is from time to time required to withhold; *provided, that* the amount so withheld shall not exceed the minimum amount required to be withheld by law. In addition, if prior to the date of payment of the Termination Payment hereunder, the Federal Insurance Contributions Act (FICA) tax imposed under Sections 3101, 3121(a) and 3121(v)(2), where applicable, becomes due with respect to any payment or benefit to be provided hereunder, the Employer may provide for an immediate payment of the amount needed to pay the Executive's portion of such tax (plus an amount equal to the taxes that will be due on such amount) and the Executive's Termination Payment shall be reduced accordingly. The Employer shall be entitled to rely on an opinion of the National Tax Counsel if any question as to the amount or requirement of any such withholding shall arise.

21. Certain Rules of Construction. No party shall be considered as being responsible for the drafting of this Agreement for the purpose of applying any rule construing ambiguities against the drafter or otherwise. No draft of this Agreement shall be taken into account

in construing this Agreement. Any provision of this Agreement which requires an agreement in writing shall be deemed to require that the writing in question be signed by the Executive and an authorized representative of the Company.

22. Governing Law; Resolution of Disputes. This Agreement and the rights and obligations hereunder shall be governed by and construed in accordance with the laws of the State of Minnesota, without reference to the conflict of law principles thereof. Any dispute arising out of this Agreement shall, at the Executive's election, be determined by arbitration under the rules of the American Arbitration Association then in effect (in which case both parties shall be bound by the arbitration award) or by litigation. Whether the dispute is to be settled by arbitration or litigation, the venue for the arbitration or litigation shall be Minneapolis, Minnesota or, at the Executive's election, if the Executive is not then residing or working in the Minneapolis, Minnesota metropolitan area, in the judicial district encompassing the city in which the Executive resides; *provided, that*, if the Executive is not then residing in the United States, the election of the Executive with respect to such venue shall be either Minneapolis, Minnesota or in the judicial district encompassing that city in the United States among the thirty cities having the largest population (as determined by the most recent United States Census data available at the Termination Date) which is closest to the Executive's residence. The parties consent to personal jurisdiction in each trial court in the selected venue having subject matter jurisdiction notwithstanding their residence or situs, and each party irrevocably consents to service of process in the manner provided hereunder for the giving of notices.

23. Additional Section 409A Provisions. (%2) If, after the date of a Change in Control of the Company, any payment amount or the value of any benefit under this Agreement is required to be included in the Executive's income prior to the date such amount is actually paid or the benefit provided as a result of the failure of this Agreement (or any other arrangement that is required to be aggregated with this Agreement under Code Section 409A) to comply with Code Section 409A, then the Executive shall receive a distribution, in a lump sum, within 90 days after the date it is finally determined that the Agreement (or such other arrangement that is required to be aggregated with this Agreement) fails to meet the requirements of Section 409A of the Code; such distribution shall equal the amount required to be included in the Executive's income as a result of such failure and shall reduce the amount of payments or benefits otherwise due hereunder.

(b) The Company and the Executive intend the terms of this Agreement to be in compliance with Section 409A of the Code. The Company does not guarantee the tax treatment or tax consequences associated with any payment or benefit, including but not limited to consequences related to Section 409A of the Code. To the maximum extent permissible, any ambiguous terms of this Agreement shall be interpreted in a manner that avoids a violation of Section 409A of the Code.

(c) If the Executive believes he or she is entitled to a payment or benefit pursuant to the terms of this Agreement that was not timely paid or provided, and such payment or benefit is considered deferred compensation subject to the requirements of Section 409A of the Code, the Executive acknowledges that to avoid an additional tax on such payment or benefit pursuant to the provisions of Section 409A of the Code, the Executive must make a reasonable, good faith effort to collect such payment or benefit no later than 90 days after the latest date upon which the payment could have been timely made or benefit timely provided without violating Section 409A of the Code, and if not paid or provided, must take further enforcement measures within 180 days after such latest date.

24. Notice. Notices given pursuant to this Agreement shall be in writing and, except as otherwise provided by Section 13(d), shall be deemed given when actually received by the Executive or actually received by the Company's Secretary or any officer of the Company other than the Executive. If mailed, such notices shall be mailed by United States registered or certified mail, return receipt requested, addressee only, postage prepaid, if to the Company, to Pentair plc, c/o Pentair, Inc., Attention: Secretary (or Chief Executive Officer, if the Executive is then Secretary), 5500 Wayzata Blvd., Suite 800, Golden Valley, Minnesota 55416, or if to the Executive, at the address set forth below the Executive's signature to this Agreement, or to such other address as the party to be notified shall have theretofore given to the other party in writing.

25. No Waiver. No waiver by either party at any time of any breach by the other party of, or compliance with, any condition or provision of this Agreement to be performed by the other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same time or any prior or subsequent time.

26. Headings. The headings herein contained are for reference only and shall not affect the meaning or interpretation of any provision of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

PENTAIR PLC

By:

Its:

Attest:

Its:

EXECUTIVE:

Address:

KEY EXECUTIVE EMPLOYMENT AND SEVERANCE AGREEMENT

THIS AGREEMENT, made and entered into as of the ___ day of _____, 201___, by and between Pentair plc, an Irish corporation limited by shares (hereinafter referred to as the “Company”), and _____ (hereinafter referred to as the “Executive”).

W I T N E S S E T H

WHEREAS, the Executive is employed by the Company and/or a subsidiary of the Company (hereinafter referred to collectively as the “Employer”) in a key executive capacity and the Executive’s services are valuable to the conduct of the business of the Company;

WHEREAS, the Company desires to continue to attract and retain dedicated and skilled management employees in a period of industry consolidation, consistent with achieving the best possible value for its shareholders in any change in control of the Company;

WHEREAS, the Company recognizes that circumstances may arise in which a change in control of the Company occurs, through acquisition or otherwise, thereby causing a potential conflict of interest between the Company’s needs for the Executive to remain focused on the Company’s business and for the necessary continuity in management prior to and following a change in control, and the Executive’s reasonable personal concerns regarding future employment with the Employer and economic protection in the event of loss of employment as a consequence of a change in control;

WHEREAS, the Company and the Executive are desirous that any proposal for a change in control or acquisition of the Company will be considered by the Executive objectively and with reference only to the best interests of the Company and its shareholders;

WHEREAS, the Executive will be in a better position to consider the Company’s best interests if the Executive is afforded reasonable economic security, as provided in this Agreement, against altered conditions of employment which could result from any such change in control or acquisition;

WHEREAS, the Executive possesses intimate knowledge of the business and affairs of the Company and has acquired certain confidential information and data with respect to the Company; and

WHEREAS, the Company desires to insure, insofar as possible, that it will continue to have the benefit of the Executive’s services and to protect its confidential information and goodwill.

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants and agreements hereinafter set forth, the parties hereto mutually covenant and agree as follows:

1. Definitions.

(a) 409A Affiliate. The term “409A Affiliate” means each entity that is required to be included in the Company’s controlled group of corporations within the meaning of Section 414(b) of the Code, or that is under common control with the Company within the meaning of Section 414(c) of the Code; *provided, however*, that the phrase “at least 50 percent” shall be used in place of the phrase “at least 80 percent” each place it appears therein or in the regulations thereunder.

