

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended 31 December 2017

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 001-04534

**AIR PRODUCTS AND CHEMICALS, INC.**

(Exact Name of Registrant as Specified in Its Charter)

Delaware

23-1274455

(State or Other Jurisdiction of Incorporation or Organization)

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

7201 Hamilton Boulevard, Allentown, Pennsylvania

18195-1501

(Address of Principal Executive Offices)

(Zip Code)

610-481-4911

(Registrant's Telephone Number, Including Area Code)

Not Applicable

(Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  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 the 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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class

Outstanding at 31 December 2017

Common Stock, \$1 par value

218,939,303

**AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries**  
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**PART I. FINANCIAL INFORMATION**  
**Item 1. Financial Statements**

**AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries**  
**CONSOLIDATED INCOME STATEMENTS**  
**(Unaudited)**

(Millions of dollars, except for share and per share data)	Three Months Ended	
	31 December	
	2017	2016
<b>Sales</b>	\$ 2,216.6	\$ 1,882.5
Cost of sales	1,571.8	1,316.7
Selling and administrative	191.6	164.7
Research and development	14.6	15.0
Business separation costs	—	32.5
Cost reduction and asset actions	—	50.0
Other income (expense), net	22.1	24.7
<b>Operating Income</b>	460.7	328.3
Equity affiliates' income	13.8	38.0
Interest expense	29.8	29.5
Other non-operating income (expense), net	9.8	(.2)
<b>Income From Continuing Operations Before Taxes</b>	454.5	336.6
Income tax provision	291.8	78.4
<b>Income From Continuing Operations</b>	162.7	258.2
Income (Loss) From Discontinued Operations, net of tax	(1.0)	48.2
<b>Net Income</b>	161.7	306.4
<b>Net Income Attributable to Noncontrolling Interests of Continuing Operations</b>	7.1	6.6
<b>Net Income Attributable to Air Products</b>	\$ 154.6	\$ 299.8
<b>Net Income Attributable to Air Products</b>		
Income from continuing operations	\$ 155.6	\$ 251.6
Income (Loss) from discontinued operations	(1.0)	48.2
<b>Net Income Attributable to Air Products</b>	\$ 154.6	\$ 299.8
<b>Basic Earnings Per Common Share Attributable to Air Products</b>		
Income from continuing operations	\$ .71	\$ 1.16
Income from discontinued operations	—	.22
<b>Net Income Attributable to Air Products</b>	\$ .71	\$ 1.38
<b>Diluted Earnings Per Common Share Attributable to Air Products</b>		
Income from continuing operations	\$ .70	\$ 1.15
Income from discontinued operations	—	.22
<b>Net Income Attributable to Air Products</b>	\$ .70	\$ 1.37
<b>Weighted Average Common Shares – Basic</b> (in millions)	218.9	217.7
<b>Weighted Average Common Shares – Diluted</b> (in millions)	220.4	219.7
<b>Dividends Declared Per Common Share – Cash</b>	\$ .95	\$ .86

The accompanying notes are an integral part of these statements.

**AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries**  
**CONSOLIDATED COMPREHENSIVE INCOME STATEMENTS**  
(Unaudited)

(Millions of dollars)	Three Months Ended	
	31 December	
	2017	2016
<b>Net Income</b>	\$ 161.7	\$ 306.4
<b>Other Comprehensive Income (Loss), net of tax:</b>		
Translation adjustments, net of tax of (\$6.6) and \$32.3	136.4	(281.2)
Net loss on derivatives, net of tax of (\$5.3) and (\$10.7)	(9.5)	(9.8)
Reclassification adjustments:		
Currency translation adjustment	3.1	—
Derivatives, net of tax of \$1.7 and \$10.6	.8	25.6
Pension and postretirement benefits, net of tax of \$11.0 and \$12.9	22.9	27.4
<b>Total Other Comprehensive Income (Loss)</b>	<b>153.7</b>	<b>(238.0)</b>
<b>Comprehensive Income</b>	<b>315.4</b>	<b>68.4</b>
<b>Net Income Attributable to Noncontrolling Interests</b>	<b>7.1</b>	<b>6.6</b>
<b>Other Comprehensive Income (Loss) Attributable to Noncontrolling Interests</b>	<b>1.9</b>	<b>(3.1)</b>
<b>Comprehensive Income Attributable to Air Products</b>	<b>\$ 306.4</b>	<b>\$ 64.9</b>

The accompanying notes are an integral part of these statements.

**AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries**  
**CONSOLIDATED BALANCE SHEETS**  
(Unaudited)

(Millions of dollars, except for share data)	31 December 2017	30 September 2017
<b>Assets</b>		
<b>Current Assets</b>		
Cash and cash items	\$ 2,722.6	\$ 3,273.6
Short-term investments	407.1	404.0
Trade receivables, net	1,233.4	1,174.0
Inventories	347.4	335.4
Contracts in progress, less progress billings	85.4	84.8
Prepaid expenses	177.7	191.4
Other receivables and current assets	371.7	403.3
Current assets of discontinued operations	10.2	10.2
<b>Total Current Assets</b>	<b>5,355.5</b>	<b>5,876.7</b>
Investment in net assets of and advances to equity affiliates	1,258.0	1,286.9
Plant and equipment, at cost	20,040.0	19,547.8
Less: accumulated depreciation	11,408.1	11,107.6
Plant and equipment, net	8,631.9	8,440.2
Goodwill, net	790.8	721.5
Intangible assets, net	429.1	368.3
Noncurrent capital lease receivables	1,126.0	1,131.8
Other noncurrent assets	617.5	641.8
<b>Total Noncurrent Assets</b>	<b>12,853.3</b>	<b>12,590.5</b>
<b>Total Assets</b>	<b>\$ 18,208.8</b>	<b>\$ 18,467.2</b>
<b>Liabilities and Equity</b>		
<b>Current Liabilities</b>		
Payables and accrued liabilities	\$ 1,609.5	\$ 1,814.3
Accrued income taxes	110.1	98.6
Short-term borrowings	87.1	144.0
Current portion of long-term debt	11.3	416.4
Current liabilities of discontinued operations	13.6	15.7
<b>Total Current Liabilities</b>	<b>1,831.6</b>	<b>2,489.0</b>
Long-term debt	3,414.9	3,402.4
Other noncurrent liabilities	1,921.9	1,611.9
Deferred income taxes	719.2	778.4
<b>Total Noncurrent Liabilities</b>	<b>6,056.0</b>	<b>5,792.7</b>
<b>Total Liabilities</b>	<b>7,887.6</b>	<b>8,281.7</b>
<b>Commitments and Contingencies - See Note 12</b>		
<b>Air Products Shareholders' Equity</b>		
Common stock (par value \$1 per share; issued 2018 and 2017 - 249,455,584 shares)	249.4	249.4
Capital in excess of par value	998.1	1,001.1
Retained earnings	12,792.3	12,846.6
Accumulated other comprehensive loss	(1,695.6)	(1,847.4)
Treasury stock, at cost (2018 - 30,516,281 shares; 2017 - 31,109,510 shares)	(2,128.9)	(2,163.5)
<b>Total Air Products Shareholders' Equity</b>	<b>10,215.3</b>	<b>10,086.2</b>
<b>Noncontrolling Interests</b>	<b>105.9</b>	<b>99.3</b>
<b>Total Equity</b>	<b>10,321.2</b>	<b>10,185.5</b>
<b>Total Liabilities and Equity</b>	<b>\$ 18,208.8</b>	<b>\$ 18,467.2</b>

The accompanying notes are an integral part of these statements.

**AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(Unaudited)

(Millions of dollars)	Three Months Ended	
	2017	2016
<b>Operating Activities</b>		
Net income	\$ 161.7	\$ 306.4
Less: Net income attributable to noncontrolling interests of continuing operations	7.1	6.6
Net income attributable to Air Products	154.6	299.8
(Income) Loss from discontinued operations	1.0	(48.2)
Income from continuing operations attributable to Air Products	155.6	251.6
Adjustments to reconcile income to cash provided by operating activities:		
Depreciation and amortization	227.9	206.1
Deferred income taxes	(76.7)	(23.6)
Tax reform repatriation	310.3	—
Undistributed earnings of unconsolidated affiliates	34.0	(6.9)
Gain on sale of assets and investments	(.6)	(5.0)
Share-based compensation	11.8	9.0
Noncurrent capital lease receivables	23.3	22.3
Write-down of long-lived assets associated with restructuring	—	45.7
Other adjustments	5.3	10.7
Working capital changes that provided (used) cash, excluding effects of acquisitions and divestitures:		
Trade receivables	(34.2)	42.3
Inventories	(8.4)	9.9
Contracts in progress, less progress billings	—	(22.6)
Other receivables	23.8	(7.2)
Payables and accrued liabilities	(113.5)	10.4
Other working capital	5.5	31.6
<b>Cash Provided by Operating Activities</b>	<b>564.1</b>	<b>574.3</b>
<b>Investing Activities</b>		
Additions to plant and equipment	(256.6)	(239.2)
Acquisitions, less cash acquired	(237.1)	—
Investment in and advances to unconsolidated affiliates	—	(8.8)
Proceeds from sale of assets and investments	10.6	11.4
Purchases of investments	(212.2)	—
Proceeds from investments	208.9	—
Other investing activities	1.5	(1.5)
<b>Cash Used for Investing Activities</b>	<b>(484.9)</b>	<b>(238.1)</b>
<b>Financing Activities</b>		
Long-term debt proceeds	—	1.2
Payments on long-term debt	(408.6)	(14.4)
Net decrease in commercial paper and short-term borrowings	(40.7)	(772.2)
Dividends paid to shareholders	(207.5)	(186.9)
Proceeds from stock option exercises	34.4	10.7
Other financing activities	(18.7)	(12.9)
<b>Cash Used for Financing Activities</b>	<b>(641.1)</b>	<b>(974.5)</b>
<b>Discontinued Operations</b>		
Cash used for operating activities	(3.1)	(59.6)
Cash used for investing activities	—	(19.4)
Cash provided by financing activities	—	69.5
<b>Cash Used for Discontinued Operations</b>	<b>(3.1)</b>	<b>(9.5)</b>
<b>Effect of Exchange Rate Changes on Cash</b>	<b>14.0</b>	<b>(16.2)</b>
Decrease in cash and cash items	(551.0)	(664.0)
Cash and Cash items – Beginning of Year	3,273.6	1,330.8
<b>Cash and Cash Items – End of Period</b>	<b>\$ 2,722.6</b>	<b>\$ 666.8</b>
<b>Less: Cash and Cash Items – Discontinued Operations</b>	<b>—</b>	<b>11.3</b>
<b>Cash and Cash Items – Continuing Operations</b>	<b>\$ 2,722.6</b>	<b>\$ 655.5</b>

The accompanying notes are an integral part of these statements.

# AIR PRODUCTS AND CHEMICALS, INC. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Millions of dollars unless otherwise indicated, except for share and per share data)

### 1. BASIS OF PRESENTATION AND MAJOR ACCOUNTING POLICIES

Refer to our 2017 Form 10-K for a description of major accounting policies. There have been no significant changes to these accounting policies during the first three months of fiscal year 2018 other than those detailed in Note 2, New Accounting Guidance, under *Accounting Guidance Implemented in 2018*. Certain prior year information has been reclassified to conform to the fiscal year 2018 presentation. The notes to the interim consolidated financial statements, unless otherwise indicated, are on a continuing operations basis.

The consolidated financial statements of Air Products and Chemicals, Inc. and its subsidiaries (“we,” “our,” “us,” the “Company,” “Air Products,” or “registrant”) included herein have been prepared by us, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles (GAAP) have been condensed or omitted pursuant to such rules and regulations. In our opinion, the accompanying statements reflect adjustments necessary to present fairly the financial position, results of operations, and cash flows for those periods indicated and contain adequate disclosure to make the information presented not misleading. Adjustments included herein are of a normal, recurring nature unless otherwise disclosed in the notes. The interim results for the periods indicated herein, however, do not reflect certain adjustments, such as the valuation of inventories on the last-in, first-out (LIFO) cost basis, which are only finally determined on an annual basis. In order to fully understand the basis of presentation, the consolidated financial statements and related notes included herein should be read in conjunction with the financial statements and notes thereto included in our 2017 Form 10-K. Results of operations for interim periods are not necessarily indicative of the results of operations for a full year.

### 2. NEW ACCOUNTING GUIDANCE

#### *Accounting Guidance Implemented in 2018*

##### **Presentation of Net Periodic Pension and Postretirement Benefit Cost**

In March 2017, the Financial Accounting Standards Board (FASB) issued guidance for improving the presentation of net periodic pension cost and net periodic postretirement benefit cost. The amendments require that the service cost component of the net periodic benefit cost be presented in the same operating income line items as other compensation costs arising from services rendered by employees during the period. The non-service costs (e.g., interest cost, expected return on plan assets, amortization of actuarial gains/losses, settlements) should be presented in the income statement outside of operating income. The amendments also allow only the service cost component to be eligible for capitalization when applicable. We early adopted this guidance during the first quarter of fiscal year 2018. The amendments have been applied retrospectively for the income statement presentation requirements and prospectively for the limit on costs eligible for capitalization. The Company applied the practical expedient to use the amounts disclosed in its retirement benefits note for the prior comparative periods as the estimation basis for applying the retrospective presentation requirements.

Prior to adoption of the guidance, we classified all net periodic benefit costs within operating costs, primarily within "Cost of sales" and "Selling and administrative" on the consolidated income statements. The line item classification changes required by the new guidance did not impact the Company's pre-tax earnings or net income; however, "Operating income" and "Other non-operating income (expense), net" changed by immaterial offsetting amounts.

##### **Derivative Contract Novations**

In March 2016, the FASB issued guidance to clarify that a change in the counterparty to a derivative instrument that has been designated as a hedging instrument does not, in and of itself, require re-designation of that hedging relationship provided that all other hedge accounting criteria continue to be met. We adopted this guidance in the first quarter of fiscal year 2018. This guidance did not have an impact on our consolidated financial statements upon adoption.

## ***New Accounting Guidance to be Implemented***

### **Revenue Recognition**

In May 2014, the FASB issued guidance based on the principle that revenue is recognized in an amount expected to be collected and to which the entity expects to be entitled in exchange for the transfer of goods or services. We will adopt this guidance in fiscal year 2019 under the modified retrospective approach, which will result in a cumulative-effect adjustment as of 1 October 2018. We are in the process of evaluating and implementing necessary changes to accounting policies, processes, controls and systems to enable compliance with this new standard. We continue to evaluate the impact the adoption of this standard will have on our consolidated financial statements and related disclosures.

### **Leases**

In February 2016, the FASB issued guidance which requires lessees to recognize a right-of-use asset and lease liability on the balance sheet for all leases, including operating leases, with a term in excess of 12 months. The guidance also expands the quantitative and qualitative disclosure requirements. The guidance is effective in fiscal year 2020, with early adoption permitted, and must be applied using a modified retrospective approach. We are currently evaluating the impact of adopting this new guidance on the consolidated financial statements, including the assessment of our current lease population under the revised definition of what qualifies as a leased asset.

The Company is the lessee under various agreements for real estate, distribution equipment, aircraft, and vehicles that are currently accounted for as operating leases. The new guidance will require the Company to record operating leases on the balance sheet with a right-of-use asset and corresponding liability for future payment obligations.

### **Credit Losses on Financial Instruments**

In June 2016, the FASB issued guidance on the measurement of credit losses, which requires measurement and recognition of expected credit losses for financial assets, including trade receivables and capital lease receivables, held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. The method to determine a loss is different from the existing guidance, which requires a credit loss to be recognized when it is probable. The guidance is effective beginning in fiscal year 2021, with early adoption permitted beginning in fiscal year 2020. We are currently evaluating the impact this guidance will have on our consolidated financial statements.

### **Cash Flow Statement Classification**

In August 2016, the FASB issued guidance to reduce diversity in practice on how certain cash receipts and cash payments are classified in the statement of cash flows. The guidance is effective beginning fiscal year 2019, with early adoption permitted, and should be applied retrospectively. We are currently evaluating the impact of adopting this new guidance on the consolidated financial statements.

### **Intra-Entity Asset Transfers**

In October 2016, the FASB issued guidance on the accounting for the income tax effects of intra-entity transfers of assets other than inventory. Current GAAP prohibits the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party. Under the new guidance, the income tax consequences of an intra-entity asset transfer are recognized when the transfer occurs. The guidance is effective beginning in fiscal year 2019, with early adoption permitted as of the beginning of an annual reporting period. The guidance must be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the date of adoption. We are currently evaluating the impact this guidance will have on our consolidated financial statements and plan to adopt the guidance in fiscal year 2019.

### **Derecognition of Nonfinancial Assets**

In February 2017, the FASB issued an update to clarify the scope of guidance on gains and losses from the derecognition of nonfinancial assets and to add guidance for partial sales of nonfinancial assets. The update must be adopted at the same time as the new guidance on revenue recognition discussed above, which we will adopt in fiscal year 2019. The guidance may be applied retrospectively or with a cumulative-effect adjustment to retained earnings at the date of adoption. We are currently evaluating the impact this update will have on our consolidated financial statements.



## Hedging Activities

In August 2017, the FASB issued guidance on hedging activities to expand the related presentation and disclosure requirements, change how companies assess effectiveness, and eliminate the separate measurement and reporting of hedge ineffectiveness. The guidance also enables more financial and nonfinancial hedging strategies to become eligible for hedge accounting. The guidance is effective in fiscal year 2020, with early adoption permitted. For cash flow and net investment hedges existing at the date of adoption, an entity should apply a cumulative-effect adjustment to eliminate the separate measurement of ineffectiveness within equity as of the beginning of the fiscal year the guidance is adopted. The amended presentation and disclosure guidance is applied prospectively. We are currently evaluating the impact this guidance will have on our consolidated financial statements.

## 3. DISCONTINUED OPERATIONS

The results of our former Performance Materials Division (PMD) and Energy-from-Waste (EfW) segment are reflected in our consolidated financial statements as discontinued operations for all periods presented.

During the second quarter of fiscal year 2017, we completed the sale of PMD to Evonik Industries AG (Evonik) for \$3.8 billion in cash. A gain of \$2,870 (\$1,828 after-tax, or \$8.32 per share) was recognized on the sale, which closed on 3 January 2017.

In fiscal year 2016, we discontinued efforts to start up and operate two EfW projects located in Tees Valley, United Kingdom. During the second quarter of fiscal year 2016, we recorded an initial loss on disposal of \$945.7 (\$846.6 after-tax) to write down plant assets to their estimated net realizable value and record a liability for plant disposition and other costs. Income tax benefits related only to one of the projects as the other did not qualify for a local tax deduction. During the first quarter of fiscal year 2017, we recorded an additional loss on disposal of \$59.3 (\$47.1 after-tax), primarily for land lease obligations and to update our estimate of the net realizable value of the plant assets as of 31 December 2016. There have been no significant changes to our estimates as of 31 December 2017.

The losses on disposal were recorded as a component of discontinued operations while the liability associated with land lease obligations was recorded in continuing operations. The remaining carrying amount of the accrual in discontinued operations at 31 December 2017 was not material.