(b) Accrued Benefits. The Executive’s “Accrued Benefits” shall include the following amounts, payable as described herein: (i) all base salary for the time period ending with the Termination Date; (ii) reimbursement for any and all monies advanced in connection with the Executive’s employment for reasonable and necessary expenses incurred by the Executive on behalf of the Employer for the time period ending with the Termination Date; (iii) any and all other cash earned through the Termination Date and deferred at the election of the Executive or pursuant to any deferred compensation plan then in effect; (iv) notwithstanding any provision of any cash bonus or cash incentive compensation plan applicable to the Executive, but subject to any irrevocable deferral election then in effect, a lump sum amount, in cash, equal to the sum of (A) any cash bonus or cash incentive compensation that has been allocated or awarded to the Executive for a fiscal year or other measuring period under the plan that ends prior to the Termination Date but has not yet been paid (pursuant to Section 5(e) or otherwise) and (B) a pro rata portion to the Termination Date of the aggregate value of all contingent bonus or incentive compensation awards to the Executive for all uncompleted periods under the plan calculated as to each such award as if the Goals with respect to such bonus or incentive compensation award had been attained; and (v) all other payments and benefits to which the Executive (or in the event of the Executive’s death, the Executive’s surviving spouse or other beneficiary) may be entitled on the Termination Date as compensatory fringe benefits or under the terms of any benefit plan of the Employer, excluding severance payments under any Employer severance policy, practice or agreement in effect on the Termination Date. Payment of Accrued Benefits shall be made promptly in accordance with the Company’s prevailing practice with respect to clauses (i) and (ii) or, with respect to clauses (iii), (iv) and (v), pursuant to the terms of the benefit plan or practice establishing such benefits; *provided* that payments pursuant to clause (iv)(B) shall be paid on the first day of the seventh month following the month in which the Executive’s Separation from Service occurs to the extent necessary for compliance with the requirements of Code Section 409A(a)(2)(B) relating to specified employees or, to the extent not so required, within ninety (90) days of the Executive’s Separation from Service.

(c) Act. The term “Act” means the Securities Exchange Act of 1934, as amended.

(d) Affiliate and Associate. The terms “Affiliate” and “Associate” shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Act.

(e) Annual Cash Compensation. The term “Annual Cash Compensation” shall mean the sum of (i) the Executive’s Annual Base Salary (determined as of the time of the Change in Control of the Company or, if higher, immediately prior to the date the Notice of Termination is given) plus (ii) an amount equal to the greatest of the Executive’s annual cash incentive target bonus for the fiscal year in which the Termination Date occurs, the annual cash incentive bonus the Executive received during the fiscal year prior to the Change in Control of the Company or the annual cash incentive bonus the Executive received with respect to the fiscal year prior to the Change in Control of the Company (the aggregate amount set forth in clause (i) and clause (ii) shall hereafter be referred to as the “Annual Cash Compensation”).

(f) Beneficial Owner. A Person shall be deemed to be the “Beneficial Owner” of any securities:

(i) which such Person or any of such Person’s Affiliates or Associates has the right to acquire (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding, or upon the exercise of conversion rights, exchange rights, rights, warrants or options, or otherwise; *provided, however*, that a Person shall not be deemed the Beneficial Owner of, or to beneficially own, (A) securities tendered pursuant to a tender or exchange offer made by or on behalf of such Person or any of such Person’s Affiliates or Associates until such tendered securities are accepted for purchase, or (B) securities issuable upon exercise of any rights issued pursuant to the terms of any rights agreement of the Company, at any time before the issuance of such securities;

(ii) which such Person or any of such Person’s Affiliates or Associates, directly or indirectly, has the right to vote or dispose of or has “beneficial ownership” of (as determined pursuant to Rule 13d-3 of the General Rules and Regulations under the Act), including pursuant to any agreement, arrangement or understanding; *provided, however*, that a Person shall not be deemed the Beneficial Owner of, or to beneficially own, any security under this clause (ii) as a result of an agreement, arrangement or understanding to vote such security if the agreement, arrangement or understanding: (A) arises solely from a revocable proxy or consent given to such Person in response to a public proxy or consent solicitation made pursuant to, and in accordance with, the applicable rules and regulations under the Act and (B) is not also then reportable on a Schedule 13D under the Act (or any comparable or successor report); or

(iii) which are beneficially owned, directly or indirectly, by any other Person with which such Person or any of such Person’s Affiliates or Associates has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting (except pursuant to a revocable proxy as described in clause (ii) above) or disposing of any voting securities of the Company.

(g) Cause. “Cause” for termination by the Employer of the Executive’s employment shall be limited to (i) the engaging by the Executive in intentional conduct that the Company establishes, by clear and convincing evidence, has caused demonstrable and serious financial injury to the Employer, as evidenced by a determination in a binding and final judgment, order or decree of a court or administrative agency of competent jurisdiction, in effect after exhaustion or lapse of all rights of appeal, in an action, suit or proceeding, whether civil, criminal, administrative or investigative; (ii) the Executive’s conviction of a felony (as evidenced by binding and final judgment, order or decree of a court of competent jurisdiction, in effect after exhaustion of all rights of appeal); or (iii) continuing willful and unreasonable refusal by the Executive to perform the Executive’s duties or responsibilities (unless significantly changed without the Executive’s consent).

(h) Change in Control of the Company. A “Change in Control of the Company” shall be deemed to have occurred if an event set forth in any one of the following paragraphs shall have occurred:

(i) any Person (other than (A) the Company or any of its subsidiaries, (B) a trustee or other fiduciary holding securities under any employee benefit plan of the Company or any of its subsidiaries, (C) an underwriter temporarily holding securities pursuant to an offering of such securities or (D) a corporation owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of stock in the Company (“Excluded Persons”)) is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such Person any securities acquired directly from the Company or its Affiliates after the date of this Agreement, pursuant to express authorization by the Board that refers to this exception) representing 30% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company’s then outstanding voting securities; or

(ii) the following individuals cease for any reason to constitute a majority of the number of directors of the Company then serving: (A) individuals who, on the date of this Agreement constituted the Board and (B) any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including but not limited to a consent solicitation, relating to the election of directors of the Company, as such terms are used in Rule 14a 11 of Regulation 14A under the Act) whose appointment or election by the Board or nomination for election by the Company’s shareholders was approved by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors on the date of this Agreement, or whose appointment, election or nomination for election was previously so approved (collectively the “Continuing Directors”); *provided, however*, that individuals who are appointed to the Board pursuant to or in accordance with the terms of an agreement relating to a merger, consolidation, or share exchange involving the Company (or any direct or indirect subsidiary of the Company) shall not be Continuing Directors for purposes of this Agreement until after such individuals are first nominated for election by a vote of at least two-thirds (2/3) of the then Continuing Directors and are thereafter elected as directors by the shareholders of the Company at a meeting of shareholders held following consummation of such merger, consolidation, or share exchange; and, *provided further*, that in the event the failure of any such persons appointed to the Board to be Continuing Directors results in a Change in Control of the Company, the subsequent qualification of such persons as Continuing Directors shall not alter the fact that a Change in Control of the Company occurred; or

(iii) the consummation of a merger, consolidation or share exchange of the Company with any other corporation or the issuance of voting securities of the Company in connection with a merger, consolidation or share exchange of the Company (or any direct or indirect subsidiary of the Company), in each case, which requires approval of the shareholders of the Company, other than (A) a merger, consolidation or share exchange which would result in the voting securities of the Company outstanding immediately prior to such merger, consolidation or share exchange continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof) at least 50% of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger, consolidation or share exchange, or (B) a merger, consolidation or share exchange effected to implement a recapitalization of the Company (or similar transaction) in which no Person (other than an Excluded Person) is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such Person

any securities acquired directly from the Company or its Affiliates after the date of this Agreement, pursuant to express authorization by the Board that refers to this exception) representing 30% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding voting securities; or

(iv) the consummation of a plan of complete liquidation or dissolution of the Company or a sale or disposition by the Company of all or substantially all of the Company's assets (in one transaction or a series of related transactions within any period of 24 consecutive months), in each case, which requires approval of the shareholders of the Company, other than a sale or disposition by the Company of all or substantially all of the Company's assets to an entity at least 75% of the combined voting power of the voting securities of which are owned by Persons in substantially the same proportions as their ownership of the Company immediately prior to such sale.