### Summarized Financial Information of Discontinued Operations

For the three months ended 31 December 2017, the loss from discontinued operations, net of tax, on the consolidated income statements of \$1.0 related to ongoing EfW project exit activities and administrative costs.

The following table details the businesses and major line items that comprise income from discontinued operations, net of tax, on the consolidated income statements for the three months ended 31 December 2016:

	Three Months Ended 31 December 2016		
	Performance Materials	Energy- from-Waste <sup>(A)</sup>	Total Discontinued Operations
<b>Sales</b>	\$ 254.8	\$ —	\$ 254.8
Cost of sales	179.0	6.6	185.6
Selling and administrative	20.4	.2	20.6
Research and development	5.1	—	5.1
Other income (expense), net	(.4)	.3	(.1)
<b>Operating Income (Loss)</b>	49.9	(6.5)	43.4
Equity affiliates' income	.3	—	.3
<b>Income (Loss) Before Taxes</b>	50.2	(6.5)	43.7
Income tax benefit <sup>(B)</sup>	(50.5)	(1.1)	(51.6)
<b>Income (Loss) From Operations of Discontinued Operations, net of tax</b>	100.7	(5.4)	95.3
<b>Loss on Disposal, net of tax</b>	—	(47.1)	(47.1)
<b>Income (Loss) From Discontinued Operations, net of tax</b>	100.7	(52.5)	48.2

<sup>(A)</sup> The loss from operations of discontinued operations for EfW primarily relates to land lease obligations, administrative costs, and costs incurred for ongoing project exit activities.

<sup>(B)</sup> As a result of the expected gain on sale of PMD, we released valuation allowances related to capital loss and net operating loss carryforwards primarily during the first quarter of 2017 that favorably impacted our income tax provision within discontinued operations by approximately \$69.

Current assets of discontinued operations on the consolidated balance sheets of \$10.2 as of 31 December 2017 and 30 September 2017 relate to the remaining EfW plant and equipment.

Current liabilities of discontinued operations on the consolidated balance sheets of \$13.6 and \$15.7 as of 31 December 2017 and 30 September 2017, respectively, primarily relate to reserves associated with the disposition of PMD.

## 4. MATERIALS TECHNOLOGIES SEPARATION

In fiscal year 2017, we completed the separation of the divisions comprising the former Materials Technologies segment. As further discussed below, we completed the separation of the Electronic Materials Division (EMD) through the spin-off of Versum Materials, Inc. (Versum). For information on the disposition of PMD, refer to Note 3, Discontinued Operations.

### Spin-off of EMD

On 1 October 2016 (the distribution date), Air Products completed the spin-off of Versum into a separate and independent public company. The spin-off was completed by way of a distribution to Air Products' stockholders of all of the then issued and outstanding shares of common stock of Versum on the basis of one share of Versum common stock for every two shares of Air Products' common stock held as of the close of business on 21 September 2016 (the record date for the distribution). Fractional shares of Versum common stock were not distributed to Air Products' common stockholders. Air Products' stockholders received cash in lieu of fractional shares. The spin-off of Versum was treated as a noncash transaction in the consolidated statements of cash flows in fiscal year 2017. There has been no activity in discontinued operations on the consolidated income statements and no assets or liabilities presented in discontinued operations on the consolidated balance sheets related to EMD for the periods presented.

### Business Separation Costs

In connection with the dispositions of EMD and PMD, we incurred net separation costs of \$30.2 during the first quarter of fiscal year 2017. The net costs include legal and advisory fees of \$32.5, which are reflected on the consolidated income statements as "Business separation costs," and a pension settlement benefit of \$2.3 that is now presented within "Other non-operating income (expense), net" as a result of the adoption of pension guidance at the beginning of fiscal year 2018. Refer to Note 2, New Accounting Guidance, for additional information.

Our income tax provision for the three months ended 31 December 2016 includes additional tax expense of \$2.7 related to the separation. No business separation costs were incurred during fiscal year 2018.

## 5. COST REDUCTION AND ASSET ACTIONS

In the first quarter of fiscal year 2017, we recognized a net expense of \$50.0, which included \$45.7 from the write-down of an air separation unit in the Industrial Gases – EMEA segment that was constructed mainly to provide oxygen to one of the Energy-from-Waste plants.

In fiscal year 2017, we recognized a net expense of \$151.4. The net expense included a charge of \$154.8 for actions taken during fiscal year 2017, partially offset by the favorable settlement of the remaining \$3.4 accrued balance associated with business restructuring actions taken in 2015. Asset actions of \$88.5 included charges resulting from the write-down of an air separation unit in the Industrial Gases – EMEA segment discussed above, the planned sale of a non-industrial gas hardgoods business in the Industrial Gases – Americas segment, and the closure of a facility in the Corporate and other segment that manufactured liquefied natural gas (LNG) heat exchangers. During fiscal year 2017, severance and other benefits totaled \$66.3 and related to the elimination or planned elimination of approximately 625 positions, primarily in the Corporate and other segment and in the Industrial Gases – EMEA segment. The actions in the Corporate and other segment were driven by the reorganization of our engineering, manufacturing, and technology functions. The 2017 charge related to the segments as follows: \$39.3 in Industrial Gases – Americas, \$77.9 in Industrial Gases – EMEA, \$0.9 in Industrial Gases – Asia, \$2.5 in Industrial Gases – Global, and \$34.2 in Corporate and other.

In the first quarter of fiscal year 2018, cash expenditures for severance and other benefits totaled \$13.5.

The charges we record for cost reduction and asset actions have been excluded from segment operating income.

The following table summarizes the carrying amount of the accrual for cost reduction and asset actions at 31 December 2017:

	Severance and Other Benefits	Asset Actions/Other	Total
30 September 2016	\$ 12.3	\$ —	\$ 12.3
2017 Charge	66.3	88.5	154.8
Noncash expenses	—	(84.2)	(84.2)
Amount reflected in pension liability	(2.0)	—	(2.0)
Amount reflected in other noncurrent liabilities	—	(2.2)	(2.2)
Cash expenditures	(35.7)	(1.2)	(36.9)
Currency translation adjustment	(.3)	—	(.3)
30 September 2017	\$ 40.6	\$ .9	\$ 41.5
Cash expenditures	(13.5)	(.1)	(13.6)
Currency translation adjustment	.2	—	.2
31 December 2017	\$ 27.3	\$ .8	\$ 28.1

## 6. BUSINESS COMBINATIONS

During the first quarter of fiscal year 2018, we completed three acquisitions with an aggregate purchase price, net of cash acquired, of \$237.1. The largest acquisition consists primarily of three air separation units serving onsite and merchant customers in China. This acquisition is expected to strengthen our position in the region. The results of this business are consolidated within our Industrial Gases – Asia segment.

The first quarter 2018 acquisitions resulted in the recognition of \$148.5 of plant and equipment, \$53.7 of goodwill, \$3.0 of which is deductible for tax purposes, and \$53.4 of intangible assets, primarily customer relationships, having a weighted-average useful life of twelve years. The goodwill recognized on the transactions is attributable to expected growth and cost synergies and was primarily recorded in the Industrial Gases – Asia segment.

## 7. INVENTORIES

The components of inventories are as follows:

	31 December 2017	30 September 2017
Finished goods	\$ 135.1	\$ 120.0
Work in process	17.8	15.7
Raw materials, supplies and other	218.6	223.0
Total FIFO cost	\$ 371.5	\$ 358.7
Less: Excess of FIFO cost over LIFO cost	(24.1)	(23.3)
Inventories	\$ 347.4	\$ 335.4

First-in, first-out (FIFO) cost approximates replacement cost.

## 8. GOODWILL

Changes to the carrying amount of consolidated goodwill by segment for the three months ended 31 December 2017 are as follows:

	Industrial Gases– Americas	Industrial Gases– EMEA	Industrial Gases– Asia	Industrial Gases– Global	Total
Goodwill, net at 30 September 2017	\$ 163.7	\$ 402.4	\$ 135.2	\$ 20.2	\$ 721.5
Acquisitions	—	17.3	36.4	—	53.7
Currency translation	2.3	10.9	2.5	(.1)	15.6
Goodwill, net at 31 December 2017	\$ 166.0	\$ 430.6	\$ 174.1	\$ 20.1	\$ 790.8

	31 December 2017	30 September 2017
Goodwill, gross	\$ 1,224.4	\$ 1,138.7
Accumulated impairment losses	(433.6)	(417.2)
Goodwill, net	\$ 790.8	\$ 721.5

We review goodwill for impairment annually in the fourth quarter of the fiscal year and whenever events or changes in circumstances indicate that the carrying value of goodwill might not be recoverable.

The accumulated impairment losses of \$433.6 as of 31 December 2017 are attributable to LASA within the Industrial Gases– Americas segment and include impairment charges recorded in previous years as well as the impacts of currency translation on the losses.

## 9. FINANCIAL INSTRUMENTS

### Currency Price Risk Management

Our earnings, cash flows, and financial position are exposed to foreign currency risk from foreign currency-denominated transactions and net investments in foreign operations. It is our policy to seek to minimize our cash flow volatility from changes in currency exchange rates. This is accomplished by identifying and evaluating the risk that our cash flows will change in value due to changes in exchange rates and by executing the appropriate strategies necessary to manage such exposures. Our objective is to maintain economically balanced currency risk management strategies that provide adequate downside protection.

### Forward Exchange Contracts

We enter into forward exchange contracts to reduce the cash flow exposure to foreign currency fluctuations associated with highly anticipated cash flows and certain firm commitments, such as the purchase of plant and equipment. We also enter into forward exchange contracts to hedge the cash flow exposure on intercompany loans. This portfolio of forward exchange contracts consists primarily of Euros and U.S. Dollars. The maximum remaining term of any forward exchange contract currently outstanding and designated as a cash flow hedge at 31 December 2017 is 1.5 years.

Forward exchange contracts are also used to hedge the value of investments in certain foreign subsidiaries and affiliates by creating a liability in a currency in which we have a net equity position. The primary currency pair in this portfolio of forward exchange contracts is Euros and U.S. Dollars.

In addition to the forward exchange contracts that are designated as hedges, we utilize forward exchange contracts that are not designated as hedges. The primary objective of these forward exchange contracts is to protect the value of foreign currency-denominated monetary assets and liabilities, primarily working capital, from the effects of volatility in foreign exchange rates that might occur prior to their receipt or settlement. This portfolio of forward exchange contracts comprises many different foreign currency pairs, with a profile that changes from time to time depending on business activity and sourcing decisions.

The table below summarizes our outstanding currency price risk management instruments:

	31 December 2017		30 September 2017	
	US\$ Notional	Years Average Maturity	US\$ Notional	Years Average Maturity
<b>Forward Exchange Contracts:</b>				
Cash flow hedges	\$ 3,209.0	.5	\$ 3,150.2	.4
Net investment hedges	674.0	2.8	675.5	3.0
Not designated	390.2	.2	273.8	.1
<b>Total Forward Exchange Contracts</b>	<b>\$ 4,273.2</b>	<b>.8</b>	<b>\$ 4,099.5</b>	<b>.8</b>

In addition to the above, we use foreign currency-denominated debt to hedge the foreign currency exposures of our net investment in certain foreign subsidiaries. The designated foreign currency-denominated debt and related accrued interest included €909.0 million (\$1,091.2) at 31 December 2017 and €912.2 million (\$1,077.7) at 30 September 2017. The designated foreign currency-denominated debt is located on the balance sheet in the long-term debt line item.

#### Debt Portfolio Management

It is our policy to identify on a continuing basis the need for debt capital and evaluate the financial risks inherent in funding the Company with debt capital. Reflecting the result of this ongoing review, the debt portfolio and hedging program are managed with the objectives and intent to (1) reduce funding risk with respect to borrowings made by us to preserve our access to debt capital and provide debt capital as required for funding and liquidity purposes, and (2) manage the aggregate interest rate risk and the debt portfolio in accordance with certain debt management parameters.

#### Interest Rate Management Contracts

We enter into interest rate swaps to change the fixed/variable interest rate mix of our debt portfolio in order to maintain the percentage of fixed- and variable-rate debt within the parameters set by management. In accordance with these parameters, the agreements are used to manage interest rate risks and costs inherent in our debt portfolio. Our interest rate management portfolio generally consists of fixed-to-floating interest rate swaps (which are designated as fair value hedges), pre-issuance interest rate swaps and treasury locks (which hedge the interest rate risk associated with anticipated fixed-rate debt issuances and are designated as cash flow hedges), and floating-to-fixed interest rate swaps (which are designated as cash flow hedges). At 31 December 2017, the outstanding interest rate swaps were denominated in U.S. Dollars. The notional amount of the interest rate swap agreements is equal to or less than the designated debt being hedged. When interest rate swaps are used to hedge variable-rate debt, the indices of the swaps and the debt to which they are designated are the same. It is our policy not to enter into any interest rate management contracts which lever a move in interest rates on a greater than one-to-one basis.

#### Cross Currency Interest Rate Swap Contracts

We enter into cross currency interest rate swap contracts when our risk management function deems necessary. These contracts may entail both the exchange of fixed- and floating-rate interest payments periodically over the life of the agreement and the exchange of one currency for another currency at inception and at a specified future date. The contracts are used to hedge either certain net investments in foreign operations or non-functional currency cash flows related to intercompany loans. The current cross currency interest rate swap portfolio consists of fixed-to-fixed swaps primarily between U.S. Dollars and offshore Chinese Renminbi, U.S. Dollars and Chilean Pesos, and U.S. Dollars and British Pound Sterling.

The following table summarizes our outstanding interest rate management contracts and cross currency interest rate swaps:

	31 December 2017				30 September 2017			
	US\$ Notional	Average Pay %	Average Receive %	Years Average Maturity	US\$ Notional	Average Pay %	Average Receive %	Years Average Maturity
Interest rate swaps (fair value hedge)	\$ 400.0	LIBOR	2.53%	1.6	\$ 600.0	LIBOR	2.28%	1.3
Cross currency interest rate swaps (net investment hedge)	\$ 670.1	3.73%	2.82%	2.6	\$ 539.7	3.27%	2.59%	1.9
Cross currency interest rate swaps (cash flow hedge)	\$ 1,027.8	5.05%	2.82%	2.3	\$ 1,095.7	4.96%	2.78%	2.4
Cross currency interest rate swaps (not designated)	\$ 58.1	3.34%	2.07%	1.3	\$ 41.6	3.28%	2.32%	1.7

The table below summarizes the fair value and balance sheet location of our outstanding derivatives:

	Balance Sheet Location	31 December 2017	30 September 2017	Balance Sheet Location	31 December 2017	30 September 2017
<b>Derivatives Designated as Hedging Instruments:</b>						
Forward exchange contracts	Other receivables	\$ 58.6	\$ 81.7	Accrued liabilities	\$ 44.3	\$ 82.0
Interest rate management contracts	Other receivables	7.0	11.1	Accrued liabilities	14.8	10.7
Forward exchange contracts	Other noncurrent assets	23.2	27.1	Other noncurrent liabilities	21.9	13.8
Interest rate management contracts	Other noncurrent assets	79.5	102.6	Other noncurrent liabilities	38.2	22.2
<b>Total Derivatives Designated as Hedging Instruments</b>		<b>\$ 168.3</b>	<b>\$ 222.5</b>		<b>\$ 119.2</b>	<b>\$ 128.7</b>
<b>Derivatives Not Designated as Hedging Instruments:</b>						
Forward exchange contracts	Other receivables	\$ 2.4	\$ 1.1	Accrued liabilities	\$ 6.0	\$ 2.2
Interest rate management contracts	Other receivables	—	—	Accrued liabilities	2.7	1.0
Interest rate management contracts	Other noncurrent assets	4.6	4.2	Other noncurrent liabilities	—	—
<b>Total Derivatives Not Designated as Hedging Instruments</b>		<b>\$ 7.0</b>	<b>\$ 5.3</b>		<b>\$ 8.7</b>	<b>\$ 3.2</b>
<b>Total Derivatives</b>		<b>\$ 175.3</b>	<b>\$ 227.8</b>		<b>\$ 127.9</b>	<b>\$ 131.9</b>

Refer to Note 10, Fair Value Measurements, which defines fair value, describes the method for measuring fair value, and provides additional disclosures regarding fair value measurements.

The table below summarizes the gain or loss related to our cash flow hedges, fair value hedges, net investment hedges, and derivatives not designated as hedging instruments:

	Three Months Ended 31 December							
	Forward Exchange Contracts		Foreign Currency Debt		Other <sup>(A)</sup>		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
<b>Cash Flow Hedges, net of tax:</b>								
Net gain (loss) recognized in OCI (effective portion)	\$ 7.5	\$ (59.4)	\$ —	\$ —	\$ (17.0)	\$ 49.6	\$ (9.5)	\$ (9.8)
Net (gain) loss reclassified from OCI to sales/cost of sales (effective portion)	1.0	4.6	—	—	—	—	1.0	4.6
Net (gain) loss reclassified from OCI to other income (expense), net (effective portion)	(17.6)	49.5	—	—	16.4	(28.2)	(1.2)	21.3
Net (gain) loss reclassified from OCI to interest expense (effective portion)	.6	(.8)	—	—	.6	.7	1.2	(.1)
Net (gain) loss reclassified from OCI to other income (expense), net (ineffective portion)	(.2)	(.2)	—	—	—	—	(.2)	(.2)
<b>Fair Value Hedges:</b>								
Net gain (loss) recognized in interest expense <sup>(B)</sup>	\$ —	\$ —	\$ —	\$ —	\$ (3.2)	\$ (9.1)	\$ (3.2)	\$ (9.1)
<b>Net Investment Hedges, net of tax:</b>								
Net gain (loss) recognized in OCI	\$ (7.5)	\$ 27.9	\$ (17.3)	\$ 41.8	\$ (11.2)	\$ 13.1	\$ (36.0)	\$ 82.8
<b>Derivatives Not Designated as Hedging Instruments:</b>								
Net gain (loss) recognized in other income (expense), net <sup>(C)</sup>	\$ (1.5)	\$ 2.1	\$ —	\$ —	\$ (1.3)	\$ .8	\$ (2.8)	\$ 2.9

<sup>(A)</sup> Other includes the impact on other comprehensive income (OCI) and earnings primarily related to interest rate and cross currency interest rate swaps.

<sup>(B)</sup> The impact of fair value hedges noted above was largely offset by recognized gains and losses resulting from the impact of changes in related interest rates on outstanding debt.

<sup>(C)</sup> The impact of the non-designated hedges noted above was largely offset by recognized gains and losses resulting from the impact of changes in exchange rates on assets and liabilities denominated in non-functional currencies.

The amount of cash flow hedges' unrealized gains and losses at 31 December 2017 that are expected to be reclassified to earnings in the next twelve months is approximately \$14. The balance primarily consists of losses on forward exchange contracts that hedged foreign currency exposures for a sale of equipment project and intercompany loans.

The cash flows related to all derivative contracts are reported in the operating activities section of the consolidated statements of cash flows.

#### Credit Risk-Related Contingent Features

Certain derivative instruments are executed under agreements that require us to maintain a minimum credit rating with both Standard & Poor's and Moody's. If our credit rating falls below this threshold, the counterparty to the derivative instruments has the right to request full collateralization on the derivatives' net liability position. The net liability position of derivatives with credit risk-related contingent features was \$78.7 as of 31 December 2017 and \$34.6 as of 30 September 2017. Because our current credit rating is above the various pre-established thresholds, no collateral has been posted on these liability positions.