Notwithstanding the foregoing, no "Change in Control of the Company" shall be deemed to have occurred if there is consummated any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to own, directly or indirectly, in the same proportions as their ownership in the Company, an entity that owns all or substantially all of the assets or voting securities of the Company immediately following such transaction or series of transactions.

(i) Code. The term "Code" means the Internal Revenue Code of 1986, including any amendments thereto or successor tax codes thereof. Any reference to a specific provision of the Code includes any regulations promulgated under such provision and any successor provision.

(j) Covered Termination. Subject to Section 2(b), the term "Covered Termination" means any Termination of Employment during the Employment Period where the Termination Date or the date Notice of Termination is delivered is any date prior to the end of the Employment Period.

(k) Employment Period. Subject to Section 2(b), the term "Employment Period" means a period commencing on the date of a Change in Control of the Company, and ending at 11:59 p.m. Central Time on the earlier of the second anniversary of such date or the Executive's Normal Retirement Date.

(l) Good Reason. The Executive shall have "Good Reason" for termination of employment in the event of any of the following without the Executive's prior written consent:

(i) any breach of this Agreement by the Employer, including specifically any breach by the Employer of the agreements contained in Section 3, Section 4, Section 5, or Section 6, other than an isolated, insubstantial and inadvertent failure not occurring in bad faith that the Employer remedies within ten (10) days after receipt of written notice thereof given by the Executive;

(ii) any reduction in the Executive's (A) base salary, (B) percentage of base salary available as cash incentive compensation or bonus opportunity, (C) grant date fair value of annual equity-based awards or (D) other benefits, in each case relative to those most favorable to the Executive in effect at any time during the 180-day period prior to the Change

in Control of the Company or, to the extent more favorable to the Executive, those in effect at any time during the Employment Period;

(iii) the removal of the Executive from, or any failure to reelect or reappoint the Executive to, any of the positions held with the Employer on the date of the Change in Control of the Company or any other positions with the Employer to which the Executive shall thereafter be elected, appointed or assigned, except in the event that such removal or failure to reelect or reappoint relates to the termination by the Employer of the Executive's employment for Cause or by reason of disability pursuant to Section 12;

(iv) a good faith determination by the Executive that there has been a material adverse change in the Executive's working conditions or status with the Employer relative to the most favorable working conditions or status in effect during the 180-day period prior to the Change in Control of the Company, or, to the extent more favorable to the Executive, those in effect at any time during the Employment Period, including but not limited to (A) a significant change in the nature or scope of the Executive's authority, powers, functions, duties or responsibilities, or (B) a significant reduction in the level of support services, staff, secretarial and other assistance, office space and accoutrements, but in each case excluding for this purpose an isolated, insubstantial and inadvertent event not occurring in bad faith that the Employer remedies within ten (10) days after receipt of written notice thereof given by the Executive;

(v) the relocation of the Executive's principal place of employment to a location more than 50 miles from the Executive's principal place of employment on the date 180 days prior to the Change in Control of the Company (or if the Executive has not been employed for 180 days prior to the Change in Control of the Company, as in effect on the date the Executive entered into this Agreement);

(vi) the Employer requires the Executive to travel on Employer business 20% in excess of the average number of days per month the Executive was required to travel during the 180-day period prior to the Change in Control of the Company; or

(vii) failure by the Company to obtain the Agreement referred to in Section 17(a) as provided therein.

(m) Normal Retirement Date. The term "Normal Retirement Date" means the Executive's attainment of age sixty-five (65).

(n) Person. The term "Person" shall mean any individual, firm, partnership, corporation or other entity, including any successor (by merger or otherwise) of such entity, or a group of any of the foregoing acting in concert.

(o) Separation from Service. For purposes of this Agreement, the term "Separation from Service" means the Executive's Termination of Employment, or if the Executive continues to provide services following his or her Termination of Employment, such later date as is considered a separation from service from the Company and its 409A Affiliates within the meaning of Code Section 409A. Specifically, if the Executive continues to provide services to the Company or a 409A Affiliate in a capacity other than as an employee, such shift in status is not automatically a Separation from Service.

(p) Termination of Employment. For purposes of this Agreement, the Executive's termination of employment shall be presumed to occur when the Company and Executive reasonably anticipate that no further services will be performed by the Executive for the Company and its 409A Affiliates or that the level of bona fide services the Executive will perform as an employee of the Company and its 409A Affiliates will permanently decrease to no more than 20% of the average level of bona fide services performed by the Executive (whether as an employee or independent contractor) for the Company and its 409A Affiliates over the immediately preceding 36-month period (or such lesser period of services). Whether the Executive has experienced a Termination of Employment shall be determined by the Employer in good faith and consistent with Section 409A of the Code. Notwithstanding the foregoing, if the Executive takes a leave of absence for purposes of military leave, sick leave or other bona fide reason, the Executive will not be deemed to have incurred a Separation from Service for the first 6 months of the leave of absence, or if longer, for so long as the Executive's right to reemployment is provided either by statute or by contract, including this Agreement; *provided that* if the leave of absence is due to a medically determinable physical or mental impairment that can be expected to result in death or last for a continuous period of not less than six months, where such impairment causes the Executive to be unable to perform the duties of his or her position of employment or any substantially similar position of employment, the leave may be extended by the Employer for up to 29 months without causing a Termination of Employment.

(q) Termination Date. Except as otherwise provided in Section 2(b), Section 10(b), and Section 17(a), the term "Termination Date" means (i) if the Executive's Termination of Employment is by the Executive's death, the date of death; (ii) if the Executive's Termination of Employment is by reason of voluntary early retirement, as agreed in writing by the Employer and the Executive, the date of such early retirement which is set forth in such written agreement; (iii) if the Executive's Termination of Employment is, for purposes of this Agreement, by reason of disability pursuant to Section 12, the earlier of thirty (30) days after the Notice of Termination is given or one day prior to the end of the Employment Period; (iv) if the Executive's Termination of Employment is by the Executive voluntarily (other than for Good Reason), the date the Notice of Termination is given; and (v) if the Executive's Termination of Employment is by the Employer (other than by reason of disability pursuant to Section 12) or by the Executive for Good Reason, the earlier of thirty (30) days after the Notice of Termination is given or one day prior to the end of the Employment Period. Notwithstanding the foregoing,

(A) If termination is for Cause pursuant to Section 1(g)(iii) and if the Executive has cured the conduct constituting such Cause as described by the Employer in its Notice of Termination within such 30-day or shorter period, then the Executive's employment hereunder shall continue as if the Employer had not delivered its Notice of Termination.