#### Counterparty Credit Risk Management

We execute financial derivative transactions with counterparties that are highly rated financial institutions, all of which are investment grade at this time. Some of our underlying derivative agreements give us the right to require the institution to post collateral if its credit rating falls below the pre-established thresholds with Standard & Poor's or Moody's. The collateral that the counterparties would be required to post was \$100.6 as of 31 December 2017 and \$138.5 as of 30 September 2017. No financial institution is required to post collateral at this time, as all have credit ratings at or above threshold.



## 10. FAIR VALUE MEASUREMENTS

Fair value is defined as an exit price, i.e., 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.

The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels as follows:

Level 1 — Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 — Inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the asset or liability.

Level 3 — Inputs that are unobservable for the asset or liability based on our own assumptions (about the assumptions market participants would use in pricing the asset or liability).

The methods and assumptions used to measure the fair value of financial instruments are as follows:

### Short-term Investments

Short-term investments primarily include time deposits and treasury securities with original maturities greater than three months and less than one year. The estimated fair value of the short-term investments, which approximates carrying value as of 31 December 2017 and 30 September 2017, was determined using level 2 inputs within the fair value hierarchy. Level 2 measurements were based on current interest rates for similar investments with comparable credit risk and time to maturity.

### Derivatives

The fair value of our interest rate management contracts and forward exchange contracts are quantified using the income approach and are based on estimates using standard pricing models. These models take into account the value of future cash flows as of the balance sheet date, discounted to a present value using discount factors that match both the time to maturity and currency of the underlying instruments. The computation of the fair values of these instruments is generally performed by the Company. These standard pricing models utilize inputs which are derived from or corroborated by observable market data such as interest rate yield curves as well as currency spot and forward rates. Therefore, the fair value of our derivatives is classified as a level 2 measurement. On an ongoing basis, we randomly test a subset of our valuations against valuations received from the transaction's counterparty to validate the accuracy of our standard pricing models. Counterparties to these derivative contracts are highly rated financial institutions.

Refer to Note 9, Financial Instruments, for a description of derivative instruments, including details on the balance sheet line classifications.

### Long-term Debt

The fair value of our debt is based on estimates using standard pricing models that take into account the value of future cash flows as of the balance sheet date, discounted to a present value using discount factors that match both the time to maturity and currency of the underlying instruments. These standard valuation models utilize observable market data such as interest rate yield curves and currency spot rates. Therefore, the fair value of our debt is classified as a level 2 measurement. We generally perform the computation of the fair value of these instruments.

The carrying values and fair values of financial instruments were as follows:

	31 December 2017		30 September 2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
<b>Assets</b>				
Derivatives				
Forward exchange contracts	\$ 84.2	\$ 84.2	\$ 109.9	\$ 109.9
Interest rate management contracts	91.1	91.1	117.9	117.9
<b>Liabilities</b>				
Derivatives				
Forward exchange contracts	\$ 72.2	\$ 72.2	\$ 98.0	\$ 98.0
Interest rate management contracts	55.7	55.7	33.9	33.9
Long-term debt, including current portion	3,426.2	3,519.6	3,818.8	3,928.2

The carrying amounts reported in the balance sheet for cash and cash items, short-term investments, trade receivables, payables and accrued liabilities, accrued income taxes, and short-term borrowings approximate fair value due to the short-term nature of these instruments. Accordingly, these items have been excluded from the above table.

The following table summarizes assets and liabilities measured at fair value on a recurring basis in the consolidated balance sheets:

	31 December 2017				30 September 2017			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
<b>Assets at Fair Value</b>								
Derivatives								
Forward exchange contracts	\$ 84.2	\$ —	\$ 84.2	\$ —	\$ 109.9	\$ —	\$ 109.9	\$ —
Interest rate management contracts	91.1	—	91.1	—	117.9	—	117.9	—
Total Assets at Fair Value	\$ 175.3	\$ —	\$ 175.3	\$ —	\$ 227.8	\$ —	\$ 227.8	\$ —
<b>Liabilities at Fair Value</b>								
Derivatives								
Forward exchange contracts	\$ 72.2	\$ —	\$ 72.2	\$ —	\$ 98.0	\$ —	\$ 98.0	\$ —
Interest rate management contracts	55.7	—	55.7	—	33.9	—	33.9	—
Total Liabilities at Fair Value	\$ 127.9	\$ —	\$ 127.9	\$ —	\$ 131.9	\$ —	\$ 131.9	\$ —

## 11. RETIREMENT BENEFITS

The components of net periodic benefit cost for the defined benefit pension plans for the three months ended 31 December 2017 and 2016 were as follows:

Three Months Ended 31 December	Pension Benefits			
	2017		2016	
	U.S.	International	U.S.	International
Service cost <sup>(A)</sup>	\$ 6.4	\$ 6.3	\$ 8.3	\$ 6.7
Interest cost	26.7	9.2	24.9	7.6
Expected return on plan assets	(50.4)	(20.2)	(52.7)	(18.5)
Prior service cost amortization	.4	—	.6	—
Actuarial loss amortization	21.7	10.0	26.1	13.9
Settlements	1.8	—	—	(2.3)
Curtailment	—	—	4.2	(3.1)
Special termination benefits	—	—	1.1	.4
Other	—	.5	—	2.7
Net Periodic Benefit Cost (Total)	\$ 6.6	\$ 5.8	\$ 12.5	\$ 7.4
Less: Discontinued Operations	—	—	(.6)	(.7)
Net Periodic Benefit Cost (Continuing Operations)	\$ 6.6	\$ 5.8	\$ 11.9	\$ 6.7

<sup>(A)</sup>Includes total service costs from discontinued operations of \$1.3 for the three months ended 31 December 2016. There was no discontinued operations activity for the three months ended 31 December 2017.

As noted in Note 2, New Accounting Guidance, we early adopted guidance on the presentation of net periodic pension and postretirement benefit cost during the first quarter of fiscal year 2018. The amendments require that the service cost component of the net periodic benefit cost be presented in the same line items as other compensation costs arising from services rendered by employees during the period. The non-service related costs are presented outside of operating income in "Other non-operating income (expense), net."

Service costs are primarily included in "Cost of sales" and "Selling and administrative" on our consolidated income statements. The costs capitalized in fiscal year 2018 and 2017 were not material.

For the three months ended 31 December 2017 and 2016, our cash contributions to funded pension plans and benefit payments under unfunded pension plans were \$27.4 and \$24.9, respectively. Total contributions for fiscal year 2018 are expected to be approximately \$50 to \$70. During fiscal year 2017, total contributions were \$64.1.

## 12. COMMITMENTS AND CONTINGENCIES

### Litigation

We are involved in various legal proceedings, including commercial, competition, environmental, health, safety, product liability, and insurance matters. In September 2010, the Brazilian Administrative Council for Economic Defense (CADE) issued a decision against our Brazilian subsidiary, Air Products Brasil Ltda., and several other Brazilian industrial gas companies for alleged anticompetitive activities. CADE imposed a civil fine of R\$179.2 million (approximately \$54 at 31 December 2017) on Air Products Brasil Ltda. This fine was based on a recommendation by a unit of the Brazilian Ministry of Justice, whose investigation began in 2003, alleging violation of competition laws with respect to the sale of industrial and medical gases. The fines are based on a percentage of our total revenue in Brazil in 2003.

We have denied the allegations made by the authorities and filed an appeal in October 2010 with the Brazilian courts. On 6 May 2014, our appeal was granted and the fine against Air Products Brasil Ltda. was dismissed. CADE has appealed that ruling and the matter remains pending. We, with advice of our outside legal counsel, have assessed the status of this matter and have concluded that, although an adverse final judgment after exhausting all appeals is possible, such a judgment is not probable. As a result, no provision has been made in the consolidated financial statements. We estimate the maximum possible loss to be the full amount of the fine of R\$179.2 million (approximately \$54 at 31 December 2017) plus interest accrued thereon until final disposition of the proceedings.

Other than this matter, we do not currently believe there are any legal proceedings, individually or in the aggregate, that are reasonably possible to have a material impact on our financial condition, results of operations, or cash flows.

### Environmental

In the normal course of business, we are involved in legal proceedings under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA: the federal Superfund law); Resource Conservation and Recovery Act (RCRA); and similar state and foreign environmental laws relating to the designation of certain sites for investigation or remediation. Presently, there are approximately 32 sites on which a final settlement has not been reached where we, along with others, have been designated a potentially responsible party by the Environmental Protection Agency or are otherwise engaged in investigation or remediation, including cleanup activity at certain of our current and former manufacturing sites. We continually monitor these sites for which we have environmental exposure.

Accruals for environmental loss contingencies are recorded when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. The consolidated balance sheets at 31 December 2017 and 30 September 2017 included an accrual of \$81.4 and \$83.6, respectively, primarily as part of other noncurrent liabilities. The environmental liabilities will be paid over a period of up to 30 years. We estimate the exposure for environmental loss contingencies to range from \$81 to a reasonably possible upper exposure of \$95 as of 31 December 2017.

Actual costs to be incurred at identified sites in future periods may vary from the estimates, given inherent uncertainties in evaluating environmental exposures. Using reasonably possible alternative assumptions of the exposure level could result in an increase to the environmental accrual. Due to the inherent uncertainties related to environmental exposures, a significant increase to the reasonably possible upper exposure level could occur if a new site is designated, the scope of remediation is increased, a different remediation alternative is identified, or a significant increase in our proportionate share occurs. We do not expect that any sum we may have to pay in connection with environmental matters in excess of the amounts recorded or disclosed above would have a material adverse impact on our financial position or results of operations in any one year.

### PACE

At 31 December 2017, \$28.5 of the environmental accrual was related to the Pace facility.

In 2006, we sold our Amines business, which included operations at Pace, Florida, and recognized a liability for retained environmental obligations associated with remediation activities at Pace. We are required by the Florida Department of Environmental Protection (FDEP) and the United States Environmental Protection Agency (USEPA) to continue our remediation efforts. We estimated that it would take a substantial period of time to complete the groundwater remediation, and the costs through completion were estimated to range from \$42 to \$52. As no amount within the range was a better estimate than another, we recognized a pretax expense in fiscal 2006 of \$42 as a component of income from discontinued operations and recorded an environmental accrual of \$42 in continuing operations on the consolidated balance sheets. There has been no change to the estimated exposure range related to the Pace facility.

We have implemented many of the remedial corrective measures at the Pace facility required under 1995 Consent Orders issued by the FDEP and the USEPA. Contaminated soils have been bioremediated, and the treated soils have been secured in a lined on-site disposal cell. Several groundwater recovery systems have been installed to contain and remove contamination from groundwater. We completed an extensive assessment of the site to determine how well existing measures are working, what additional corrective measures may be needed, and whether newer remediation technologies that were not available in the 1990s might be suitable to more quickly and effectively remove groundwater contaminants. Based on assessment results, we completed a focused feasibility study that has identified alternative approaches that may more effectively remove contaminants. We continue to review alternative remedial approaches with the FDEP and have started additional field work to support the design of an improved groundwater recovery network with the objective of targeting areas of higher contaminant concentration and avoiding areas of high groundwater iron which has proven to be a significant operability issue for the project. In the first quarter of 2015, we entered into a new Consent Order with the FDEP requiring us to continue our remediation efforts at the Pace facility. The costs we are incurring under the new Consent Order are consistent with our previous estimates.

#### PIEDMONT

At 31 December 2017, \$16.4 of the environmental accrual was related to the Piedmont site.

On 30 June 2008, we sold our Elkton, Maryland, and Piedmont, South Carolina, production facilities and the related North American atmospheric emulsions and global pressure sensitive adhesives businesses. In connection with the sale, we recognized a liability for retained environmental obligations associated with remediation activities at the Piedmont site. This site is under active remediation for contamination caused by an insolvent prior owner. We are required by the South Carolina Department of Health and Environmental Control (SCDHEC) to address both contaminated soil and groundwater. Numerous areas of soil contamination have been addressed, and contaminated groundwater is being recovered and treated. On 13 June 2017, the SCDHEC issued its final approval to the site-wide feasibility study, and with that, we will be moving towards a record of decision for the Piedmont site and into the final remedial design phase of this project. We estimate that it will take until 2019 to complete source area remediation, with groundwater recovery and treatment continuing through 2029. Thereafter, we are expecting this site to go into a state of monitored natural attenuation through 2047. We recognized a pretax expense in 2008 of \$24 as a component of income from discontinued operations and recorded an environmental liability of \$24 in continuing operations on the consolidated balance sheets. There have been no significant changes to the estimated exposure.

#### PASADENA

At 31 December 2017, \$12.0 of the environmental accrual was related to the Pasadena site.

During the fourth quarter of 2012, management committed to permanently shutting down our polyurethane intermediates (PUI) production facility in Pasadena, Texas. In shutting down and dismantling the facility, we have undertaken certain obligations related to soil and groundwater contaminants. We have been pumping and treating groundwater to control off-site contaminant migration in compliance with regulatory requirements and under the approval of the Texas Commission on Environmental Quality (TCEQ). We estimate that the pump and treat system will continue to operate until 2042. We plan to perform additional work to address other environmental obligations at the site. This additional work includes remediating, as required, impacted soils, investigating groundwater west of the former PUI facility, performing post closure care for two closed RCRA surface impoundment units, and establishing engineering controls. In 2012, we estimated the total exposure at this site to be \$13. There have been no significant changes to the estimated exposure.

### 13. SHARE-BASED COMPENSATION

We have various share-based compensation programs, which include deferred stock units, stock options, and restricted stock. During the three months ended 31 December 2017, we granted market-based and time-based deferred stock units. Under all programs, the terms of the awards are fixed at the grant date. We issue shares from treasury stock upon the payout of deferred stock units, the exercise of stock options, and the issuance of restricted stock awards. As of 31 December 2017, there were 4,627,480 shares available for future grant under our Long-Term Incentive Plan (LTIP), which is shareholder approved.

Share-based compensation cost recognized in continuing operations on the consolidated income statements is summarized below:

	Three Months Ended	
	31 December	
	2017	2016
Before-tax share-based compensation cost	\$ 11.8	\$ 9.0
Income tax benefit	(3.2)	(3.0)
After-tax share-based compensation cost	\$ 8.6	\$ 6.0

Before-tax share-based compensation cost is primarily included in selling and administrative expense on our consolidated income statements. The amount of share-based compensation cost capitalized in fiscal year 2018 and 2017 was not material.

#### Deferred Stock Units

During the three months ended 31 December 2017, we granted 99,130 market-based deferred stock units. The market-based deferred stock units are earned out at the end of a performance period beginning 1 October 2017 and ending 30 September 2020, conditioned on the level of the Company's total shareholder return in relation to a defined peer group over the three-year performance period.

The market-based deferred stock units had an estimated grant-date fair value of \$202.47 per unit, which was estimated using a Monte Carlo simulation model. The model utilizes multiple input variables that determine the probability of satisfying the market condition stipulated in the grant and calculates the fair value of the awards. We generally expense the grant-date fair value of these awards on a straight-line basis over the vesting period. The calculation of the fair value of market-based deferred stock units used the following assumptions:

Expected volatility	18.7%
Risk-free interest rate	1.9%
Expected dividend yield	2.6%

In addition, during the three months ended 31 December 2017, we granted 125,140 time-based deferred stock units at a weighted average grant-date fair value of \$161.49.

## 14. EQUITY

The following is a summary of the changes in total equity:

	Three Months Ended 31 December					
	2017			2016		
	Air Products	Non- controlling Interests	Total Equity	Air Products	Non- controlling Interests	Total Equity
Balance at 30 September	\$ 10,086.2	\$ 99.3	\$ 10,185.5	\$ 7,079.6	\$ 133.8	\$ 7,213.4
Net income	154.6	7.1	161.7	299.8	6.6	306.4
Other comprehensive income (loss)	151.8	1.9	153.7	(234.9)	(3.1)	(238.0)
Dividends on common stock (per share \$0.95, \$0.86)	(208.0)	—	(208.0)	(187.1)	—	(187.1)
Dividends to noncontrolling interests	—	(7.7)	(7.7)	—	(4.2)	(4.2)
Share-based compensation	11.1	—	11.1	9.0	—	9.0
Treasury shares for stock option and award plans	19.9	—	19.9	(.3)	—	(.3)
Spin-off of Versum	—	—	—	186.5	(33.9)	152.6
Cumulative change in accounting principle	—	—	—	8.8	—	8.8
Other equity transactions	(.3)	5.3	5.0	.1	.4	.5
Balance at 31 December	\$ 10,215.3	\$ 105.9	\$ 10,321.2	\$ 7,161.5	\$ 99.6	\$ 7,261.1

## 15. ACCUMULATED OTHER COMPREHENSIVE LOSS

The tables below summarize changes in accumulated other comprehensive loss (AOCL), net of tax, attributable to Air Products for the three months ended 31 December 2017:

	Derivatives qualifying as hedges	Foreign currency translation adjustments	Pension and postretirement benefits	Total
Balance at 30 September 2017	\$ (53.1)	\$ (787.1)	\$ (1,007.2)	\$ (1,847.4)
Other comprehensive income (loss) before reclassifications	(9.5)	136.4	—	126.9
Amounts reclassified from AOCL	.8	3.1	22.9	26.8
Net current period other comprehensive income (loss)	(8.7)	139.5	22.9	153.7
Amount attributable to noncontrolling interests	—	1.9	—	1.9
Balance at 31 December 2017	\$ (61.8)	\$ (649.5)	\$ (984.3)	\$ (1,695.6)

The table below summarizes the reclassifications out of accumulated other comprehensive loss and the affected line item on the consolidated income statements:

	Three Months Ended 31 December	
	2017	2016
(Gain) Loss on Cash Flow Hedges, net of tax		
Sales/Cost of sales	\$ 1.0	\$ 4.6
Other income (expense), net	(1.4)	21.1
Interest expense	1.2	(.1)
Total (Gain) Loss on Cash Flow Hedges, net of tax	\$ .8	\$ 25.6
Currency Translation Adjustment <sup>(A)</sup>	\$ 3.1	\$ —
Pension and Postretirement Benefits, net of tax <sup>(B)</sup>	\$ 22.9	\$ 27.4

<sup>(A)</sup> The impact is reflected in "Cost of sales" and relates to an equipment sale resulting from the termination of a contract in the Industrial Gases – Asia segment.

<sup>(B)</sup> The components of net periodic benefit cost reclassified out of accumulated other comprehensive loss include items such as prior service cost amortization, actuarial loss amortization, and settlements and are included in "Other non-operating income (expense), net" on the consolidated income statements. Refer to Note 11, Retirement Benefits, for additional information.



## 16. EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted earnings per share:

	Three Months Ended	
	31 December	
	2017	2016
<b>Numerator</b>		
Income from continuing operations	\$ 155.6	\$ 251.6
Income (Loss) from discontinued operations	(1.0)	48.2
<b>Net Income Attributable to Air Products</b>	<b>\$ 154.6</b>	<b>\$ 299.8</b>
<b>Denominator (in millions)</b>		
Weighted average common shares — Basic	218.9	217.7
Effect of dilutive securities		
Employee stock option and other award plans	1.5	2.0
Weighted average common shares — Diluted	220.4	219.7
<b>Basic Earnings Per Common Share Attributable to Air Products</b>		
Income from continuing operations	\$ .71	\$ 1.16
Income from discontinued operations	—	.22
<b>Net Income Attributable to Air Products</b>	<b>\$ .71</b>	<b>\$ 1.38</b>
<b>Diluted Earnings Per Common Share Attributable to Air Products</b>		
Income from continuing operations	\$ .70	\$ 1.15
Income from discontinued operations	—	.22
<b>Net Income Attributable to Air Products</b>	<b>\$ .70</b>	<b>\$ 1.37</b>

Outstanding share-based awards of .1 million and .2 million shares were antidilutive and therefore excluded from the computation of diluted earnings per share for the three months ended 31 December 2017 and 2016, respectively.

## 17. INCOME TAXES

### U.S. Tax Cuts and Jobs Act ("the Act")

On 22 December 2017, the United States enacted the U.S. Tax Cuts and Jobs Act ("the Act") which significantly changed existing U.S. tax laws, including a reduction in the federal corporate income tax rate from 35% to 21%, a deemed repatriation tax on unremitted foreign earnings, as well as other changes. As a result of the Act, our consolidated income statements reflect a net expense of \$239.0 in the first quarter of fiscal year 2018. This includes an expense of \$453.0 for the cost of the deemed repatriation tax and adjustments to the future cost of repatriation from foreign investments. This expense impacted our income tax provision by \$420.5 and equity affiliate income by \$32.5 for future costs of repatriation that will be borne by an equity affiliate. In addition, the income tax provision was benefited by \$214.0 primarily from the re-measurement of our net U.S. deferred tax liabilities at the lower corporate tax rate.

The \$420.5 adjustment recorded in the first quarter reflects a deemed repatriation tax of \$364.1 that is payable over eight years and \$56.4 resulting primarily from withholding taxes that were established for repatriation of foreign earnings and other impacts of the Act. We expect to apply \$53.8 of existing foreign tax credits towards the \$364.1 deemed repatriation tax. Of the remaining \$310.3 obligation, \$296.6 is recorded on our consolidated balance sheets in noncurrent liabilities.

We are reporting the impacts of the Act provisionally based upon reasonable estimates. The impacts are not yet finalized as they are dependent on factors and analysis not yet known or fully completed, including but not limited to, the final cash balances for fiscal year 2018, further book to U.S. tax adjustments for the earnings of foreign entities, the issuance of additional guidance, as well as our ongoing analysis of the Act.

As a fiscal year-end taxpayer, certain provisions of the Act become effective in our fiscal year 2018 while other provisions do not become effective until fiscal year 2019. The corporate tax rate reduction is effective as of 1 January 2018 and, accordingly, reduces our 2018 fiscal year U.S. federal statutory rate to a blended rate of approximately 24.5%.

Primarily due to the impact of the Act, our effective tax rate was 64.2% for our first quarter ended 31 December 2017.

#### Cash Paid for Taxes (Net of Cash Refunds)

On a total company basis, income tax payments, net of refunds, were \$61.0 and \$96.7 for the three months ended 31 December 2017 and 2016, respectively.

## 18. BUSINESS SEGMENT INFORMATION

Our reporting segments reflect the manner in which our chief operating decision maker reviews results and allocates resources. Except in the Corporate and other segment, each reporting segment meets the definition of an operating segment and does not include the aggregation of multiple operating segments. Our liquefied natural gas (LNG) and helium storage and distribution sale of equipment businesses are aggregated within the Corporate and other segment.

Our reporting segments are:

- Industrial Gases – Americas
- Industrial Gases – EMEA (Europe, Middle East, and Africa)
- Industrial Gases – Asia
- Industrial Gases – Global
- Corporate and other

	Industrial Gases – Americas	Industrial Gases – EMEA	Industrial Gases – Asia	Industrial Gases – Global	Corporate and other	Segment Total
<b>Three Months Ended 31 December 2017</b>						
Sales	\$ 909.8	\$ 515.9	\$ 643.6	\$ 133.0	\$ 14.3	\$ 2,216.6
Operating income (loss)	217.2	104.5	175.5	9.5	(46.0)	460.7
Depreciation and amortization	117.8	49.1	56.8	1.6	2.6	227.9
Equity affiliates' income	18.6	13.1	14.2	.4	—	46.3
<b>Three Months Ended 31 December 2016</b>						
Sales	\$ 863.9	\$ 399.7	\$ 438.3	\$ 147.9	\$ 32.7	\$ 1,882.5
Operating income (loss)	223.3	90.0	118.4	8.2	(29.1)	410.8
Depreciation and amortization	111.8	42.2	46.7	2.0	3.4	206.1
Equity affiliates' income	14.7	9.5	13.5	.3	—	38.0
<b>Total Assets</b>						
31 December 2017	\$ 5,878.6	\$ 3,378.5	\$ 4,592.3	\$ 285.5	\$ 4,063.7	\$ 18,198.6
30 September 2017	5,840.8	3,276.1	4,412.1	279.6	4,648.4	18,457.0

The sales information noted above relates to external customers only. All intersegment sales are eliminated in consolidation. For the three months ended 31 December 2017 and 2016, the Industrial Gases – Global segment had intersegment sales of \$61.9 and \$61.0, respectively. These sales are generally transacted at market pricing. For all other segments, intersegment sales are not material for all periods presented. Equipment manufactured for our industrial gases segments is generally transferred at cost and not reflected as an intersegment sale.

In 2015, we entered into a long-term sale of equipment contract to engineer, procure, and construct industrial gas facilities with a 25%-owned joint venture for Saudi Aramco's Jazan oil refinery and power plant in Saudi Arabia. Sales related to this contract are included in the results of our Industrial Gases – Global segment and were approximately \$90 and \$110 during the three months ended 31 December 2017 and 2016, respectively.

Below is a reconciliation of segment total operating income to consolidated operating income:

<b>Operating Income</b>	Three Months Ended	
	31 December	
	2017	2016
Segment total	\$ 460.7	\$ 410.8
Business separation costs	—	(32.5)
Cost reduction and asset actions	—	(50.0)
<b>Consolidated Total</b>	<b>\$ 460.7</b>	<b>\$ 328.3</b>

Below is a reconciliation of segment total equity affiliates' income to consolidated equity affiliates' income:

<b>Equity Affiliates' Income</b>	Three Months Ended	
	31 December	
	2017	2016
Segment total	\$ 46.3	\$ 38.0
Tax reform repatriation - equity method investment <sup>(A)</sup>	(32.5)	—
<b>Consolidated Total</b>	<b>\$ 13.8</b>	<b>\$ 38.0</b>

<sup>(A)</sup> For additional information on the impact of the U.S. Tax Cuts and Jobs Act, including our equity affiliate impact, refer to Note 17, Income Taxes.

Below is a reconciliation of segment total assets to consolidated total assets:

<b>Total Assets</b>	31 December	30 September
	2017	2017
Segment total	\$ 18,198.6	\$ 18,457.0
Discontinued operations	10.2	10.2
<b>Consolidated Total</b>	<b>\$ 18,208.8</b>	<b>\$ 18,467.2</b>

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The disclosures in this quarterly report are complementary to those made in our 2017 Form 10-K. An analysis of results for the first quarter of fiscal year 2018 is provided in this Management's Discussion and Analysis.

The following discussion should be read in conjunction with the consolidated financial statements and the accompanying notes contained in this report. Unless otherwise indicated, financial information is presented on a continuing operations basis. All comparisons in the discussion are to the corresponding prior year, unless otherwise stated. All amounts presented are in accordance with U.S. generally accepted accounting principles (GAAP), except as noted. All amounts are presented in millions of dollars, except for per share data, unless otherwise indicated.

Captions such as income from continuing operations attributable to Air Products, net income attributable to Air Products, and diluted earnings per share attributable to Air Products are simply referred to as "income from continuing operations," "net income," and "diluted earnings per share (EPS)" throughout this Management's Discussion and Analysis, unless otherwise stated.

The discussion of results that follows includes comparisons to certain non-GAAP ("adjusted") financial measures. The presentation of non-GAAP measures is intended to provide investors, potential investors, securities analysts, and others with useful supplemental information to evaluate the performance of the business because such measures, when viewed together with our financial results computed in accordance with GAAP, provide a more complete understanding of the factors and trends affecting our historical financial performance and projected future results. The reconciliations of reported GAAP results to non-GAAP measures are presented on pages 36-39. Descriptions of the excluded items appear on pages 31 and 32.

### FIRST QUARTER 2018 VS. FIRST QUARTER 2017

#### FIRST QUARTER 2018 IN SUMMARY

- Sales of \$2,216.6 increased 18%, or \$334.1, from underlying sales growth of 15% and favorable currency impacts of 3%. Underlying sales increased primarily from higher volumes across the regional industrial gases businesses driven by an equipment sale resulting from the termination of a contract in the Industrial Gases – Asia segment, new project onstreams, and base business growth.
- Operating income of \$460.7 increased 40%, or \$132.4, and operating margin of 20.8% increased 340 basis points (bp). On a non-GAAP basis, operating income of \$460.7 increased 12%, or \$49.9, and operating margin of 20.8% decreased 100 bp.
- Income from continuing operations of \$155.6 decreased 38%, or \$96.0, and diluted earnings per share of \$.70 decreased 39%, or \$.45. On a non-GAAP basis, income from continuing operations of \$394.6 increased 23%, or \$72.6, and diluted earnings per share of \$1.79 increased 22%, or \$.32. A summary table of changes in diluted earnings per share is presented below.
- Adjusted EBITDA of \$734.9 increased 12%, or \$80.0. Adjusted EBITDA margin of 33.2% decreased 160 bp.

## Changes in Diluted Earnings per Share Attributable to Air Products

	Three Months Ended		Increase (Decrease)
	2017	31 December 2016	
<b>Diluted Earnings per Share</b>			
Net income	\$ .70	\$ 1.37	\$ (.67)
Income from discontinued operations	—	.22	(.22)
<b>Income from Continuing Operations – GAAP Basis</b>	<b>\$ .70</b>	<b>\$ 1.15</b>	<b>\$ (.45)</b>
<b>Operating Income Impact (after-tax)</b>			
Underlying business			
Volume			\$ .19
Price/raw materials			.08
Costs			(.15)
Currency			.06
Business separation costs			.12
Cost reduction and asset actions			.19
<b>Total Operating Income Impact (after-tax)</b>			<b>\$ .49</b>
<b>Other Impact (after-tax)</b>			
Equity affiliates' income			\$ .03
Other non-operating income (expense), net			.04
Income tax			.08
Tax reform repatriation			(2.06)
Tax reform rate change and other			.97
Tax costs associated with business separation			.01
Weighted average diluted shares			(.01)
<b>Total Other Impact (after-tax)</b>			<b>\$ (.94)</b>
<b>Total Change in Diluted Earnings per Share from Continuing Operations – GAAP Basis</b>			<b>\$ (.45)</b>

	Three Months Ended		Increase (Decrease)
	2017	31 December 2016	
<b>Income from Continuing Operations – GAAP Basis</b>	<b>\$ .70</b>	<b>\$ 1.15</b>	<b>\$ (.45)</b>
Business separation costs	—	.12	(.12)
Tax costs associated with business separation	—	.01	(.01)
Cost reduction and asset actions	—	.19	(.19)
Tax reform repatriation	2.06	—	2.06
Tax reform rate change and other	(.97)	—	(.97)
<b>Income from Continuing Operations – Non-GAAP Basis</b>	<b>\$ 1.79</b>	<b>\$ 1.47</b>	<b>\$ .32</b>

## RESULTS OF OPERATIONS

### Discussion of Consolidated Results

	Three Months Ended			
	31 December		\$ Change	Change
	2017	2016		
Sales	\$ 2,216.6	\$ 1,882.5	\$ 334.1	18 %
Operating income	460.7	328.3	132.4	40 %
Operating margin	20.8%	17.4%		340 bp
Equity affiliates' income	13.8	38.0	(24.2)	(64)%
Income from continuing operations	155.6	251.6	(96.0)	(38)%
<b>Non-GAAP Basis</b>				
Adjusted EBITDA	\$ 734.9	\$ 654.9	\$ 80.0	12 %
Adjusted EBITDA margin	33.2%	34.8%		(160 bp)
Adjusted operating income	460.7	410.8	49.9	12 %
Adjusted operating margin	20.8%	21.8%		(100 bp)
Adjusted equity affiliates' income	46.3	38.0	8.3	22 %

### Sales

	% Change from Prior Year
Underlying business	
Volume	13%
Price	2%
Energy and natural gas cost pass-through	—%
Currency	3%
<b>Total Consolidated Change</b>	<b>18%</b>

Sales of \$2,216.6 increased 18%, or \$334.1. Underlying sales increased 15% from higher volumes of 13% and higher pricing of 2%. Volumes were higher across all regional Industrial Gases segments driven by an equipment sale resulting from the termination of a contract in the Industrial Gases – Asia segment, new project onstreams in the Industrial Gases – Asia and EMEA segments, and base business growth. The pricing improvement was attributable to the Industrial Gases – Asia segment. Energy and natural gas cost pass-through to customers was flat versus the prior year. Favorable currency impacts, primarily from the Euro, the British Pound Sterling, and the Chinese Renminbi, increased sales by 3%.

### Operating Income and Margin

Operating income of \$460.7 increased 40%, or \$132.4, due to favorable volumes of \$52, lower cost reduction and asset actions of \$50, lower business separation costs of \$33, favorable pricing, net of energy, fuel, and raw material costs, of \$22, and favorable currency impacts of \$16, partially offset by unfavorable net operating costs of \$41. Net operating costs were higher primarily due to higher planned maintenance costs. Operating margin of 20.8% increased 340 bp, primarily due to lower cost reduction and asset actions and lower business separation costs, partially offset by higher operating costs.

On a non-GAAP basis, adjusted operating income of \$460.7 increased 12%, or \$49.9, primarily due to higher volumes, favorable pricing, and favorable currency impacts, partially offset by unfavorable net operating costs. Adjusted operating margin of 20.8% decreased 100 bp as higher costs were partially offset by favorable pricing.

## **Adjusted EBITDA**

We define Adjusted EBITDA as income from continuing operations (including noncontrolling interests) excluding certain disclosed items, which the Company does not believe to be indicative of underlying business trends, before interest expense, other non-operating income (expense), net, income tax provision, and depreciation and amortization expense. Adjusted EBITDA provides a useful metric for management to assess operating performance.

Adjusted EBITDA of \$734.9 increased 12%, or \$80.0, primarily due to higher volumes and favorable pricing. Adjusted EBITDA margin of 33.2% decreased 160 bp, primarily due to the impact of an equipment sale resulting from the termination of a contract in the Industrial Gases – Asia segment of 90 bp, a new hydrogen plant in India of 40 bp, and higher planned maintenance costs of 30 bp.

## **Equity Affiliates' Income**

Equity affiliates' income of \$13.8 decreased \$24.2 and includes \$32.5 resulting from the U.S. Tax Cuts and Jobs Act. Refer to Note 17, Income Taxes, to the consolidated financial statements for additional information. On a non-GAAP basis, equity affiliates' income of \$46.3 increased 22%, or \$8.3, primarily driven by Industrial Gases – Americas and Industrial Gases – EMEA affiliates.

## **Cost of Sales and Gross Margin**

Cost of sales of \$1,571.8 increased \$255.1, or 19%, due to higher costs attributable to sales volumes of \$183, unfavorable currency impacts of \$36, higher other costs of \$28, and higher energy and natural gas cost pass-through to customers of \$8. Gross margin of 29.1% decreased 100 bp, primarily due to unfavorable costs, partially offset by favorable currency.

## **Selling and Administrative Expense**

Selling and administrative expense of \$191.6 increased \$26.9, primarily driven by unfavorable currency impacts and other higher costs. Selling and administrative expense, as a percent of sales, decreased from 8.7% to 8.6%.

## **Research and Development**

Research and development expense of \$14.6 decreased \$4. Research and development expense, as a percent of sales, decreased from .8% to .7%.

## **Business Separation Costs**

With the disposition of the two divisions comprising the former Materials Technologies segment complete, no business separation costs were incurred during the first quarter of fiscal year 2018. Refer to Note 3, Discontinued Operations, and Note 4, Materials Technologies Separation, to the consolidated financial statements for additional information regarding the dispositions.

For the three months ended 31 December 2016, we incurred legal and advisory fees related to the dispositions of \$32.5 (\$26.5 after-tax, or \$.12 per share). Our income tax provision for the three months ended 31 December 2016 includes additional tax expense of \$2.7 (\$.01 per share) related to the separation.

## **Cost Reduction and Asset Actions**

For the three months ended 31 December 2016, we recognized a net expense of \$50.0 (\$41.2 after-tax, or \$.19 per share), which included \$45.7 from the write-down of an air separation unit in the Industrial Gases – EMEA segment that was constructed mainly to provide oxygen to one of the Energy-from-Waste plants. Refer to Note 5, Cost Reduction and Asset Actions, to the consolidated financial statements for additional details. There were no charges recorded for cost reduction and asset actions for the three months ended 31 December 2017.

## **Other Income (Expense), Net**

Other income (expense), net of \$22.1 decreased \$2.6, primarily due to lower sales of assets and investments.

## Interest Expense

	Three Months Ended 31 December	
	2017	2016
Interest incurred	\$ 32.6	\$ 35.8
Less: capitalized interest	2.8	6.3
Interest expense	\$ 29.8	\$ 29.5

Interest incurred decreased \$3.2 as the impact from a lower average debt balance of \$8 was partially offset by the impact from a higher average interest rate on the debt portfolio of \$5. The change in capitalized interest was driven by a decrease in the carrying value of projects under construction.

### Other Non-Operating Income (Expense), Net

Other non-operating income (expense), net of \$9.8 primarily resulted from interest income on cash and cash items. In 2017, interest income was not material and was presented on our consolidated income statements within "Other income (expense), net."

### Effective Tax Rate

The effective tax rate equals the income tax provision divided by income from continuing operations before taxes. The effective tax rate was 64.2% and 23.3% in the first quarter of 2018 and 2017, respectively. The current year rate was higher primarily due to the enactment of the U.S. Tax Cuts and Jobs Act ("the Act"), which significantly changed existing U.S. tax laws, including a reduction in the federal corporate income tax rate from 35% to 21% that is effective 1 January 2018, a deemed repatriation tax on unremitted foreign earnings, as well as other changes. As a result of the Act, our income tax provision reflects a net income tax expense of \$206.5. This included a deemed repatriation tax on accumulated unremitted foreign earnings and adjustments to the future cost of repatriation from foreign investments of \$420.5, offset by a benefit of \$214.0 primarily from the re-measurement of our net U.S. deferred tax liabilities at the lower corporate tax rate. Additionally, the current year effective tax rate benefited from a lower U.S. federal statutory rate under the Act.

On a non-GAAP basis, the effective tax rate decreased from 21.2% in 2017 to 17.5% in 2018. We estimate that the Act reduced our non-GAAP effective tax rate by approximately 2.6% for the three months ended 31 December 2017. The tax rate for the current year was also reduced by a higher tax benefit from share-based compensation and from the mix of income earned in countries with lower statutory tax rates.