(B) If the Executive shall in good faith give a Notice of Termination for Good Reason and the Employer notifies the Executive that a dispute exists concerning the termination within the 15-day period following receipt thereof, then the Executive may elect to continue his or her employment during such dispute and the Termination Date shall be determined under this paragraph. If the Executive so elects and it is thereafter determined that Good Reason did exist, the Termination Date shall be the earliest of (1) the date on which the dispute is finally determined, either (x) by mutual written agreement of the parties or (y) in accordance with Section 22, (2) the date of the Executive's death or (3) one day prior to the end of the

Employment Period. If the Executive so elects and it is thereafter determined that Good Reason did not exist, then the employment of the Executive hereunder shall continue after such determination as if the Executive had not delivered the Notice of Termination asserting Good Reason and there shall be no Termination Date arising out of such Notice. In either case, this Agreement continues, until the Termination Date, if any, as if the Executive had not delivered the Notice of Termination except that, if it is finally determined that Good Reason did exist, the Executive shall in no case be denied the benefits described in Section 9 (including a Termination Payment) based on events occurring after the Executive delivered his Notice of Termination.

(C) Except as provided in Section 1(q)(B), if the party receiving the Notice of Termination notifies the other party that a dispute exists concerning the termination within the appropriate period following receipt thereof and it is finally determined that the reason asserted in such Notice of Termination did not exist, then (1) if such Notice was delivered by the Executive, the Executive will be deemed to have voluntarily terminated his employment and the Termination Date shall be the earlier of the date 15 days after the Notice of Termination is given or one day prior to the end of the Employment Period and (2) if delivered by the Company, the Company will be deemed to have terminated the Executive other than by reason of death, disability or Cause.

Capitalized terms used in this Agreement not defined in this Section 1 have the meanings assigned in the other sections of this Agreement. The definitions of the following terms may be found in the sections indicated:

<u>Term</u>	<u>Section</u>
Annual Base Salary	Section 5(a)
Base Period Income	Section 9(b)(iii)
Bonus Amount	Section 5(e)(i)
Bonus Plan	Section 5(e)
Company Incentive Plan	Section 5(e)(iii)
Excise Tax	Section 9(b)(i)
Expenses	Section 15
Goals	Section 5(e)(iii)
National Tax Counsel	Section 9(b)(ii)
Notice of Termination	Section 13
Plans	Section 9(c)(iv)
Termination Payment	Section 9(a)
Total Payments	Section 9(b)(i)

2. Termination or Cancellation Prior to Change in Control.

(a) Subject to Section 2(b), the Employer and the Executive shall each retain the right to terminate the employment of the Executive at any time and for any reason (or no reason) prior to a Change in Control of the Company. Subject to Section 2(b), in the event that prior to a

Change in Control of the Company (i) the Executive's employment is terminated or (ii) as determined in writing by the Compensation Committee of the Board of Directors of the Company in its sole discretion, the Executive's authority, powers, functions, duties, responsibilities or pay grade are materially reduced, this Agreement shall be terminated and cancelled and of no further force and effect, and any and all rights and obligations of the parties hereunder shall cease.

(b) Anything in this Agreement to the contrary notwithstanding, if the Executive's employment with the Employer is terminated by the Employer (other than a termination due to the Executive's death or as a result of the Executive's disability (as determined under Section 12) during the period of 180 days prior to the date on which a Change in Control of the Company occurs, and if it is reasonably demonstrated by the Executive that such termination of employment (i) was at the request of a third party who has taken steps reasonably calculated to effect a Change in Control of the Company or (ii) otherwise arose in connection with or in anticipation of a Change in Control of the Company, then for all purposes of this Agreement such termination of employment shall be deemed a "Covered Termination," a "Notice of Termination" shall be deemed to have been given, and the "Employment Period" shall be deemed to have begun on the date of such termination which shall be deemed to be the "Termination Date" and the date of the Change of Control of the Company for purposes of this Agreement. Anything in this Agreement to the contrary notwithstanding, if the Executive's authority, powers, functions, duties, responsibilities or pay grade were reduced pursuant to Section 2(a)(ii) during the period of 180 days prior to the date on which the Change in Control of the Company occurs, and if it is reasonably demonstrated by the Executive that such reduction in authority, powers, functions, duties, responsibilities or pay grade (i) was at the request of a third party who has taken steps reasonably calculated to effect a Change in Control of the Company or (ii) otherwise arose in connection with or in anticipation of a Change in Control of the Company, then the termination and cancellation of this Agreement pursuant to Section 2(a) shall be deemed null and void, this Agreement shall be deemed to remain in full force and effect with any and all rights and obligations of the parties hereunder continuing and such reduction in authority, powers, functions, duties, responsibilities or pay grade shall be considered "Good Reason" for the Executive to terminate employment in connection with a Change in Control of the Company.

3. Employment Period. If a Change in Control of the Company occurs when the Executive is employed by the Employer, the Employer will continue thereafter to employ the Executive during the Employment Period, and the Executive will remain in the employ of the Employer in accordance with and subject to the terms and provisions of this Agreement. Any Termination of Employment during the Employment Period, whether by the Company or the Employer, shall be deemed a termination by the Company for purposes of this Agreement.

4. Duties. During the Employment Period, the Executive shall, in the same capacities and positions held by the Executive at the time of the Change in Control of the Company or in such other capacities and positions as may be agreed to by the Employer and the Executive in writing, devote the Executive's best efforts and all of the Executive's business time, attention and skill to the business and affairs of the Employer, as such business and affairs now exist and as they may hereafter be conducted.

5. Compensation. During the Employment Period, the Executive shall be compensated as follows:

(a) The Executive shall receive, at reasonable intervals (but not less often than monthly) and in accordance with such standard policies as may be in effect immediately prior to the

Change in Control of the Company, an annual base salary in cash equivalent of not less than twelve times the Executive's highest monthly base salary for the twelve-month period immediately preceding the month in which the Change in Control of the Company occurs or, if higher, annual base salary at the rate in effect immediately prior to the Change in Control of the Company (which base salary shall, unless otherwise agreed in writing by the Executive or subject to any irrevocable deferral election then in effect, include the current receipt by the Executive of any amounts which, prior to the Change in Control of the Company, the Executive had elected to defer, whether such compensation is deferred under Section 401(k) of the Code or otherwise), subject to adjustment as hereinafter provided in Section 6 (such salary amount as adjusted upward from time to time is hereafter referred to as the "Annual Base Salary").

(b) The Executive shall receive fringe benefits at least equal in value to the highest value of such benefits provided for the Executive at any time during the 180-day period immediately prior to the Change in Control of the Company or, if more favorable to the Executive, those provided generally at any time during the Employment Period to any executives of the Employer of comparable status and position to the Executive; and shall be reimbursed, at such intervals and in accordance with such standard policies that are most favorable to the Executive that were in effect at any time during the 180-day period immediately prior to the Change in Control of the Company, for any and all monies advanced in connection with the Executive's employment for reasonable and necessary expenses incurred by the Executive on behalf of the Employer, including travel expenses.

(c) The Executive and/or the Executive's family, as the case may be, shall be included, to the extent eligible thereunder (which eligibility shall not be conditioned on the Executive's salary grade or on any other requirement which excludes persons of comparable status to the Executive unless such exclusion was in effect for such plan or an equivalent plan at any time during the 180-day period immediately prior to the Change in Control of the Company), in any and all plans providing benefits for the Employer's salaried employees in general, including but not limited to group life insurance, hospitalization, medical, dental, profit sharing and stock bonus plans; *provided, that*, (i) in no event shall the aggregate level of benefits under such plans in which the Executive is included be less than the aggregate level of benefits under plans of the Employer of the type referred to in this Section 5(c) in which the Executive was participating at any time during the 180-day period immediately prior to the Change in Control of the Company and (ii) in no event shall the aggregate level of benefits under such plans be less than the aggregate level of benefits under plans of the type referred to in this Section 5(c) provided at any time after the Change in Control of the Company to any executive of the Employer of comparable status and position to the Executive.