We are reporting the impacts of the Act provisionally based upon reasonable estimates. The impacts are not yet finalized as they are dependent on factors and analysis not yet known or fully completed, including but not limited to, the final cash balances for fiscal year 2018, further book to U.S. tax adjustments for the earnings of foreign entities, the issuance of additional guidance, as well as our ongoing analysis of the Act.

At this time, we do not anticipate a significant change in our full-year rate in fiscal year 2019 versus our estimated fiscal year 2018 full-year rate of 20.0% to 21.0% (after one-time adjustments) related to provisions of the Act.

Refer to Note 17, Income Taxes, to the consolidated financial statements for additional information.

### Discontinued Operations

The results of our former Performance Materials Division (PMD) and Energy-from-Waste (EfW) segment are reflected in our consolidated financial statements as discontinued operations for all periods presented. Refer to Note 3, Discontinued Operations, to the consolidated financial statements for additional information.



## Segment Analysis

### Industrial Gases – Americas

	Three Months Ended			
	31 December			
	2017	2016	\$ Change	% Change
Sales	\$ 909.8	\$ 863.9	\$ 45.9	5%
Operating income	217.2	223.3	(6.1)	(3)%
Operating margin	23.9%	25.8%		(190 bp)
Equity affiliates' income	18.6	14.7	3.9	27%
Adjusted EBITDA	353.6	349.8	3.8	1%
Adjusted EBITDA margin	38.9%	40.5%		(160 bp)

### Industrial Gases – Americas Sales

	% Change from Prior Year
Underlying business	
Volume	5 %
Price	— %
Energy and natural gas cost pass-through	(1)%
Currency	1 %
<b>Total Industrial Gases – Americas Sales Change</b>	<b>5 %</b>

Underlying sales were up 5% from higher volumes as pricing was flat. The higher volumes were primarily due to higher hydrogen volumes in the Gulf Coast. Lower energy and natural gas cost pass-through to customers of 1% was offset by favorable currency impacts of 1%.

### Industrial Gases – Americas Operating Income and Margin

Operating income of \$217.2 decreased 3%, or \$6.1, primarily due to higher costs of \$15, partially offset by favorable volumes of \$8 and favorable currency impacts of \$2. The higher costs primarily included higher planned maintenance costs. Operating margin of 23.9% decreased 190 bp, primarily due to higher costs.

### Industrial Gases – Americas Equity Affiliates' Income

Equity affiliates' income of \$18.6 increased \$3.9 due to favorable currency and volume growth.

### Industrial Gases – Europe, Middle East, and Africa (EMEA)

	Three Months Ended			
	31 December			
	2017	2016	\$ Change	% Change
Sales	\$ 515.9	\$ 399.7	\$ 116.2	29%
Operating income	104.5	90.0	14.5	16%
Operating margin	20.3%	22.5%		(220 bp)
Equity affiliates' income	13.1	9.5	3.6	38%
Adjusted EBITDA	166.7	141.7	25.0	18%
Adjusted EBITDA margin	32.3%	35.5%		(320 bp)

## Industrial Gases – EMEA Sales

	% Change from Prior Year
Underlying business	
Volume	17%
Price	—%
Energy and natural gas cost pass-through	3%
Currency	9%
<b>Total Industrial Gases – EMEA Sales Change</b>	<b>29%</b>

Underlying sales were up 17% from higher volumes, primarily due to a new hydrogen plant in India. Higher merchant volumes increased sales by 3%. Pricing was flat versus the prior year. Higher energy and natural gas cost pass-through to customers increased sales by 3%. Favorable currency impacts, primarily from the Euro and British Pound Sterling, increased sales by 9%.

### Industrial Gases – EMEA Operating Income and Margin

Operating income of \$104.5 increased 16%, or \$14.5, due to higher new plant and base business volumes of \$11 and favorable currency impacts of \$8, partially offset by higher costs of \$3 and lower price, net of power costs, of \$1. Operating margin of 20.3% decreased 220 bp, primarily due to lower margins on the new hydrogen volumes in India and higher energy and natural gas cost pass-through to customers.

### Industrial Gases – EMEA Equity Affiliates' Income

Equity affiliates' income of \$13.1 increased \$3.6 due to favorable currency and volume growth.

## Industrial Gases – Asia

	Three Months Ended			
	31 December			
	2017	2016	\$ Change	% Change
Sales	\$ 643.6	\$ 438.3	\$ 205.3	47%
Operating income	175.5	118.4	57.1	48%
Operating margin	27.3%	27.0%		30 bp
Equity affiliates' income	14.2	13.5	.7	5%
Adjusted EBITDA	246.5	178.6	67.9	38%
Adjusted EBITDA margin	38.3%	40.7%		(240 bp)

## Industrial Gases – Asia Sales

	% Change from Prior Year
Underlying business	
Volume	36%
Price	7%
Energy and natural gas cost pass-through	—%
Currency	4%
<b>Total Industrial Gases – Asia Sales Change</b>	<b>47%</b>

Underlying sales were up 43% from higher volumes of 36% and higher pricing of 7%. The volume increase included 28% from an equipment sale resulting from the termination of a contract and 8% primarily from new plant onstreams and higher merchant volumes. Merchant pricing improved across Asia driven primarily by China. Energy and natural gas cost pass-through to customers was flat versus the prior year. Favorable currency impacts, primarily from the Chinese Renminbi, South Korean Won, and Taiwan Dollar, increased sales by 4%.

### Industrial Gases – Asia Operating Income and Margin

Operating income of \$175.5 increased 48%, or \$57.1, due to the equipment sale and merchant volumes of \$40, favorable price, net of power costs, of \$23, and a favorable currency impact of \$5, partially offset by higher operating costs of \$11. Operating margin of 27.3% increased 30 bp as higher volumes and favorable price, net of power costs, were mostly offset by the dilutive impact of the equipment sale and unfavorable cost performance.

### Industrial Gases – Asia Equity Affiliates' Income

Equity affiliates' income of \$14.2 increased \$0.7.

### Industrial Gases – Global

	Three Months Ended			
	31 December			
	2017	2016	\$ Change	% Change
Sales	\$ 133.0	\$ 147.9	\$ (14.9)	(10)%
Operating income	9.5	8.2	1.3	16%
Adjusted EBITDA	11.5	10.5	1.0	10%

### Industrial Gases – Global Sales and Operating Income

The Industrial Gases – Global segment includes sales of cryogenic and gas processing equipment for air separation and centralized global costs associated with management of all the Industrial Gases segments.

Sales of \$133.0 decreased \$14.9, or 10%. The decrease in sales was primarily driven by lower sale of equipment activity on the multiple air separation units that will serve Saudi Aramco's Jazan oil refinery and power plant in Saudi Arabia.

Operating income of \$9.5 increased \$1.3.

### Corporate and other

In addition to our liquefied natural gas (LNG) and helium storage and distribution sale of equipment businesses, the results of the Corporate and other segment include stranded costs related to the former Materials Technologies segment as discontinued operations. These stranded costs primarily relate to costs in support of transition services agreements with Versum and Evonik, the majority of which are reimbursed to Air Products. All transition services for Evonik were completed during the first quarter of fiscal year 2018, and we expect all transition services for Versum to end in the second quarter of fiscal year 2018.

We will continue to take actions to reduce the costs after completion of these services.

	Three Months Ended			
	31 December			
	2017	2016	\$ Change	% Change
Sales	\$ 14.3	\$ 32.7	\$ (18.4)	(56)%
Operating loss	(46.0)	(29.1)	(16.9)	(58)%
Adjusted EBITDA	(43.4)	(25.7)	(17.7)	(69)%

### Corporate and other Sales and Operating Loss

Sales of \$14.3 decreased \$18.4, primarily due to lower LNG project activity. We expect delays in new LNG project orders due to continued oversupply of LNG in the market. Operating loss of \$46.0 increased \$16.9 due to lower LNG activity.

## RECONCILIATION OF NON-GAAP FINANCIAL MEASURES

(Millions of dollars unless otherwise indicated, except for share data)

The Company has presented certain financial measures on a non-GAAP (“adjusted”) basis and has provided a reconciliation to the most directly comparable financial measure calculated in accordance with GAAP. These financial measures are not meant to be considered in isolation or as a substitute for the most directly comparable financial measure calculated in accordance with GAAP. The Company believes these non-GAAP measures provide investors, potential investors, securities analysts, and others with useful information to evaluate the performance of the business because such measures, when viewed together with our financial results computed in accordance with GAAP, provide a more complete understanding of the factors and trends affecting our historical financial performance and projected future results.

In many cases, our non-GAAP measures are determined by adjusting the most directly comparable GAAP financial measure to exclude certain disclosed items (“non-GAAP adjustments”) that we believe are not representative of the underlying business performance. For example, Air Products restructured the Company to focus on its core Industrial Gases business. This had resulted in significant cost reduction and asset actions that we believe were important for investors to understand separately from the performance of the underlying business. The reader should be aware that we may incur similar expenses in the future. The tax impact on our pre-tax non-GAAP adjustments reflects the expected current and deferred income tax expense impact of the transactions and is impacted primarily by the statutory tax rate of the various relevant jurisdictions and the taxability of the adjustments in those jurisdictions. Investors should also consider the limitations associated with these non-GAAP measures, including the potential lack of comparability of these measures from one company to another.

During the first quarter of fiscal year 2018, we adopted accounting guidance on the presentation of net periodic pension and postretirement benefit cost. Certain prior year information has been reclassified to conform to the fiscal year 2018 presentation. Refer to Note 2, New Accounting Guidance, to the consolidated financial statements for additional information.

Presented below are reconciliations of the reported GAAP results to the non-GAAP measures for the first quarter of fiscal year 2018 and 2017:

## CONSOLIDATED RESULTS

Q1 2018 vs. Q1 2017	Continuing Operations					
	Operating Income	Operating Margin <sup>(A)</sup>	Equity Affiliates' Income	Income Tax Provision	Net Income	Diluted EPS
2018 GAAP	\$ 460.7	20.8%	\$ 13.8	\$ 291.8	\$ 155.6	\$ .70
2017 GAAP	328.3	17.4%	38.0	78.4	251.6	1.15
Change GAAP	\$ 132.4	340bp	\$ (24.2)	\$ 213.4	\$ (96.0)	\$ (.45)
% Change GAAP	40%		(64)%	272 %	(38)%	(39)%
2018 GAAP	\$ 460.7	20.8%	\$ 13.8	\$ 291.8	\$ 155.6	\$ .70
Tax reform repatriation <sup>(B)</sup>	—	—%	32.5	(420.5)	453.0	2.06
Tax reform rate change and other <sup>(B)</sup>	—	—%	—	214.0	(214.0)	(.97)
2018 Non-GAAP Measure	\$ 460.7	20.8%	\$ 46.3	\$ 85.3	\$ 394.6	\$ 1.79
2017 GAAP	\$ 328.3	17.4%	\$ 38.0	\$ 78.4	\$ 251.6	\$ 1.15
Business separation costs	32.5	1.7%	—	3.7	26.5	.12
Tax costs associated with business separation	—	—%	—	(2.7)	2.7	.01
Cost reduction and asset actions	50.0	2.7%	—	8.8	41.2	.19
2017 Non-GAAP Measure	\$ 410.8	21.8%	\$ 38.0	\$ 88.2	\$ 322.0	\$ 1.47
Change Non-GAAP Measure	\$ 49.9	(100)bp	\$ 8.3	\$ (2.9)	\$ 72.6	\$ .32
% Change Non-GAAP Measure	12%		22 %	(3)%	23 %	22 %

<sup>(A)</sup> Operating margin is calculated by dividing operating income by sales.

<sup>(B)</sup> For additional information on the impact of the U.S. Tax Cuts and Jobs Act, including our equity affiliate impact, refer to Note 17, Income Taxes.

## ADJUSTED EBITDA

We define Adjusted EBITDA as income from continuing operations (including noncontrolling interests) excluding certain disclosed items, which the Company does not believe to be indicative of underlying business trends, before interest expense, other non-operating income (expense), net, income tax provision, and depreciation and amortization expense. Adjusted EBITDA provides a useful metric for management to assess operating performance.

Below is a reconciliation of Income from Continuing Operations on a GAAP basis to Adjusted EBITDA:

	Three Months Ended	
	31 December	
	2017	2016
<b>Income from Continuing Operations<sup>(A)</sup></b>	\$ 162.7	\$ 258.2
Add: Interest expense	29.8	29.5
Less: Other non-operating income (expense), net	9.8	(.2)
Add: Income tax provision <sup>(B)</sup>	291.8	78.4
Add: Depreciation and amortization	227.9	206.1
Add: Business separation costs	—	32.5
Add: Cost reduction and asset actions	—	50.0
Add: Tax reform repatriation - equity method investment <sup>(B)</sup>	32.5	—
<b>Adjusted EBITDA</b>	\$ 734.9	\$ 654.9
<b>Change GAAP</b>		
Income from continuing operations change	\$ (95.5)	
Income from continuing operations % change	(37)%	
<b>Change Non-GAAP</b>		
Adjusted EBITDA change	\$ 80.0	
Adjusted EBITDA % change	12 %	

<sup>(A)</sup> Includes net income attributable to noncontrolling interests.

<sup>(B)</sup> For additional information on the impact of the U.S. Tax Cuts and Jobs Act, including our equity affiliate impact, refer to Note 17, Income Taxes, to the consolidated financial statements.

Below is a reconciliation of segment operating income to Adjusted EBITDA:

	Industrial Gases— Americas	Industrial Gases— EMEA	Industrial Gases— Asia	Industrial Gases— Global	Corporate and other	Segment Total
<b>GAAP MEASURE</b>						
<b>Three Months Ended 31 December 2017</b>						
Operating income (loss)	\$ 217.2	\$ 104.5	\$ 175.5	\$ 9.5	\$ (46.0)	\$ 460.7
Operating margin	23.9 %	20.3%	27.3%			20.8%
<b>Three Months Ended 31 December 2016</b>						
Operating income (loss)	\$ 223.3	\$ 90.0	\$ 118.4	\$ 8.2	\$ (29.1)	\$ 410.8
Operating margin	25.8 %	22.5%	27.0%			21.8%
Operating income (loss) change	\$ (6.1)	\$ 14.5	\$ 57.1	\$ 1.3	\$ (16.9)	\$ 49.9
Operating income (loss) % change	(3)%	16%	48%	16%	(58)%	12%
Operating margin change	(190) bp	(220) bp	30 bp			(100) bp
<b>NON-GAAP MEASURE</b>						
<b>Three Months Ended 31 December 2017</b>						
Operating income (loss)	\$ 217.2	\$ 104.5	\$ 175.5	\$ 9.5	\$ (46.0)	\$ 460.7
Add: Depreciation and amortization	117.8	49.1	56.8	1.6	2.6	227.9
Add: Equity affiliates' income	18.6	13.1	14.2	.4	—	46.3
Adjusted EBITDA	\$ 353.6	\$ 166.7	\$ 246.5	\$ 11.5	\$ (43.4)	\$ 734.9
Adjusted EBITDA margin	38.9 %	32.3%	38.3%			33.2%
<b>Three Months Ended 31 December 2016</b>						
Operating income (loss)	\$ 223.3	\$ 90.0	\$ 118.4	\$ 8.2	\$ (29.1)	\$ 410.8
Add: Depreciation and amortization	111.8	42.2	46.7	2.0	3.4	206.1
Add: Equity affiliates' income	14.7	9.5	13.5	.3	—	38.0
Adjusted EBITDA	\$ 349.8	\$ 141.7	\$ 178.6	\$ 10.5	\$ (25.7)	\$ 654.9
Adjusted EBITDA margin	40.5 %	35.5%	40.7%			34.8%
Adjusted EBITDA change	\$ 3.8	\$ 25.0	\$ 67.9	\$ 1.0	\$ (17.7)	\$ 80.0
Adjusted EBITDA % change	1 %	18%	38%	10%	(69)%	12%
Adjusted EBITDA margin change	(160) bp	(320) bp	(240) bp			(160) bp

Below is a reconciliation of segment total operating income to consolidated operating income:

<b>Operating Income</b>	Three Months Ended 31 December	
	2017	2016
Segment total	\$ 460.7	\$ 410.8
Business separation costs	—	(32.5)
Cost reduction and asset actions	—	(50.0)
<b>Consolidated Total</b>	<b>\$ 460.7</b>	<b>\$ 328.3</b>

Below is a reconciliation of segment total equity affiliates' income to consolidated equity affiliates' income:

Equity Affiliates' Income	Three Months Ended 31 December	
	2017	2016
Segment total	\$ 46.3	\$ 38.0
Tax reform repatriation - equity method investment <sup>(A)</sup>	(32.5)	—
<b>Consolidated Total</b>	<b>\$ 13.8</b>	<b>\$ 38.0</b>

<sup>(A)</sup> For additional information on the impact of the U.S. Tax Cuts and Jobs Act, including our equity affiliate impact, refer to Note 17, Income Taxes, to the consolidated financial statements.

## INCOME TAXES

The tax impact on our pre-tax non-GAAP adjustments reflects the expected current and deferred income tax expense impact of the transactions and is impacted primarily by the statutory tax rate of the various relevant jurisdictions and the taxability of the adjustments in those jurisdictions. For additional discussion on the impacts of the U.S. Tax Cuts and Jobs Act, refer to Note 17, Income Taxes, to the consolidated financial statements.

	Effective Tax Rate	
	Three Months Ended 31 December	
	2017	2016
<b>Income Tax Provision—GAAP</b>	<b>\$ 291.8</b>	<b>\$ 78.4</b>
<b>Income From Continuing Operations Before Taxes—GAAP</b>	<b>\$ 454.5</b>	<b>\$ 336.6</b>
<b>Effective Tax Rate—GAAP</b>	<b>64.2%</b>	<b>23.3%</b>
Income Tax Provision—GAAP	\$ 291.8	\$ 78.4
Business separation costs	—	3.7
Tax costs associated with business separation	—	(2.7)
Cost reduction and asset actions	—	8.8
Tax reform repatriation	(420.5)	—
Tax reform rate change and other	214.0	—
<b>Income Tax Provision—Non-GAAP Measure</b>	<b>\$ 85.3</b>	<b>\$ 88.2</b>
Income From Continuing Operations Before Taxes—GAAP	\$ 454.5	\$ 336.6
Business separation costs	—	30.2
Cost reduction and asset actions	—	50.0
Tax reform repatriation - equity method investment	32.5	—
<b>Income From Continuing Operations Before Taxes—Non-GAAP Measure</b>	<b>\$ 487.0</b>	<b>\$ 416.8</b>
<b>Effective Tax Rate—Non-GAAP Measure</b>	<b>17.5%</b>	<b>21.2%</b>

## PENSION BENEFITS

As noted in Note 2, New Accounting Guidance, to the consolidated financial statements, we early adopted guidance on the presentation of net periodic pension and postretirement benefit cost during the first quarter of fiscal year 2018. The amendments require that the service cost component of the net periodic benefit cost be presented in the same line items as other compensation costs arising from services rendered by employees during the period. The non-service related costs are presented outside of operating income in "Other non-operating income (expense), net."