(d) The Executive shall annually be entitled to not less than the amount of paid vacation and not fewer than the highest number of paid holidays to which the Executive was entitled annually at any time during the 180-day period immediately prior to the Change in Control of the Company or such greater amount of paid vacation and number of paid holidays as may be made available annually to other executives of the Employer of comparable status and position to the Executive at any time during the Employment Period.

(e) The Executive shall be included in all plans providing additional benefits to executives of the Employer of comparable status and position to the Executive, including but not limited to short- or long-term cash-based incentive compensation plans (such plan or plans together, the "Bonus Plan"), deferred compensation plans, supplemental retirement plans, equity awards, and similar or comparable plans; *provided, that*, unless otherwise provided in clauses (i) or (ii) below, in

no event shall the aggregate level of benefits under such plans or awards be less than the higher of (x) the highest aggregate level of benefits under plans of the Employer of the type referred to in this Section 5(e) in which the Executive was participating at any time during the 180-day period immediately prior to the Change in Control of the Company and (y) the aggregate levels of benefits under plans of the type referred to in this Section 5(e) provided at any time after the Change in Control of the Company to any executive of the Employer comparable in status and position to the Executive.

(i) With respect to the Bonus Plan, the amount of the compensation (the “Bonus Amount”) that the Executive is eligible to earn under the Bonus Plan if the threshold, target and maximum performance objectives are met shall be no less than the highest threshold, target and maximum amounts, respectively, that Executive was eligible to receive under awards outstanding under the Employer’s short- or long-term cash-based incentive compensation plan or plans as in effect at any time during the 180-day period immediately prior to the Change in Control of the Company; *provided that* the amount Executive is eligible to earn shall in no event be lower than the amount of short- or long-term cash-based incentive compensation that any executive of the Employer comparable in status and position to the Executive is eligible to earn. Payment of the Bonus Amount, if earned, shall not be affected by the Executive’s Termination of Employment after the end of the Employment Period.

(ii) With respect to equity awards, the Executive shall annually receive awards under one or more equity-based compensation plan or plans of the Employer. Such annual equity awards shall have a grant date fair value at least equal to the aggregate grant date fair value of the largest equity-based awards granted to the Executive at any time during the one-year period immediately prior to the Change in Control of the Company, measured, in each case, as a multiple of the Executive’s Annual Base Salary; *provided that*, solely for purposes of determining the grant date fair value of the largest equity-based awards granted to the Executive during such one-year period immediately prior to the Change in Control of the Company, any inducement awards or other awards that are intended to be non-recurring shall be disregarded or, to the extent such awards are intended to replace more than one annual award, shall be pro-rated so that only a one-year portion of the award shall be counted; and *provided further* that the grant date fair value of the equity awards granted to the Executive shall in no event be lower than the grant date fair value of the annual equity-based awards granted to any executive of the Employer comparable in status and position to the Executive.

(iii) To the extent any compensation that the Executive has an opportunity to earn after a Change in Control of the Company is subject to achieving performance objectives, such performance objectives shall be established and communicated in writing to the Executive within the first ninety (90) days of the performance period and shall be reasonably related to the business of the Employer (the “Goals”). All Goals shall be attainable with approximately the same degree of probability as the most attainable goals under the Employer’s performance-based compensation plan or plans as in effect at any time during the 180-day period immediately prior to the Change in Control of the Company (whether one or more, the “Company Incentive Plan”) and in view of the Employer’s existing and projected financial and business circumstances applicable at the time, and shall have a performance period that is no longer than the performance period corresponding to the most analogous type of compensation under the Company Incentive Plan.

6. Annual Compensation Adjustments. During the Employment Period, the Board of Directors of the Company (or an appropriate committee thereof) will consider and appraise, at least annually, the contributions of the Executive to the Company, and in accordance with the Company's practice prior to the Change in Control of the Company, due consideration shall be given to the upward adjustment of the Executive's Annual Base Salary, at least annually, (a) commensurate with increases generally given to other executives of the Employer of comparable status and position to the Executive, and (b) as the scope of the Company's operations or the Executive's duties expand.

7. Termination For Cause or Without Good Reason. If there is a Covered Termination for Cause or due to the Executive's voluntarily terminating his or her employment other than for Good Reason (any such terminations to be subject to the procedures set forth in Section 13), then the Executive shall be entitled to receive only Accrued Benefits.

8. Termination Giving Rise to a Termination Payment and Certain Other Benefits. If there is a Covered Termination by the Executive for Good Reason, or by the Company other than by reason of (i) death, (ii) disability pursuant to Section 12, or (iii) Cause (any such terminations to be subject to the procedures set forth in Section 13), then (A) the Executive shall be entitled to receive Accrued Benefits and, in lieu of further base salary for periods following the Termination Date, as liquidated damages and additional severance pay and in consideration of the covenant of the Executive set forth in Section 14(a), the Termination Payment pursuant to Section 9(a), (B) all equity-based and cash incentive awards then held by the Executive that were granted prior to the Change in Control of the Company shall be subject to the terms of the 2012 Stock and Incentive Awards Plan or a successor incentive compensation plan under which the awards were granted and (C) all equity-based and cash incentive awards then held by the Executive that were granted on or after the Change in Control of the Company shall vest or be earned in full immediately upon such Covered Termination, with the amount or value of any performance-based awards determined based on the deemed achievement of all applicable performance conditions at 100% of target, without pro-ration.

9. Payments Upon Termination.

(a) Termination Payment. The "Termination Payment" shall be an amount equal to the Annual Cash Compensation times two. The Termination Payment shall be paid to the Executive in cash equivalent (i) on the first day of the seventh month following the month in which the Executive's Separation from Service occurs, without interest thereon, to the extent necessary for compliance with the requirements of Code Section 409A(a)(2)(B) relating to specified employees or (ii) to the extent not so required, within ten (10) business days after the Termination Date. Notwithstanding the foregoing, in the event the Executive's Termination Date is pursuant to Section 2(b), the Termination Payment shall be paid within ten (10) business days after the date of the Change in Control of the Company (as defined without reference to Section 2(b)), without interest. Such lump sum payment shall not be reduced by any present value or similar factor, and the Executive shall not be required to mitigate the amount of the Termination Payment by securing other employment or otherwise, nor will such Termination Payment be reduced by reason of the Executive securing other employment or for any other reason, except as provided in subsection (b) below. The Termination Payment shall be in lieu of, and acceptance by the Executive of the Termination Payment shall constitute the Executive's release of any rights of the Executive to, any other cash severance payments under any Company severance policy, practice or agreement.

(b) 280G Provision.

(i) Notwithstanding any other provision of this Agreement, if any portion of the Termination Payment or any other payment or other benefit to the Executive under this Agreement, or under any other agreement with or plan of the Employer or any 409A Affiliate (in the aggregate, "Total Payments"), would constitute an "excess parachute payment" (as defined below) and would, but for this Section 9(b)(i), result in the imposition on the Executive of an excise tax under Code Section 4999 (the "Excise Tax"), then the Total Payments to be made to the Executive shall either be (A) delivered in full, or (B) delivered in a reduced amount that is One Dollar (\$1.00) less than the amount that would cause any portion of such Total Payments to be subject to the Excise Tax, whichever of the foregoing results in the receipt by the Executive of the greatest benefit on an after-tax basis (taking into account the applicable federal, state and local income taxes and the Excise Tax).

(ii) Within forty (40) days following the Executive's Termination of Employment or notice by one party to the other of its belief that there is a payment or benefit due the Executive that will result in an excess parachute payment, the Executive and the Company, at the Company's expense, shall obtain the opinion (which need not be unqualified) of nationally recognized tax counsel ("National Tax Counsel") selected by the Company's independent auditors and reasonably acceptable to the Executive (which may be regular outside counsel to the Company), which opinion sets forth (A) the amount of the Base Period Income (as defined below), (B) the amount and present value of Total Payments, (C) the amount and present value of any excess parachute payments determined without regard to any reduction of Total Payments pursuant to Section 9(b)(i), and (D) the net after-tax proceeds to the Executive, taking into account the tax imposed under Code Section 4999 if (1) the Total Payments were reduced in accordance with Section 9(b)(i)(B), or (2) the Total Payments were not so reduced. The opinion of National Tax Counsel shall be addressed to the Company and the Executive and shall be binding upon the Company and the Executive. If such National Tax Counsel opinion determines that clause (B) of Section 9(b)(i) applies, then the payments hereunder or any other payment or benefit determined by such counsel to be includable in Total Payments shall be reduced or eliminated so that under the bases of calculations set forth in such opinion there will be no excess parachute payment. In such event, payments or benefits included in the Total Payments shall be reduced or eliminated by applying the following principles, in order: (x) the payment or benefit with the higher ratio of the parachute payment value to present economic value (determined using reasonable actuarial assumptions) shall be reduced or eliminated before a payment or benefit with a lower ratio; (y) the payment or benefit with the later possible payment date shall be reduced or eliminated before a payment or benefit with an earlier payment date; and (z) cash payments shall be reduced prior to non-cash benefits; *provided* that if the foregoing order of reduction or elimination would violate Code Section 409A, then the reduction shall be made pro rata among the payments or benefits included in the Total Payments (on the basis of the relative present value of the parachute payments).

(iii) For purposes of this Agreement, (A) the terms "excess parachute payment" and "parachute payments" shall have the meanings assigned to them in Section 280G of the Code and such "parachute payments" shall be valued as provided therein, (B) present value for purposes of this Agreement shall be calculated in accordance with Section 1274(b)(2) of the Code, (C) the term "Base Period Income" means an amount equal to the Executive's "annualized includable compensation for the base period" as defined in Section

280G(d)(1) of the Code, (D) for purposes of the National Tax Counsel opinion, the value of any noncash benefits or any deferred payment or benefit shall be determined by the Company's independent auditors in accordance with the principles of Section 280G(d)(3) and (4) of the Code, which determination shall be evidenced in a certificate of such auditors addressed to the Company and the Executive, and (E) the Executive shall be deemed to pay federal income tax and employment taxes at the highest marginal rate of federal income and employment taxation, and state and local income taxes at the highest marginal rate of taxation in the state or locality of the Executive's domicile (determined in both cases in the calendar year in which the Covered Termination occurs or notice described in Section 9(b)(ii) is given, whichever is earlier), net of the maximum reduction in federal income taxes that may be obtained from the deduction of such state and local taxes. If the National Tax Counsel so requests in connection with the opinion required by this Section 9(b), the Executive and the Company shall obtain, at the Company's expense, and the National Tax Counsel may rely on, the advice of a firm of recognized executive compensation consultants as to the reasonableness of any item of compensation to be received by the Executive solely with respect to its status under Section 280G of the Code and the regulations thereunder.

(iv) The Company agrees to bear all costs associated with, and to indemnify and hold harmless, the National Tax Counsel of and from any and all claims, damages, and expenses resulting from or relating to its determinations pursuant to this Section 9(b), except for claims, damages or expenses resulting from the gross negligence or willful misconduct of such firm.

(v) This Section 9(b) shall be amended to comply with any amendment or successor provision to Sections 280G or 4999 of the Code. If such provisions are repealed without successor, then this Section 9(b) shall be cancelled without further effect.

(c) Additional Benefits. If there is a Covered Termination and the Executive is entitled to Accrued Benefits and the Termination Payment, then the Company shall provide to the Executive the following additional benefits:

(i) The Executive shall receive until the end of the second calendar year following the calendar year in which the Executive's Separation from Service occurs, at the expense of the Company, outplacement services, on an individualized basis at a level of service commensurate with the Executive's status with the Company immediately prior to the date of the Change in Control of the Company (or, if higher, immediately prior to the Executive's Termination of Employment), provided by a nationally recognized executive placement firm selected by the Company; *provided that* the cost to the Company of such services shall not exceed 10% of the Executive's Annual Base Salary.

(ii) Until the earlier of the end of the Employment Period or such time as the Executive has obtained new employment and is covered by benefits which in the aggregate are at least equal in value to the following benefits, the Executive shall continue to be covered, at the expense of the Company, by the same or equivalent life insurance, hospitalization, medical and dental coverage as was required hereunder with respect to the Executive immediately prior to the date the Notice of Termination is given, subject to the following:

(A) Following the end of the COBRA continuation period, if such hospitalization, medical or dental coverage is provided under a health plan that is subject to Section 105(h) of the Code, benefits payable under such health plan shall comply with the requirements of Treasury regulation section 1.409A-3(i)(1)(iv) and, if necessary, the Company shall amend such health plan to comply therewith. If the Executive is entitled to the Termination Payment pursuant to Section 2(b), then within ten (10) days following the Change in Control of the Company (determined without regard to Section 2(b)), the Company shall reimburse the Executive for any COBRA premiums the Executive paid for his or her hospitalization, medical and dental coverage under COBRA from the Executive's Termination Date through the date of the Change in Control of the Company (determined without regard to Section 2(b)).

(B) To the extent required to comply with Code Section 409A, during the first six months following the Executive's Separation from Service, the Executive shall pay the Company for any life insurance coverage that provides a benefit in excess of \$50,000 under a group term life insurance policy.. After the end of such six month period, the Company shall make a cash equivalent payment to the Executive equal to the aggregate premiums paid by the Executive for such coverage, and thereafter such coverage shall be provided at the expense of the Company for the remainder of the period as set forth above; *provided that* this clause (B) shall cease to apply if on the date of the Executive's Separation from Service, neither the Company nor any other entity that is considered a "service recipient" with respect to the Executive within the meaning of Code Section 409A has any stock which is publicly traded on an established securities market (within the meaning of Treasury Regulation Section 1.897-1(m)) or otherwise.

(iii) The Company shall bear up to \$15,000 in the aggregate of fees and expenses of consultants and/or legal or accounting advisors engaged by the Executive to advise the Executive as to matters relating to the computation of benefits due and payable under this Section 9.

(iv) The Company shall cause the Executive to be fully and immediately vested in his or her account under any nonqualified defined contribution retirement plan of the Employer.

10. Death.

(a) Except as provided in Section 10(b), in the event of a Covered Termination due to the Executive's death, the Executive's estate, heirs and beneficiaries shall receive all the Executive's Accrued Benefits through the Termination Date.

(b) In the event the Executive dies after a Notice of Termination is given (i) by the Company or (ii) by the Executive for Good Reason, the Executive's estate, heirs and beneficiaries shall be entitled to the benefits described in Section 10(a) and, subject to the provisions of this Agreement, to such Termination Payment as the Executive would have been entitled to had the Executive lived, except that the Termination Payment shall be paid within 90 days following the date of the Executive's death, without interest thereon. For purposes of this Section 10(b), the

Termination Date shall be the earlier of 30 days following the giving of the Notice of Termination, subject to extension pursuant to Section 1(g), or one day prior to the end of the Employment Period.