For the three months ended 31 December 2017 and 2016, total net periodic pension cost was \$12.4 and \$18.6, respectively. We recognized service-related costs of \$13.2 and \$19.0, respectively, on our consolidated income statements within operating income of continuing operations. The non-service benefits of \$.8 and \$.4 were included in "Other non-operating income (expense), net" for the three months ended 31 December 2017 and 2016, respectively. The decrease in pension expense in fiscal year 2018 results from lower loss amortization primarily due to favorable asset experience and the effects of the disposition of the former Materials Technologies segment. The costs capitalized in fiscal year 2018 and 2017 were not material.

For the three months ended 31 December 2017 and 2016, we recognized a pension settlement loss of \$1.8 and a gain of \$2.3, respectively, in "Other non-operating income (expense), net" on our consolidated income statements to accelerate recognition of a portion of actuarial gains and losses deferred in accumulated other comprehensive loss. The pension settlement loss in fiscal year 2018 was associated with the U.S. Supplementary Pension Plan. The pension settlement gain in fiscal year 2017 resulted from the disposition of the former Materials Technologies segment. We expect total pension settlement losses of approximately \$5 in fiscal year 2018.

Management considers various factors when making pension funding decisions, including tax, cash flow, and regulatory implications. For the three months ended 31 December 2017 and 2016, our cash contributions to funded pension plans and benefit payments under unfunded pension plans were \$27.4 and \$24.9, respectively. Total contributions for fiscal 2018 are expected to be approximately \$50 to \$70. During fiscal 2017, total contributions were \$64.1.

Refer to Note 11, Retirement Benefits, to the consolidated financial statements for details on pension cost and cash contributions.

## LIQUIDITY AND CAPITAL RESOURCES

We have consistent access to commercial paper markets, and our cash balance and cash flows from operations and financing activities are expected to meet liquidity needs for the foreseeable future.

As of 31 December 2017, we had \$1,396.9 of foreign cash and cash items compared to total cash and cash items of \$2,722.6. As a result of the U.S. tax reform, we currently do not expect that a significant portion of the earnings of our foreign subsidiaries and affiliates will be subject to U.S. income tax upon subsequent repatriation to the United States. Depending on the country in which the subsidiaries and affiliates reside, the repatriation of these earnings may be subject to foreign withholding and other taxes.

### Operating Activities

For the first three months of 2018, cash provided by operating activities was \$564.1. Income from continuing operations of \$155.6 was adjusted for items including depreciation and amortization, deferred income taxes, impacts from the U.S. Tax Cuts and Jobs Act, undistributed earnings of unconsolidated affiliates, share-based compensation, and noncurrent capital lease receivables. The tax reform repatriation adjustment of \$310.3 represents our obligation for the deemed repatriation tax resulting from U.S. tax reform and is payable over a period of eight years. Undistributed earnings of unconsolidated affiliates includes \$32.5 of expense resulting from the U.S. Tax Cuts and Jobs Act. See Note 17, Income Taxes, to the consolidated financial statements for additional information. The working capital accounts were a use of cash of \$126.8, primarily driven by \$113.5 from payables and accrued liabilities and \$34.2 from trade receivables. The use of cash in payables and accrued liabilities included a \$39.3 decrease in accrued incentive compensation due to payments on the 2017 plan and \$13.5 of severance actions.

For the first three months of 2017, cash provided by operating activities was \$574.3. Income from continuing operations of \$251.6 included the noncash write-down of an air separation unit in the Industrial Gases – EMEA segment that was constructed mainly to provide oxygen to one of the Energy-from-Waste plants. Other adjustments included depreciation and amortization, deferred income taxes, share-based compensation, noncurrent capital lease receivables, and undistributed earnings of unconsolidated affiliates. The working capital accounts were a source of cash of \$64.4, which was primarily driven by a decrease in trade receivables of \$42.3 and other working capital of \$31.6. The decrease in trade receivables includes collections from our joint venture in Jazan, Saudi Arabia. The source of cash from other working capital was primarily due to a decrease in prepaid income taxes.

We estimate that cash paid for taxes, net of refunds, on a continuing operations basis were \$61.0 and \$79.7 for the three months ended 31 December 2017 and 2016, respectively.



## Investing Activities

For the first three months of 2018, cash used for investing activities was \$484.9. Capital expenditures for plant and equipment were \$256.6. We completed three acquisitions with an aggregate purchase price, net of cash acquired, of \$237.1. See Note 6, Business Combinations, to the consolidated financial statements for further details.

For the first three months of 2017, cash used for investing activities was \$238.1, primarily driven by capital expenditures for plant and equipment of \$239.2.

Capital expenditures are detailed in the table below:

	Three Months Ended	
	31 December	
	2017	2016
Additions to plant and equipment	\$256.6	\$239.2
Acquisitions, less cash acquired	237.1	—
Investment in and advances to unconsolidated affiliates	—	8.8
Capital expenditures on a GAAP basis	\$493.7	\$248.0
Capital lease expenditures <sup>(A)</sup>	6.4	4.0
Capital expenditures on a Non-GAAP basis	\$500.1	\$252.0

<sup>(A)</sup> We utilize a non-GAAP measure in the computation of capital expenditures and include spending associated with facilities accounted for as capital leases. Certain contracts associated with facilities that are built to provide product to a specific customer are required to be accounted for as leases, and such spending is reflected as a use of cash within cash provided by operating activities if the arrangement qualifies as a capital lease. The presentation of this non-GAAP measure is intended to enhance the usefulness of information by providing a measure that our management uses internally to evaluate and manage our expenditures.

We expect capital expenditures of approximately \$1,200 to \$1,400 on a GAAP and non-GAAP basis in fiscal year 2018. This range excludes possible acquisitions and our previously announced agreement to form a joint venture, Air Products Lu'an (Changzhi) Co., Ltd., with Lu'An Clean Energy Company.

Sales backlog represents our estimate of revenue to be recognized in the future on sale of equipment orders and related process technologies that are under firm contracts. The sales backlog for the Company at 31 December 2017 was \$405, compared to \$481 at 30 September 2017.

## Financing Activities

For the first three months of 2018, cash used for financing activities was \$641.1. This consisted primarily of repayment on long-term debt of \$408.6, dividend payments to shareholders of \$207.5, and repayments of commercial paper and short-term borrowings of \$40.7. Payments on long-term debt primarily related to the repayment of a 1.2% U.S. Senior Note of \$400.0 that matured on 16 October 2017.

For the first three months of 2017, cash used for financing activities was \$974.5. This consisted primarily of repayments of commercial paper and short-term borrowings of \$772.2 and dividend payments of \$186.9.

## Financing and Capital Structure

Capital needs were satisfied primarily with cash from operations. Total debt at 31 December 2017 and 30 September 2017, expressed as a percentage of total capitalization (total debt plus total equity), was 25.4% and 28.0%, respectively. Total debt decreased from \$3,962.8 at 30 September 2017 to \$3,513.3 at 31 December 2017 primarily due to the repayment of the 1.2% U.S. Senior Note.

On 31 March 2017, we entered into a five-year \$2,500.0 revolving credit agreement with a syndicate of banks (the "2017 Credit Agreement"), under which senior unsecured debt is available to both the Company and certain of its subsidiaries. The 2017 Credit Agreement provides a source of liquidity for the Company and supports its commercial paper program. The Company's only financial covenant is a maximum ratio of total debt to total capitalization (total debt plus total equity) no greater than 70%. No borrowings were outstanding under the 2017 Credit Agreement as of 31 December 2017.

Commitments totaling \$16.0 are maintained by our foreign subsidiaries, all of which was borrowed and outstanding at 31 December 2017.

As of 31 December 2017, we were in compliance with all of the financial and other covenants under our debt agreements.

On 15 September 2011, the Board of Directors authorized the repurchase of up to \$1,000 of our outstanding common stock. During the first three months of fiscal year 2018, we did not purchase any of our outstanding shares. At 31 December 2017, \$485.3 in share repurchase authorization remained.

#### **Dividends**

On 25 January 2018, the Board of Directors declared the second quarter dividend of \$1.10 per share. The dividend is payable on 14 May 2018 to shareholders of record at the close of business on 2 April 2018.

#### **CONTRACTUAL OBLIGATIONS**

We are obligated to make future payments under various contracts, such as debt agreements, lease agreements, unconditional purchase obligations, and other long-term obligations. As discussed in Note 17, Income Taxes, to the consolidated financial statements, our income tax provision includes an expense for a deemed repatriation tax on unremitted foreign earnings resulting from the U.S. Tax Cuts and Jobs Act that was enacted during the first quarter of fiscal year 2018. Of the expense, \$297 is recorded in noncurrent liabilities and will be paid over eight years beginning in fiscal year 2019.

Other than the above, there have been no material changes to contractual obligations since 30 September 2017.

#### **COMMITMENTS AND CONTINGENCIES**

There have been no material changes to commitments and contingencies since 30 September 2017. For additional information on Litigation and Environmental matters, refer to Note 12, Commitments and Contingencies, to the consolidated financial statements in this quarterly filing.

#### **OFF-BALANCE SHEET ARRANGEMENTS**

There have been no material changes to off-balance sheet arrangements since 30 September 2017. We are not a primary beneficiary in any material variable interest entity. Our off-balance sheet arrangements are not reasonably likely to have a material impact on financial condition, changes in financial condition, results of operations, or liquidity.

#### **RELATED PARTY TRANSACTIONS**

Our principal related parties are equity affiliates operating in the industrial gas business. In 2015, we entered into a long-term sale of equipment contract to engineer, procure, and construct industrial gas facilities with a 25%-owned joint venture for Saudi Aramco's Jazan oil refinery and power plant in Saudi Arabia. The agreement included terms that are consistent with those that we believe would have been negotiated at an arm's length with an independent party. Sales related to this contract are included in the results of our Industrial Gases – Global segment and were approximately \$90 and \$110 during the three months ended 31 December 2017 and 2016, respectively.

#### **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

Management's Discussion and Analysis of our financial condition and results of operations is based on the consolidated financial statements and accompanying notes that have been prepared in accordance with GAAP. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Other than those detailed below and in Note 2, New Accounting Guidance, to the consolidated financial statements, there have been no changes in accounting policy or accounting estimate in the current period that had a significant impact on our financial condition, change in financial condition, liquidity, or results of operations.

#### **Revenue Recognition**

Revenue from equipment sale contracts is recorded primarily using the percentage-of-completion method. Changes in estimates on projects accounted for under this method did not have a material impact to operating income during the three months ended 31 December 2017. We assess the performance of our sale of equipment projects as they progress. Our earnings could be positively or negatively impacted by changes to our forecast of revenues and costs on these projects in the future.

## **Income Taxes**

On 22 December 2017, the United States enacted the U.S. Tax Cuts and Jobs Act, which had a significant impact on our consolidated financial statements for the three months ended 31 December 2017. The impacts reflect provisional amounts for which accounting was incomplete but a reasonable estimate could be determined. Updates to the estimates are permissible for a period of no greater than one year. Refer to Note 17, Income Taxes, to the consolidated financial statements for additional information.

## **NEW ACCOUNTING GUIDANCE**

See Note 2, New Accounting Guidance, to the consolidated financial statements for information concerning the implementation and impact of new accounting guidance.

## **FORWARD-LOOKING STATEMENTS**

This quarterly report contains “forward-looking statements” within the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including statements about business outlook. These forward-looking statements are based on management’s reasonable expectations and assumptions as of the date of this report. Actual performance and financial results may differ materially from projections and estimates expressed in the forward-looking statements because of many factors not anticipated by management, including, without limitation, global or regional economic conditions and supply and demand dynamics in market segments into which the Company sells; political risks, including the risks of unanticipated government actions; acts of war or terrorism; significant fluctuations in interest rates and foreign currencies from that currently anticipated; future financial and operating performance of major customers; unanticipated contract terminations or customer cancellations or postponement of projects and sales; our ability to execute the projects in our backlog; asset impairments due to economic conditions or specific events; the impact of price fluctuations in natural gas and disruptions in markets and the economy due to oil price volatility; costs and outcomes of litigation or regulatory investigations; the success of productivity and operational improvement programs; the timing, impact, and other uncertainties of future acquisitions or divestitures, including reputational impacts; the Company’s ability to implement and operate with new technologies; the impact of changes in environmental, tax or other legislation, economic sanctions and regulatory activities in jurisdictions in which the Company and its affiliates operate; and other risk factors described in the Company’s Form 10-K for its fiscal year ended 30 September 2017. The Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements contained in this report to reflect any change in the Company’s assumptions, beliefs or expectations or any change in events, conditions, or circumstances upon which any such forward-looking statements are based.

## **Item 3. Quantitative and Qualitative Disclosures About Market Risk**

Information on our utilization of financial instruments and an analysis of the sensitivity of these instruments to selected changes in market rates and prices is included in our 2017 Form 10-K.

The net financial instrument position decreased from a liability of \$3,832.3 at 30 September 2017 to a liability of \$3,472.2 at 31 December 2017. The decrease was due primarily to the repayment of long-term debt.

### **Interest Rate Risk**

There were no material changes to the sensitivity analysis related to the fixed portion of our debt portfolio since 30 September 2017.

There were no material changes to the sensitivity analysis related to the variable portion of our debt portfolio since 30 September 2017.

### **Foreign Currency Exchange Rate Risk**

The sensitivity analysis related to foreign currency exchange rates assumes an instantaneous 10% change in the foreign currency exchange rates from their levels at period end, with all other variables held constant. A 10% strengthening or weakening of the functional currency of an entity versus all other currencies would result in a decrease or increase, respectively, of \$332 and \$312 in the net liability position of financial instruments at 31 December 2017 and 30 September 2017, respectively.

#### **Item 4. Controls and Procedures**

##### *Disclosure Controls and Procedures*

We maintain a comprehensive set of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Under the supervision of the Chief Executive Officer and Chief Financial Officer, the Company's management conducted an evaluation of the effectiveness of the Company's disclosure controls and procedures as of 31 December 2017. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of 31 December 2017, the disclosure controls and procedures were effective.

##### *Internal Control Over Financial Reporting*

There was no change in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended 31 December 2017 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

##### *Transition Services Agreement*

In connection with the spin-off of Versum Materials, Inc., the Company entered into a transition services agreement pursuant to which it will continue to provide information technology, systems applications, business processes, and associated internal controls to Versum to allow Versum the time to establish its own infrastructure and both companies sufficient time to physically separate their information technology applications and infrastructure. Management has established controls to mitigate the risk that personnel of either company obtain unauthorized access to the other company's data and will continue to monitor and evaluate the sufficiency of the controls. We expect all transition services to end in the second quarter of fiscal year 2018.

## **PART II. OTHER INFORMATION**

#### **Item 5. Other Information**

Not applicable.

**Item 6. Exhibits.**

(a) Exhibits required by Item 601 of Regulation S-K

Exhibit No.	Description
10.1	<a href="#">Air Products and Chemicals, Inc. Restricted Stock Unit Award Agreement for FY2018.</a>
10.2	<a href="#">Air Products and Chemicals, Inc. Performance Share Award Agreement for FY2018.</a>
10.3	<a href="#">Amended and Restated Employment Agreement, dated 14 November 2017, by and between Air Products and Chemicals, Inc. and Seifollah Ghasemi (Filed as Exhibit 10.1 to the Company's Form 8-K Report dated 14 November 2017.)</a>
10.4	<a href="#">Amended and Restated Air Products and Chemicals, Inc. Retirement Savings Plan effective 1 November 2017 with provisions effective 1 January 2018.</a>
10.5	<a href="#">Amended and Restated Air Products and Chemicals, Inc. Deferred Compensation Plan effective 1 January 2018.</a>
12.	<a href="#">Computation of Ratios of Earnings to Fixed Charges.</a>
31.1	<a href="#">Certification by the Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>
31.2	<a href="#">Certification by the Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>
32.1	<a href="#">Certification by the Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a> †
101.INS	XBRL Instance Document. The XBRL Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase

† The certification attached as Exhibit 32 that accompanies this Quarterly Report on Form 10-Q, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Air Products and Chemicals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Form 10-Q, irrespective of any general incorporation language contained in such filing.

**SIGNATURE**

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

Air Products and Chemicals, Inc.

\_\_\_\_\_  
(Registrant)

Date: 26 January 2018

By:

\_\_\_\_\_  
/s/ M. Scott Crocco

M. Scott Crocco  
Executive Vice President and Chief Financial Officer

**Air Products and Chemicals, Inc. (the "Company")  
Restricted Stock Unit Award Agreement**

Company Confidential Communication to: «Participant Name»

You have been granted a Restricted Stock Unit award under the Air Products and Chemicals, Inc. Long-Term Incentive Plan (the "Plan").

Your FY2018 award consists of «Shares Granted» 4-Year Restricted Stock Units, each Unit being equivalent in value to one share of Common Stock.

Your FY2018 Restricted Stock Unit Award is subject to and contingent upon your agreement to the conditions described in Exhibit A and the terms described in Exhibit B. Please read the conditions carefully, particularly the descriptions of the "Restrictive Covenants". This letter, together with its Exhibits, constitutes the agreement governing your FY2018 Restricted Stock Unit Award ("Award Agreement"). Your FY2018 Restricted Stock Unit Award is also at all times subject to the applicable provisions of the Long-Term Incentive Plan and to any determinations made by the Management Development and Compensation Committee of the Company's Board of Directors (the "Committee") or its delegate, with respect to your FY2018 Restricted Stock Unit Award as contemplated or permitted by the Plan or the Conditions.

Neither your FY2018 Restricted Stock Unit Award, this Award Agreement or the Plan constitute a contract of employment; nor do they guarantee your continued employment for any period required for all or any of your FY2018 Restricted Stock Unit Award to vest, become exercisable, be earned or be paid out. Except as otherwise indicated all capitalized words used in this Award Agreement have the meanings described in the Plan.

WITNESSETH the due execution of this Award Agreement at Allentown, Pennsylvania effective as of the 1<sup>st</sup> day of December 2017 intending to be legally bound hereby.

AIR PRODUCTS AND CHEMICALS, INC.

By:



Seifi Ghasemi

Exhibits

EXHIBIT A

**FY2018 AWARDS UNDER THE PLAN ARE SUBJECT TO THE FOLLOWING CONDITIONS:**

In the event the Company determines, in its sole discretion, that you have violated the Restrictive Covenants set forth in Paragraph 1, at any time during your employment, or within two years after termination of your employment from the Company or any Subsidiary, the Company shall be entitled to (i) preliminary and permanent injunctive relief, without the necessity of providing actual damages or posting of a bond, (ii) damages equal to an equitable accounting of all earnings, profits and other benefits arising from such violation of Paragraph 1 and (iii) subject to the requirements of Section 409A of the Internal Revenue Code, cancel, not deliver, modify, rescind, suspend, withhold, or otherwise limit or restrict any unexpired, unpaid, unexercised or deferred Awards outstanding under the Plan, and any exercise, payment or delivery of an Award or shares of Company Common Stock pursuant to an Award may be recouped by the Company within two years after such exercise, payment or delivery. In the event of any such reversion, you shall pay to the Company the amount of any gain realized or payment received as a result of the exercise, payment or delivery, in such manner and on such terms as may be required by the Company, and the Company shall be entitled to set off against the amount of any such gain or payment any amount owed to you by the Company or any Subsidiary.