11. Retirement. If, during the Employment Period, the Executive and the Employer shall execute an agreement providing for the early retirement of the Executive from the Employer, or the Executive shall otherwise give notice that he is voluntarily choosing to retire early from the Employer, the Executive shall receive Accrued Benefits through the Termination Date; *provided, that* if the Executive's employment is terminated by the Executive for Good Reason or by the Company other than by reason of death, disability or Cause and the Executive also, in connection with such termination, elects voluntary early retirement, the Executive shall also be entitled to receive a Termination Payment pursuant to Section 9.

12. Termination for Disability. If, during the Employment Period, as a result of the Executive's disability due to physical or mental illness or injury (regardless of whether such illness or injury is job-related), the Executive shall have been absent from the Executive's duties hereunder on a full-time basis for a period of six consecutive months and, within 30 days after the Company notifies the Executive in writing that it intends to terminate the Executive's employment (which notice shall not constitute the Notice of Termination contemplated below), the Executive shall not have returned to the performance of the Executive's duties hereunder on a full-time basis, the Company may terminate the Executive's employment for purposes of this Agreement pursuant to a Notice of Termination given in accordance with Section 13. If the Executive's employment is terminated on account of the Executive's disability in accordance with this Section, the Executive shall receive Accrued Benefits through the Termination Date and shall remain eligible for all benefits provided by any long term disability programs of the Employer in effect at the time of such termination.

13. Termination Notice and Procedure. Any Covered Termination by the Company or the Executive (other than a termination of the Executive's employment that is a Covered Termination by virtue of Section 2(b)) shall be communicated by a written notice of termination ("Notice of Termination") to the Executive, if such Notice is given by the Company, and to the Company, if such Notice is given by the Executive, all in accordance with the following procedures and those set forth in Section 24:

(a) If such termination is for disability, Cause or Good Reason, the Notice of Termination shall indicate in reasonable detail the facts and circumstances alleged to provide a basis for such termination.

(b) Any Notice of Termination by the Company shall have been approved, prior to the giving thereof to the Executive, by a resolution duly adopted by a majority of the directors of the Company (or any successor corporation) then in office.

(c) If the Notice is given by the Executive for Good Reason, the Executive may cease performing his duties hereunder on or after the date fifteen (15) days after the delivery of Notice of Termination and shall in any event cease employment on the Termination Date. If the Notice is given by the Company, then the Executive may cease performing his duties hereunder on the date of receipt of the Notice of Termination, subject to the Executive's rights hereunder.

(d) The Executive shall have thirty (30) days, or such longer period as the Company may determine to be appropriate, to cure any conduct or act, if curable, alleged to provide

grounds for termination of the Executive's employment for Cause under this Agreement pursuant to Section 1(g)(iii).

(e) The recipient of any Notice of Termination shall personally deliver or mail in accordance with Section 24 written notice of any dispute relating to such Notice of Termination to the party giving such Notice within 15 days after receipt thereof; *provided, however*, that if the Executive's conduct or act alleged to provide grounds for termination by the Company for Cause is curable, then such period shall be 30 days. After the expiration of such period, the contents of the Notice of Termination shall become final and not subject to dispute.

14. Further Obligations of the Executive.

(a) Competition. The Executive agrees that, in the event of any Covered Termination where the Executive is entitled to Accrued Benefits and the Termination Payment, the Executive shall not, for a period expiring one year after the Termination Date, without the prior written approval of the Company's Board of Directors, (i) solicit for employment an employee of the Company or its subsidiaries or (ii) participate in the management of, be employed by or own any business enterprise at a location anywhere in the World that engages in substantial competition with the Company or its subsidiaries, where such enterprise's revenues from any competitive activities amount to 10% or more of such enterprise's net revenues and sales for its most recently completed fiscal year; *provided, however*, that nothing in this Section 14(a) shall prohibit the Executive from owning stock or other securities of a competitor amounting to less than five percent (5%) of the outstanding capital stock of such competitor.

(b) Confidentiality. During and following the Executive's employment by the Company, the Executive shall hold in confidence and not directly or indirectly disclose or use or copy or make lists of any confidential information or proprietary data of the Company (including that of the Employer), except to the extent authorized in writing by the Board of Directors of the Company or required by any court or administrative agency, other than to an employee of the Company or a person to whom disclosure is reasonably necessary or appropriate in connection with the performance by the Executive of duties as an executive of the Company. Confidential information shall not include any information known generally to the public or any information of a type not otherwise considered confidential by persons engaged in the same business or a business similar to that of the Company. All records, files, documents and materials, or copies thereof, relating to the business of the Company which the Executive shall prepare, or use, or come into contact with, shall be and remain the sole property of the Company and shall be promptly returned to the Company upon termination of employment with the Company. Notwithstanding anything to the contrary herein, however, nothing in this Agreement prohibits the Executive from reporting possible violations of local, state, foreign or federal law or regulation, or related facts, to any governmental agency or entity or making other reports or disclosures that, in each case, the Executive believes are protected under the whistleblower provisions of local, state, foreign or federal law or regulation. Without limitation, the Executive may report possible violations of law or regulation and related facts to the U.S. Department of Justice, the Securities and Exchange Commission, Congress, and any agency Inspector General. The Executive does not need the prior authorization of the Company (including, but not limited to, its law department) to make any such reports or disclosures, and the Executive does not need to notify the Company that the Executive has made such reports or disclosures. Making such reports or disclosures does not in any way have adverse consequences to the Executive under this Agreement.

15. Expenses and Interest. If, after a Change in Control of the Company, (a) a dispute arises with respect to the enforcement of the Executive's rights under this Agreement or (b) any legal or arbitration proceeding shall be brought to enforce or interpret any provision contained herein or to recover damages for breach hereof, in either case so long as the Executive is not acting in bad faith, then the Company shall reimburse the Executive for any reasonable attorneys' fees and necessary costs and disbursements incurred as a result of the dispute, legal or arbitration proceeding ("Expenses"), and prejudgment interest on any money judgment or arbitration award obtained by the Executive calculated at the rate of interest announced by U.S. Bank National Association, Minneapolis, Minnesota, from time to time at its prime or base lending rate from the date that payments to him or her should have been made under this Agreement. Within ten days after the Executive's written request therefore (but in no event later than the end of the calendar year following the calendar year in which such Expense is incurred), the Company shall reimburse the Executive, or such other person or entity as the Executive may designate in writing to the Company, the Executive's reasonable Expenses.

16. Payment Obligations Absolute. The Company's obligation during and after the Employment Period to pay the Executive the amounts and to make the benefit and other arrangements provided herein shall be absolute and unconditional and shall not be affected by any circumstances, including, without limitation, any setoff, counterclaim, recoupment, defense or other right which the Company may have against him or her or anyone else. Except as provided in Section 15, all amounts payable by the Company hereunder shall be paid without notice or demand. Each and every payment made hereunder by the Company shall be final, and the Company will not seek to recover all or any part of such payment from the Executive, or from whomsoever may be entitled thereto, for any reason whatsoever.

17. Successors.

(a) If the Company sells, assigns or transfers all or substantially all of its business and assets to any Person or if the Company merges into or consolidates or otherwise combines (where the Company does not survive such combination) with any Person (any such event, a "Sale of Business"), then the Company shall assign all of its right, title and interest in this Agreement as of the date of such event to such Person, and the Company shall cause such Person, by written agreement in form and substance reasonably satisfactory to the Executive, to expressly assume and agree to perform from and after the date of such assignment all of the terms, conditions and provisions imposed by this Agreement upon the Company. Failure of the Company to obtain such written agreement prior to the effective date of such Sale of Business shall be a breach of this Agreement constituting "Good Reason" hereunder, except that for purposes of implementing the foregoing the date upon which such Sale of Business becomes effective shall be deemed the Termination Date. In case of such assignment by the Company and of assumption and agreement by such Person, as used in this Agreement, "Company" shall thereafter mean such Person which executes and delivers the agreement provided for in this Section 17 or which otherwise becomes bound by all the terms and provisions of this Agreement by operation of law, and this Agreement shall inure to the benefit of, and be enforceable by, such Person. The Executive shall, in his or her discretion, be entitled to proceed against any or all of such Persons, any Person which theretofore was such a successor to the Company and the Company (as so defined) in any action to enforce any rights of the Executive hereunder. Except as provided in this Section 17(a), this Agreement shall not be assignable by the Company. This Agreement shall not be terminated by the voluntary or involuntary dissolution of the Company.