1. Restrictive Covenants.

(a) Definitions. For purposes of this Paragraph 1, the following words shall have the following definitions.

- (i) “Affiliate” of a specified Person shall mean any Person which is under common control with the specified Person, or of which the specified Person is an executive officer, manager, trustee, executor or similar controlling Person.
- (ii) “Company” shall be deemed to include Air Products and Chemicals, Inc. and the subsidiaries and Affiliates of Air Products and Chemicals, Inc.
- (iii) “Business of the Company” means the production, manufacturing and distribution of industrial gases, including atmospheric and process gases; the designing and manufacturing of equipment for the production, processing, purification distribution or storage of gases or for natural gas liquefaction; and any other line of business conducted, developed or being developed by the Company during your employment with the Company, in each case, in which you are or were involved during the course of your employment with the Company or about which you possess Confidential Information.
- (iv) “Confidential Information” means any non-public, proprietary confidential or trade secret information of the Company and/or its customers, including but not limited to, business processes, know-how, practices, methods, plans, research, operations, services, strategies, techniques, formulae, manuals, data, notes, diagrams, customer or vendor information, pricing or cost information, product plans, designs, experimental processes and inventions.
- (v) “Person” means any natural person, corporation, general partnership, limited partnership, limited liability company or partnership, joint venture, proprietorship or other business organization.
- (vi) “Provide Services” means to directly or indirectly, own, manage, control, or participate in the ownership, management or control of, or be employed or engaged by, participate in, serve on the board of directors of, consult with, contribute to, hold a security interest in, render services for, give advice to, provide assistance to or be otherwise affiliated or associated with.
- (vii) “Restricted Area” means any country in which you worked during your employment with the Company, over which you had supervisory responsibility for the Business of the Company while employed by the Company, or with respect to which you have Confidential Information pertaining to the Business of the Company.

(b) Acknowledgment.

- (i) You acknowledge and agree that (A) the Business of the Company is intensely competitive and that your employment with the Company has required you to have access to, and knowledge of, Confidential Information, which is of vital importance to the success of the Business of the Company; (B) the use, disclosure or dissemination of any Confidential Information, except on behalf of the Company, could place the Company at a serious competitive disadvantage and could do serious damage, financial and otherwise, to the Business of the Company; and (C) the Company is engaged in business, and has customers, throughout the world.
- (ii) You further understand and acknowledge that the Company invests in customer relationships and as a result, has developed and will develop considerable goodwill with and among its customers. You agree that the restrictive covenants below are necessary to protect the Company’s legitimate business interests in its Confidential Information and goodwill, and that the Company would not have provided the good and valuable consideration set forth in this Award Agreement in absence of such restrictions. You further understand and acknowledge that the Company will be irreparably harmed if you violate the restrictive covenants below.

(c) Confidential Information.

- (i) You hereby expressly acknowledge and agree that the obligations in this Award Agreement are in addition to, and shall not supersede, obligations you may have pursuant to other agreements with the Company, including, without limitation, your obligations under your Employee Patent and Confidential Information



Agreement entered at the time you were employed by the Company, which shall continue to apply in accordance with its terms.

- (ii) You agree that you have and will at all times hereafter, (A) treat all Confidential Information as strictly confidential; and (B) not directly or indirectly disclose, publish, communicate or make available Confidential Information, or allow it to be disclosed, published, communicated, or made available, in whole or part, to any Person who is not authorized by the Company to know such Confidential Information in the furtherance of the Company's business.
- (d) Non-Disparagement. You agree not to directly or indirectly make, or cause to be made, any statement, observation or opinion that disparages or impugns the business or reputation of the Company, its products, services, agents or employees.
- (e) Permitted Disclosures. Pursuant to 18 U.S.C. § 1833(b), you understand that you will not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret of the Company that (i) is made (A) in confidence to a Federal, State, or local government official, either directly or indirectly, or to your attorney and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding. You understand that if you file a lawsuit for retaliation by the Company for reporting a suspected violation of law, you may disclose the trade secret to your attorney and use the trade secret information in the court proceeding if you (I) file any document containing the trade secret under seal, and (II) do not disclose the trade secret, except pursuant to court order. Nothing in this Award Agreement, or any other agreement you have with the Company, is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by such section. Further, nothing in this Award Agreement or any other agreement you have with the Company shall prohibit or restrict you from making any disclosure of information or documents to any governmental agency or legislative body, or any self-regulatory organization, in each case, without advance notice to the Company.
- (f) Return of Company Property. You represent that upon request from the Company at any time and, without request, upon termination of your employment with the Company for any reason, you will deliver to the Company all memoranda, notes, records, manuals, or other documents, including all electronic or other copies of such materials and all documentation prepared or produced in connection therewith, containing Confidential Information, which is in your possession, custody and control, whether made or compiled by you or furnished to you by virtue of your employment with the Company. You further represent that you will deliver to the Company all vehicles, computers, credit cards, telephones, handheld electronic devices, office equipment and other property furnished to you by virtue of your employment with the Company.
- (g) Notice. You agree that during your employment with the Company and for two years after your employment with the Company terminates for any reason, you will give the Company ten (10) business days' written notice of your intention to Provide Services to any other Person that engages in or is preparing to engage in the Business of the Company within the Restricted Area. Such written notice must provide sufficiently detailed information so as to allow the Company to determine if you will be in breach of this Award Agreement if you Provide Services to such other Person.
- (h) Non-Competition. During your employment by the Company and for two years after your employment with the Company terminates for any reason, you agree that you will not Provide Services to any Person, other than the Company, that engages in or is preparing to engage in the Business of the Company within the Restricted Area, unless (i) such other Person also engages in lines of business that are separate, distinct and divisible from the Business of the Company, (ii) you do not Provide Services, Confidential Information or strategy to the Business of the Company conducted by such other Person, and (iii) you do not attend meetings where the Business of the Company of such other Person is discussed or where you could, even inadvertently, disclose Confidential Information. Your passive ownership of not more than one percent (1%) of the capital stock or other ownership or equity interest, or voting power, in a public company, registered under the Securities Exchange Act of 1934, as amended, shall not be deemed to be a violation of this paragraph.
- (i) Non-Solicitation; Non-Interference. During your employment by the Company and for two years after your last day of employment with the Company, you also agree that you will not, directly or indirectly without the prior written consent of the Company:
  - (i) encourage, persuade, induce, or attempt to encourage or persuade or induce, any person who is an employee

at the grade level of 118 or above, an officer, or a director of the Company, in each case, to terminate such relationship with the Company; or hire or engage, participate in the hiring or engagement of, or solicit or make an offer of employment or engagement to any employee at the grade level of 118 or above, officer or director of the Company who was employed or engaged by the Company as of your last day of employment with the Company.

- (ii) on behalf of any Person engaged in the Business of the Company (other than the Company) solicit, contact, or attempt to solicit or contact any current, former or prospective customer of the Company whom you had contacted within the twenty-four (24) months prior to your last day of employment with the Company or about whom you have any Confidential Information.
- (iii) encourage or persuade, or attempt to encourage or persuade any (A) customer of the Company, (B) potential customer of the Company during the last twenty-four (24) months of your employment with the Company with which or with whom you knew to be such a potential customer, or (C) prior customer of the Company, in each case, not to do business with the Company or to reduce the amount of business it is doing or might do in the future with or through the Company.

(j) Tolling. If you violate any of the terms of the restrictive covenant obligations articulated herein, the obligation at issue will run from the first date on which you cease to be in violation of such obligation.

(k) Successors and Assigns. This Paragraph 1 shall inure to the benefit of the successors and assigns of the Company and therefore the Company may assign this Paragraph 1, without your consent to, including but not limited to, any of its subsidiaries or affiliates or to any successor (whether by merger, purchase, bankruptcy, reorganization or otherwise) to all or substantially all of the equity, assets or businesses of the Company.

2. Interpretation. All determinations regarding the interpretation, construction, enforcement, waiver, or modification of this Award Agreement and/or the Plan shall be made in the Company's sole discretion and shall be final and binding on you and the Company. Determinations made under this Award Agreement and the Plan need not be uniform and may be made selectively among individuals, whether or not such individuals are similarly situated.
3. Conflict. If any of the terms of this Award Agreement in the opinion of the Company conflict or are inconsistent with any applicable law or regulation of any governmental agency having jurisdiction, the Company reserves the right to modify this Award Agreement to be consistent with applicable laws or regulations.
4. Personal Data. You understand and acknowledge that the Company holds certain personal information about you, including but not limited to your name, home address, telephone number, date of birth, social security number, salary, nationality, job title, and details of all Shares awarded, cancelled, vested, unvested, or outstanding (the "personal data"). Certain personal data may also constitute "sensitive personal data" within the meaning of applicable local law. Such data include but are not limited to the information provided above and any changes thereto and other appropriate personal and financial data about you. You hereby provide explicit consent to the Company and any Subsidiary to process any such personal data and sensitive personal data. You also hereby provide explicit consent to the Company and any Subsidiary to transfer any such personal data and sensitive personal data outside the country in which you are employed, and to the United States. The legal persons for whom such personal data are intended are the Company and any third party providing services to the Company in connection with the administration of the Plan.
5. Plan Documents. By accepting this award, you acknowledge having received and read the Plan Prospectus, and you consent to receiving information and materials in connection with this Award or any subsequent awards under the Company's long-term performance plans, including without limitation any prospectuses and plan documents, by any means of electronic delivery available now and/or in the future (including without limitation by e-mail, by Website access, and/or by facsimile), such consent to remain in effect unless and until revoked in writing by you. This Award Agreement and the Plan, which is incorporated herein by reference, constitute the entire agreement between you and the Company regarding the terms and conditions of this Award.
6. Jurisdiction; Governing Law. The parties agree that upon any violation of this Award Agreement, suit may be brought, and the parties consent to personal jurisdiction, in the United States District Court for the Eastern District of Pennsylvania, or in any court of general jurisdiction in Allentown, Pennsylvania; the parties consent to the non-exclusive jurisdiction of any such court in any such suit, action or proceeding; and waive any objection which either party may have to the laying of venue of any such suit, action or proceeding in any such court. This Award Agreement shall be governed by and construed

in accordance with the laws of the Commonwealth of Pennsylvania without reference to its principles of conflict of law. The parties also irrevocably and unconditionally consents to the service of any process, pleadings, notices, or other papers with respect thereto. EACH PARTY HERETO IRREVOCABLY AGREES TO WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING, CLAIM, OR COUNTERCLAIM BROUGHT BY OR ON BEHALF OF ANY PARTY RELATED TO OR ARISING OUT OF THIS AWARD AGREEMENT.

7. **Modification; Severability.** If any court of competent jurisdiction finds any provision of this Award Agreement, and particularly the covenants set forth in Paragraph 1, or portion thereof, to not be fully enforceable, it is the intention and desire of the parties that the provision be fully enforced to the extent the court finds them enforceable and, if necessary, that the court modify any provisions of this Award Agreement to the extent deemed necessary by the court to render them reasonable and enforceable and that the court enforce them to such extent. To the extent that such provisions cannot be modified, it is the intention of the parties that the provisions be severable and that the invalidity of any one or more provisions of this Award Agreement shall not affect the legality, validity and enforceability of the remaining provisions of this Award Agreement. If Paragraph 1 is unenforceable in its entirety, then this Award Agreement shall be considered null and void *ab initio*.
8. **Waiver.** The failure of the Company to enforce any terms, provisions or covenants of this Exhibit shall not be construed as a waiver of the same or of the right of the Company to enforce the same. Waiver by the Company of any breach or default by you of any term or provision of this Exhibit shall not operate as a waiver of any other breach or default.
9. **No Contract.** Neither your FY2018 Restricted Stock Unit Awards, this Award Agreement, nor the Plan constitute a contract of employment; nor do they guarantee your continued employment for any period required for all or any of your Awards to vest or become exercisable.
- 10.

## EXHIBIT B

### RESTRICTED STOCK UNITS

**Grant of Restricted Stock Units.** Restricted Stock Units (“Units”) are granted to you subject to the terms of the Air Products and Chemicals, Inc. Long-Term Incentive Plan as amended and restated on 1 October 2014 and as amended from time to time thereafter and the conditions described below. All capitalized terms have the meaning ascribed to them in the Plan unless otherwise noted. The Units are “Deferred Stock Units” as described in Section 9 of the Plan. The Deferral Period for Units begins on 1 December 2017 and ends on 1 December 2021.

**Payment of Restricted Stock Units.** Each Unit granted to you represents the value of one share of Common Stock. Payment in respect of the Units will be delivered in shares of Common Stock or cash as determined by the Committee or its delegate, as soon as administratively practical following the end of the Deferral Period (but in no event later than 60 days thereafter) or at such other time as is specified below.

**Dividends.** No cash dividends or other amounts shall be payable with respect to the Units during the Deferral Period. At the end of the Deferral Period, for each Unit that has not been forfeited, you will also be entitled to receive a cash payment equal to the dividends which would have been paid with respect to a share of Company Common Stock during the Deferral Period (“Dividend Equivalents”).

**Termination of Employment.** Except as provided below, if your employment by the Company and all of its affiliates is terminated for any reason prior to 1 December 2018, all of your Units will be automatically forfeited in their entirety. If your employment by the Company and all its affiliates terminates on or after 1 December 2018, but during the Deferral Period, other than due to death, Disability, Retirement or termination by the Company without Cause (an “Involuntary Termination”), all of your Units will be automatically forfeited in their entirety.

If your employment by the Company and all its affiliates is terminated on or after 1 December 2018, but during the Deferral Period, due to death, Disability, or Retirement, you will vest in all of your Units. If your employment is terminated at any time during the Deferral Period due to Involuntary Termination and you execute a general release of claims in favor of the Company within 50 days following your termination in a form satisfactory to the Administrator (a “Release”), you will vest in a pro-rata portion of your Units (which portion shall be based on the number of full months you worked during the Deferral Period) and all of your remaining Units will be forfeited. If you do not execute a Release, all of your Units will be automatically forfeited in their entirety. For purposes of this paragraph, an Involuntary Termination occurring prior to 1 December 2018 which is also a Retirement shall be

treated as an Involuntary Termination; an Involuntary Termination occurring on or after 1 December 2018 which is also a Retirement shall be treated as a Retirement.

In the event of your termination of employment due to Disability or Retirement prior to the end of the Deferral Period, payment in respect of the Units due to you and of related Dividend Equivalents shall be made as soon as administratively practical following the end of the Deferral Period (but in no event later than 60 days thereafter).

If your employment by the Company and all its affiliates terminates during the Deferral Period due to Involuntary Termination, payment in respect of Units that have not been forfeited and of related Dividend Equivalents shall be made as soon as administratively practical following your termination (but in no event later than 60 days thereafter).

If your employment by the Company and all its affiliates terminates during the deferral period due to death, payment in respect of Units due to you and of related Dividend Equivalents shall be made as soon as practicable following your death (but in no event later than 60 days thereafter) to your Designated Beneficiary or, if none, your legal representative.

Notwithstanding anything to the contrary above, if your employment by the Company and its affiliates is terminated and such termination constitutes a "Termination of Employment" within the meaning of the Air Products and Chemicals, Inc. Executive Separation Program (the "Program") and the Administrator of the Program determines you are entitled to the benefits of the Program, your outstanding Awards under this Agreement shall be treated in accordance with the Program.

Recoupment. Notwithstanding anything to the contrary above, any Units and any related Dividend Equivalents paid to you may be recouped by the Company within three years of their payment in the event that: (i) the payment of such Units is predicated upon the achievement of financial results that are subsequently the subject of a restatement; (ii) the Committee determines in its sole discretion that you engaged in misconduct that caused or partially caused the need for the restatement; and (iii) the Units would not have been paid or a lesser amount of Units would have been paid based upon the restated financial results. In the event of any such recoupment, you shall pay to the Company the amount of any gain realized or payment received as a result of any recouped payment, in such manner and on such terms as may be required, and the Company shall be entitled to reduce any amount owed to you by the Company or any Subsidiary by such gain or payment.

Notwithstanding any other provisions of this Award Agreement, in the event the Company is required to prepare an accounting restatement due to its material noncompliance with any financial reporting requirement, the Company may recover from you any amounts or awards which it is required to recover under Section 10D of the Securities Exchange Act of 1934 or any other applicable law or securities exchange listing standard.

Taxes. The Company shall have the right to deduct from all Awards hereunder paid or any payment in respect of an Award, any federal, state, local or foreign taxes required or permitted by law to be withheld. In the case of a payment in respect of Units made in Common Stock, the Company shall reduce number of the shares of Common Stock to be distributed by an amount with a value equal to the value of such taxes required or permitted to be withheld.

Adjustments. In the event of any change in the outstanding shares of Common Stock of the Company or the occurrence of certain other events as described in Section 12 of the Plan, an equitable adjustment of the number of Units covered by this Award Agreement shall be made as provided in the Plan.

**Air Products and Chemicals, Inc. (the "Company")  
Performance Share Award Agreement**

Company Confidential Communication to: «Participant Name»

You have been granted a Performance Share award under the Air Products and Chemicals, Inc. Long-Term Incentive Plan (the "Plan").

Your FY2018 award consists of «Shares Granted» Deferred Stock Units with a three year performance period, each Unit (a "Performance Share") being equivalent in value to one share of Common Stock.

Your FY2018 Performance Share Award is subject to and contingent upon your agreement to the conditions described in Exhibit A and the terms described in Exhibit B. Please read the conditions carefully, particularly the descriptions of "Restrictive Covenants". This letter, together with its Exhibits, constitutes the agreement governing your FY2018 Performance Share Award ("Award Agreement"). Your FY2018 Performance Share Award is also at all times subject to the applicable provisions of the Long-Term Incentive Plan and to any determinations made by the Management Development and Compensation Committee of the Company's Board of Directors (the "Committee") or its delegate, with respect to your FY2018 Performance Share Award as contemplated or permitted by the Plan or the Conditions.

Neither your FY2018 Performance Share Award, this Award Agreement or the Plan constitute a contract of employment; nor do they guarantee your continued employment for any period required for all or any of your FY2018 Performance Share Award to vest, become exercisable, be earned or be paid out. Except as otherwise indicated all capitalized words used in this Award Agreement have the meanings described in the Plan.

WITNESSETH the due execution of this Award Agreement effective as of the 1<sup>st</sup> day of December 2017 intending to be legally bound hereby.

AIR PRODUCTS AND CHEMICALS, INC.

By:



Seifi Ghasemi

Exhibits

EXHIBIT A

**FY2018 AWARDS UNDER THE PLAN ARE SUBJECT TO THE FOLLOWING CONDITIONS:**

In the event the Company determines, in its sole discretion, that you have violated the Restrictive Covenants set forth in Paragraph 1, at any time during your employment, or within two years after termination of your employment from the Company or any Subsidiary, the Company shall be entitled to (i) preliminary and permanent injunctive relief, without the necessity of providing actual damages or posting of a bond, (ii) damages equal to an equitable accounting of all earnings, profits and other benefits arising from such violation of Paragraph 1 and (iii) subject to the requirements of Section 409A of the Internal Revenue Code, cancel, not deliver, modify, rescind, suspend, withhold, or otherwise limit or restrict any unexpired, unpaid, unexercised or deferred Awards outstanding under the Plan, and any exercise, payment or delivery of an Award or shares of Company Common Stock pursuant to an Award may be recouped by the Company within two years after such exercise, payment or delivery. In the event of any such reversion, you shall pay to the Company the amount of any gain realized or payment received as a result of the exercise, payment or delivery, in such manner and on such terms as may be required by the Company, and the Company shall be entitled to set off against the amount of any such gain or payment any amount owed to you by the Company or any Subsidiary.