(b) This Agreement and all rights of the Executive shall inure to the benefit of and be enforceable by the Executive's personal or legal representatives, executors, administrators, heirs and beneficiaries. All amounts payable to the Executive under Sections 3, 7, 8, 9, 10, 11, 12 and 15 if the Executive had lived shall be paid, in the event of the Executive's death, to the Executive's estate, heirs and representatives; *provided, however*, that the foregoing shall not be construed to modify any terms of any benefit plan of the Employer, as such terms are in effect on the date of the Change in Control of the Company, that expressly govern benefits under such plan in the event of the Executive's death.

18. Severability. The provisions of this Agreement shall be regarded as divisible, and if any of said provisions or any part hereof are declared invalid or unenforceable by a court of competent jurisdiction, the validity and enforceability of the remainder of such provisions or parts hereof and the applicability thereof shall not be affected thereby.

19. Contents of Agreement; Waiver of Rights; Amendment. This Agreement sets forth the entire understanding between the parties hereto with respect to the subject matter hereof and shall supersede in all respects, and the Executive hereby waives all rights under, any prior or other agreement or understanding between the parties with respect to such subject matter, including, but not limited to any Key Executive Employment and Severance Agreement between the Company and the Executive entered into prior to the date hereof. This Agreement may not be amended or modified at any time except by written instrument executed by the Company and the Executive.

20. Withholding. The Company shall be entitled to withhold from amounts to be paid to the Executive hereunder any federal, state or local withholding or other taxes or charges which it is from time to time required to withhold; *provided, that* the amount so withheld shall not exceed the minimum amount required to be withheld by law. In addition, if prior to the date of payment of the Termination Payment hereunder, the Federal Insurance Contributions Act (FICA) tax imposed under Sections 3101, 3121(a) and 3121(v)(2), where applicable, becomes due with respect to any payment or benefit to be provided hereunder, the Employer may provide for an immediate payment of the amount needed to pay the Executive's portion of such tax (plus an amount equal to the taxes that will be due on such amount) and the Executive's Termination Payment shall be reduced accordingly. The Employer shall be entitled to rely on an opinion of the National Tax Counsel if any question as to the amount or requirement of any such withholding shall arise.

21. Certain Rules of Construction. No party shall be considered as being responsible for the drafting of this Agreement for the purpose of applying any rule construing ambiguities against the drafter or otherwise. No draft of this Agreement shall be taken into account in construing this Agreement. Any provision of this Agreement which requires an agreement in writing shall be deemed to require that the writing in question be signed by the Executive and an authorized representative of the Company.

22. Governing Law; Resolution of Disputes. This Agreement and the rights and obligations hereunder shall be governed by and construed in accordance with the laws of the State of Minnesota, without reference to the conflict of law principles thereof. Any dispute arising out of this Agreement shall, at the Executive's election, be determined by arbitration under the rules of the American Arbitration Association then in effect (in which case both parties shall be bound by the arbitration award) or by litigation. Whether the dispute is to be settled by arbitration or litigation, the venue for the arbitration or litigation shall be Minneapolis, Minnesota or, at the Executive's election, if the Executive is not then residing or working in the Minneapolis, Minnesota metropolitan area, in

the judicial district encompassing the city in which the Executive resides; *provided, that*, if the Executive is not then residing in the United States, the election of the Executive with respect to such venue shall be either Minneapolis, Minnesota or in the judicial district encompassing that city in the United States among the thirty cities having the largest population (as determined by the most recent United States Census data available at the Termination Date) which is closest to the Executive's residence. The parties consent to personal jurisdiction in each trial court in the selected venue having subject matter jurisdiction notwithstanding their residence or situs, and each party irrevocably consents to service of process in the manner provided hereunder for the giving of notices.

23. Additional Section 409A Provisions. (%2) If, after the date of a Change in Control of the Company, any payment amount or the value of any benefit under this Agreement is required to be included in the Executive's income prior to the date such amount is actually paid or the benefit provided as a result of the failure of this Agreement (or any other arrangement that is required to be aggregated with this Agreement under Code Section 409A) to comply with Code Section 409A, then the Executive shall receive a distribution, in a lump sum, within 90 days after the date it is finally determined that the Agreement (or such other arrangement that is required to be aggregated with this Agreement) fails to meet the requirements of Section 409A of the Code; such distribution shall equal the amount required to be included in the Executive's income as a result of such failure and shall reduce the amount of payments or benefits otherwise due hereunder.

(b) The Company and the Executive intend the terms of this Agreement to be in compliance with Section 409A of the Code. The Company does not guarantee the tax treatment or tax consequences associated with any payment or benefit, including but not limited to consequences related to Section 409A of the Code. To the maximum extent permissible, any ambiguous terms of this Agreement shall be interpreted in a manner that avoids a violation of Section 409A of the Code.

(c) If the Executive believes he or she is entitled to a payment or benefit pursuant to the terms of this Agreement that was not timely paid or provided, and such payment or benefit is considered deferred compensation subject to the requirements of Section 409A of the Code, the Executive acknowledges that to avoid an additional tax on such payment or benefit pursuant to the provisions of Section 409A of the Code, the Executive must make a reasonable, good faith effort to collect such payment or benefit no later than 90 days after the latest date upon which the payment could have been timely made or benefit timely provided without violating Section 409A of the Code, and if not paid or provided, must take further enforcement measures within 180 days after such latest date.

24. Notice. Notices given pursuant to this Agreement shall be in writing and, except as otherwise provided by Section 13(d), shall be deemed given when actually received by the Executive or actually received by the Company's Secretary or any officer of the Company other than the Executive. If mailed, such notices shall be mailed by United States registered or certified mail, return receipt requested, addressee only, postage prepaid, if to the Company, to Pentair plc, c/o Pentair, Inc., Attention: Secretary (or Chief Executive Officer, if the Executive is then Secretary), 5500 Wayzata Blvd., Suite 800, Golden Valley, Minnesota 55416, or if to the Executive, at the address set forth below the Executive's signature to this Agreement, or to such other address as the party to be notified shall have theretofore given to the other party in writing.

25. No Waiver. No waiver by either party at any time of any breach by the other party of, or compliance with, any condition or provision of this Agreement to be performed by the

other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same time or any prior or subsequent time.

26. Headings. The headings herein contained are for reference only and shall not affect the meaning or interpretation of any provision of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

PENTAIR PLC

By:

Its:

Attest:

Its:

EXECUTIVE:

Address:

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 25, 2018

/s/ John L. Stauch

John L. Stauch

President and Chief Executive Officer

Certification

I, Mark C. Borin, 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 25, 2018

/s/ Mark C. Borin

Mark C. Borin

Executive Vice President and Chief Financial 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, 2018 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 25, 2018

/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, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Mark C. Borin, Executive Vice President and Chief Financial 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 25, 2018

/s/ Mark C. Borin

Mark C. Borin

Executive Vice President and Chief Financial Officer