1. Restrictive Covenants.

(a) Definitions. For purposes of this Paragraph 1, the following words shall have the following definitions.

- (i) “Affiliate” of a specified Person shall mean any Person which is under common control with the specified Person, or of which the specified Person is an executive officer, manager, trustee, executor or similar controlling Person.
- (ii) “Company” shall be deemed to include Air Products and Chemicals, Inc. and the subsidiaries and Affiliates of Air Products and Chemicals, Inc.
- (iii) “Business of the Company” means the production, manufacturing and distribution of industrial gases, including atmospheric and process gases; the designing and manufacturing of equipment for the production, processing, purification distribution or storage of gases or for natural gas liquefaction; and any other line of business conducted, developed or being developed by the Company during your employment with the Company, in each case, in which you are or were involved during the course of your employment with the Company or about which you possess Confidential Information.
- (iv) “Confidential Information” means any non-public, proprietary confidential or trade secret information of the Company and/or its customers, including but not limited to, business processes, know-how, practices, methods, plans, research, operations, services, strategies, techniques, formulae, manuals, data, notes, diagrams, customer or vendor information, pricing or cost information, product plans, designs, experimental processes and inventions.
- (v) “Person” means any natural person, corporation, general partnership, limited partnership, limited liability company or partnership, joint venture, proprietorship or other business organization.
- (vi) “Provide Services” means to directly or indirectly, own, manage, control, or participate in the ownership, management or control of, or be employed or engaged by, participate in, serve on the board of directors of, consult with, contribute to, hold a security interest in, render services for, give advice to, provide assistance to or be otherwise affiliated or associated with.
- (vii) “Restricted Area” means any country in which you worked during your employment with the Company, over which you had supervisory responsibility for the Business of the Company while employed by the Company, or with respect to which you have Confidential Information pertaining to the Business of the Company.

(b) Acknowledgment.

- (i) You acknowledge and agree that (A) the Business of the Company is intensely competitive and that your employment with the Company has required you to have access to, and knowledge of, Confidential Information, which is of vital importance to the success of the Business of the Company; (B) the use, disclosure or dissemination of any Confidential Information, except on behalf of the Company, could place the Company at a serious competitive disadvantage and could do serious damage, financial and otherwise, to the Business of the Company; and (C) the Company is engaged in business, and has customers, throughout the world.
- (ii) You further understand and acknowledge that the Company invests in customer relationships and as a result, has developed and will develop considerable goodwill with and among its customers. You agree that the restrictive covenants below are necessary to protect the Company’s legitimate business interests in its Confidential Information and goodwill, and that the Company would not have provided the good and valuable consideration set forth in this Award Agreement in absence of such restrictions. You further understand and acknowledge that the Company will be irreparably harmed if you violate the restrictive covenants below.

(c) Confidential Information.

- (i) You hereby expressly acknowledge and agree that the obligations in this Award Agreement are in addition to, and shall not supersede, the obligations you may have pursuant to other agreements with the Company, including, without limitation, your obligations under your Employee Patent and Confidential Information

Agreement, entered when you were employed by the Company, which shall continue to apply in accordance with its terms.

- (ii) You agree that you have and will at all times hereafter, (A) treat all Confidential Information as strictly confidential; and (B) not directly or indirectly disclose, publish, communicate or make available Confidential Information, or allow it to be disclosed, published, communicated, or made available, in whole or part, to any Person who is not authorized by the Company to know such Confidential Information in the furtherance of the Company's business.
- (d) Non-Disparagement. You agree not to directly or indirectly make, or cause to be made, any statement, observation or opinion that disparages or impugns the business or reputation of the Company, its products, services, agents or employees.
- (e) Permitted Disclosures. Pursuant to 18 U.S.C. § 1833(b), you understand that you will not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret of the Company that (i) is made (A) in confidence to a Federal, State, or local government official, either directly or indirectly, or to your attorney and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding. You understand that if you file a lawsuit for retaliation by the Company for reporting a suspected violation of law, you may disclose the trade secret to your attorney and use the trade secret information in the court proceeding if you (I) file any document containing the trade secret under seal, and (II) do not disclose the trade secret, except pursuant to court order. Nothing in this Award Agreement, or any other agreement you have with the Company, is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by such section. Further, nothing in this Award Agreement or any other agreement you have with the Company shall prohibit or restrict you from making any disclosure of information or documents to any governmental agency or legislative body, or any self-regulatory organization, in each case, without advance notice to the Company.
- (f) Return of Company Property. You represent that upon request from the Company at any time and, without request, upon termination of your employment with the Company for any reason, you will deliver to the Company all memoranda, notes, records, manuals, or other documents, including all electronic or other copies of such materials and all documentation prepared or produced in connection therewith, containing Confidential Information, which is in your possession, custody and control, whether made or compiled by you or furnished to you by virtue of your employment with the Company. You further represent that you will deliver to the Company all vehicles, computers, credit cards, telephones, handheld electronic devices, office equipment and other property furnished to you by virtue of your employment with the Company.
- (g) Notice. You agree that during your employment with the Company and for two years after your employment with the Company terminates for any reason, you will give the Company ten (10) business days' written notice of your intention to Provide Services to any other Person that engages in or is preparing to engage in the Business of the Company within the Restricted Area. Such written notice must provide sufficiently detailed information so as to allow the Company to determine if you will be in breach of this Award Agreement if you Provide Services to such other Person.
- (h) Non-Competition. During your employment by the Company and for two years after your employment with the Company terminates for any reason, you agree that you will not Provide Services to any Person, other than the Company, that engages in or is preparing to engage in the Business of the Company within the Restricted Area, unless (i) such other Person also engages in lines of business that are separate, distinct and divisible from the Business of the Company, (ii) you do not Provide Services, Confidential Information or strategy to the Business of the Company conducted by such other Person, and (iii) you do not attend meetings where the Business of the Company conducted by such other Person is discussed or where you could, even inadvertently, disclose Confidential Information. Your passive ownership of not more than one percent (1%) of the capital stock or other ownership or equity interest, or voting power, in a public company, registered under the Securities Exchange Act of 1934, as amended, shall not be deemed to be a violation of this paragraph.
- (i) Non-Solicitation; Non-Interference. During your employment by the Company and for two years year after your last day of employment with the Company, you also agree that you will not, directly or indirectly without the prior written consent of the Company:
  - (i) encourage, persuade, induce, or attempt to encourage or persuade or induce, any person who is an employee

at the grade level of 118 or above, an officer, or a director of the Company, in each case, to terminate such relationship with the Company; or hire or engage, participate in the hiring or engagement of, or solicit or make an offer of employment or engagement to any employee at the grade level of 118 or above, officer or director of the Company who was employed or engaged by the Company as of your last day of employment with the Company.

- (ii) on behalf of any Person engaged in the Business of the Company (other than the Company) solicit, contact, or attempt to solicit or contact any current, former or prospective customer of the Company whom you had contacted within the twenty-four (24) months prior to your last day of employment with the Company or about whom you have any Confidential Information.
- (iii) encourage or persuade, or attempt to encourage or persuade any (A) customer of the Company, (B) potential customer of the Company during the last twenty-four (24) months of your employment with the Company with which or with whom you knew to be such a potential customer, or (C) prior customer of the Company, in each case, not to do business with the Company or to reduce the amount of business it is doing or might do in the future with or through the Company.

(j) Tolling. If you violate any of the terms of the restrictive covenant obligations articulated herein, the obligation at issue will run from the first date on which you cease to be in violation of such obligation.

(k) Successors and Assigns. This Paragraph 1 shall inure to the benefit of the successors and assigns of the Company and therefore the Company may assign this Paragraph 1, without your consent to, including but not limited to, any of its subsidiaries or affiliates or to any successor (whether by merger, purchase, bankruptcy, reorganization or otherwise) to all or substantially all of the equity, assets or businesses of the Company.

2. Interpretation. All determinations regarding the interpretation, construction, enforcement, waiver, or modification of this Award Agreement and/or the Plan shall be made in the Company's sole discretion and shall be final and binding on you and the Company. Determinations made under this Award Agreement and the Plan need not be uniform and may be made selectively among individuals, whether or not such individuals are similarly situated.
3. Conflict. If any of the terms of this Award Agreement in the opinion of the Company conflict or are inconsistent with any applicable law or regulation of any governmental agency having jurisdiction, the Company reserves the right to modify this Award Agreement to be consistent with applicable laws or regulations.
4. Personal Data. You understand and acknowledge that the Company holds certain personal information about you, including but not limited to your name, home address, telephone number, date of birth, social security number, salary, nationality, job title, and details of all Shares awarded, cancelled, vested, unvested, or outstanding (the "personal data"). Certain personal data may also constitute "sensitive personal data" within the meaning of applicable local law. Such data include but are not limited to the information provided above and any changes thereto and other appropriate personal and financial data about you. You hereby provide explicit consent to the Company and any Subsidiary to process any such personal data and sensitive personal data. You also hereby provide explicit consent to the Company and any Subsidiary to transfer any such personal data and sensitive personal data outside the country in which you are employed, and to the United States. The legal persons for whom such personal data are intended are the Company and any third party providing services to the Company in connection with the administration of the Plan.
5. Plan Documents. By accepting this award, you acknowledge having received and read the Plan Prospectus, and you consent to receiving information and materials in connection with this Award or any subsequent awards under the Company's long-term performance plans, including without limitation any prospectuses and plan documents, by any means of electronic delivery available now and/or in the future (including without limitation by e-mail, by Website access, and/or by facsimile), such consent to remain in effect unless and until revoked in writing by you. This Award Agreement and the Plan, which is incorporated herein by reference, constitute the entire agreement between you and the Company regarding the terms and conditions of this Award.
6. Jurisdiction; Governing Law. The parties agree that upon any violation of this Award Agreement, suit may be brought, and the parties consent to personal jurisdiction, in the United States District Court for the Eastern District of Pennsylvania, or in any court of general jurisdiction in Allentown, Pennsylvania; the parties consent to the non-exclusive jurisdiction of any such court in any such suit, action or proceeding; and waive any objection which either party may have to the laying of venue of any such suit, action or proceeding in any such court. This Award Agreement shall be governed by and construed



in accordance with the laws of the Commonwealth of Pennsylvania without reference to its principles of conflict of law. The parties also irrevocably and unconditionally consents to the service of any process, pleadings, notices, or other papers with respect thereto. EACH PARTY HERETO IRREVOCABLY AGREES TO WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING, CLAIM, OR COUNTERCLAIM BROUGHT BY OR ON BEHALF OF ANY PARTY RELATED TO OR ARISING OUT OF THIS AGREEMENT.

7. Modification; Severability. If any court of competent jurisdiction finds any provision of this Award Agreement, and particularly the covenants set forth in Paragraph 1, or portion thereof, to not be fully enforceable, it is the intention and desire of the parties that the provision be fully enforced to the extent the court finds them enforceable and, if necessary, that the court modify any provisions of this Award Agreement to the extent deemed necessary by the court to render them reasonable and enforceable and that the court enforce them to such extent. To the extent that such provisions cannot be modified, it is the intention of the parties that the provisions be severable and that the invalidity of any one or more provisions of this Award Agreement shall not affect the legality, validity and enforceability of the remaining provisions of this Award Agreement. If Paragraph 1 is unenforceable in its entirety, then this Award Agreement shall be considered null and void *ab initio*.
8. Waiver. The failure of the Company to enforce any terms, provisions or covenants of this Exhibit shall not be construed as a waiver of the same or of the right of the Company to enforce the same. Waiver by the Company of any breach or default by you of any term or provision of this Exhibit shall not operate as a waiver of any other breach or default.
9. No Contract. Neither your FY2018 Performance Share Awards, this Award Agreement, nor the Plan constitute a contract of employment; nor do they guarantee your continued employment for any period required for all or any of your Awards to vest or become exercisable.

## EXHIBIT B

### PERFORMANCE SHARES

Grant of Performance Shares. Performance Shares are granted to you subject to the terms of the Air Products and Chemicals, Inc. Long-Term Incentive Plan as amended and restated on 1 October 2014 and as amended from time to time thereafter and the conditions described below. All capitalized terms have the meaning ascribed to them in the Plan unless otherwise noted. The Performance Shares are “Deferred Stock Units” as described in Section 9 of the Plan.

Payment of Deferred Stock Units. The Performance Shares granted to you will be earned in accordance with the formula indicated on the attached Earn-Out Schedule based on Air Products Relative Total Shareholder Return in relation to the Peer Group over the three fiscal year performance period beginning 1 October 2017 and ending 30 September 2020 (the “Performance Period”). Subject to the conditions described below, each earned Performance Share will entitle you to receive, at the end of the Deferral Period, one Share. The Deferral Period will begin on the date of this Award Agreement and will end on 1 December 2020.

Performance Shares earned and not forfeited (including in the event of your termination of employment prior to the end of the Deferral Period) shall be paid in shares of Common Stock or cash as determined by the Committee or its delegate, as soon as administratively practical following the end of the Deferral Period (but in no event later than 60 days thereafter).

Dividends. No cash dividends or other amounts shall be payable with respect to the Performance Shares during the Deferral Period. At the end of the Deferral Period, for each earned Performance Share that has not been forfeited, you will also be entitled to receive a cash payment equal to the dividends which would have been paid with respect to a share of Company Common Stock during the Deferral Period (“Dividend Equivalents”).

Termination of Employment. Except as provided below, if your employment by the Company and all of its affiliates is terminated for any reason prior to 1 December 2018, all of your Units will be automatically forfeited in their entirety. If your employment by the Company and all its affiliates terminates on or after 1 December 2018, but during the Deferral Period, other than due to death, Disability, Retirement or termination by the Company without Cause (an “Involuntary Termination”), all of your Units will be automatically forfeited in their entirety.

If your employment by the Company and all its affiliates is terminated on or after 1 December 2018, but during the Deferral Period, due to death, Disability, or Retirement, you vest in a pro-rata portion of your earned Performance Shares, based on actual financial performance (which portion in each case shall be based on the number of full months you worked during the Performance Period) and your remaining Performance Shares will be forfeited. If your employment is terminated at any time during the Deferral Period due to Involuntary Termination and you execute a general release of claims in favor of the Company within 50 days following your termination and in a form satisfactory to the Administrator (a “Release”), you will vest in a pro-rata portion of your earned

Performance Shares, based on actual financial performance (which portion shall be based on the number of full months you worked during the Performance Period) and all of your remaining Performance Shares will be forfeited. If you do not execute a Release, all of your Performance Shares will be automatically forfeited in their entirety. For purposes of this Paragraph, an Involuntary Termination occurring prior to 1 December 2018 which is also a Retirement shall be treated as an Involuntary Termination; an Involuntary Termination occurring on or after 1 December 2018 which is also a Retirement shall be treated as a Retirement.

If your employment by the Company and all its affiliates terminates during the Deferral Period due to death, payment in respect of earned Performance Shares that have not been forfeited and of related Dividend Equivalents shall be made, as soon as practical after the end of the Deferral Period (but in no event later than 60 days thereafter), to your Designated Beneficiary or, if none, your legal representative.

Notwithstanding anything to the contrary above, if your employment by the Company and its affiliates is terminated and such termination constitutes a “Termination of Employment” within the meaning of the Air Products and Chemicals, Inc. Executive Separation Program (the “Program”) and the Administrator of the Program determines you are entitled to the benefits of the Program, your outstanding Awards under this Agreement shall be treated in accordance with the Program.

**Recoupment.** Notwithstanding anything to the contrary above, any Performance Shares earned or paid and any related Dividend Equivalents paid to you may be recouped by the Company within three years of their payment in the event that: (i) the earning of such Performance Shares is predicated upon the achievement of financial results that are subsequently the subject of a restatement; (ii) the Committee determines in its sole discretion that you engaged in misconduct that caused or partially caused the need for the restatement; and (iii) the Performance Shares would not have been earned or a lesser amount of Performance Shares would have been earned based upon the restated financial results. In the event of any such recoupment, you shall pay to the Company the amount of any gain realized or payment received as a result of any recouped payment, in such manner and on such terms as may be required, and the Company shall be entitled to reduce any amount owed to you by the Company or any Subsidiary by such gain or payment.

Notwithstanding any other provisions of this Award Agreement, in the event the Company is required to prepare an accounting restatement due to its material noncompliance with any financial reporting requirement, the Company may recover from you any amounts or awards which it is required to recover under Section 10D of the Securities Exchange Act of 1934 or any other applicable law or securities exchange listing standard.

**Taxes.** The Company shall have the right to deduct from all Awards hereunder paid or any payment in respect of an Award, any federal, state, local or foreign taxes required or permitted by law to be withheld. In the case of a payment in respect of Performance Shares made in Common Stock, the Company shall reduce number of the shares of Common Stock to be distributed by an amount with a value equal to the value of such taxes required or permitted to be withheld.

**Adjustments.** In the event of any change in the outstanding shares of Common Stock of the Company or the occurrence of certain other events as described in Section 13 of the Plan, an equitable adjustment of the number of Performance Shares covered by this Award Agreement shall be made as provided in the Plan.

### Addendum

#### FY2018-2020 Performance Share Earn Out Schedule

1. Performance Shares Earned. For the avoidance of doubt, capitalized terms that are otherwise not defined in this Addendum will have the same definition as in the Award Agreement. The number of Performance Shares earned will be determined in accordance with the following formula:

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$$\frac{(\text{PERFORMANCE SHARES AWARDED}) \times (\text{PAYOUT FACTOR})}{(\text{PERFORMANCE SHARES EARNED})} =$$


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2. Payout Factor. The Payout Factor is based on the Company’s TSR Percentile Rank among the Peer Group for the Performance Period. The Initial Payout Factor is determined in accordance with the following schedule:

Company’s TSR Percentile Rank	Initial Payout Factor
≥ 75 <sup>th</sup> %ile	200%
≥ 50 <sup>th</sup> %ile	100%
≥ 30 <sup>th</sup> %ile	30%
< 30 <sup>th</sup> %ile	0%

The Initial Payout Factor will be interpolated for TSR Percentile Rank between discrete points, from a minimum Initial Payout Factor of 30 percentage points to a maximum Initial Payout Factor of 200 percentage points.

The Initial Payout Factor will be increased by 15 percentage points to determine the Maximum Payout Factor, but in no event will the Maximum Payout Factor exceed 215 percentage points. The Committee, in its discretion, may decrease the Maximum Payout Factor by up to 30 percentage points (15 percentage points from the Initial Payout Factor) to determine the Actual Payout Factor. The Committee, in its discretion, may adjust the amount of any individual’s payout, but it may not exceed the Maximum Payout Factor.

3. Definitions.

“Beginning Price” means, with respect to the Company’s and any other Peer Group member’s common stock, the average of the closing sale prices of a share of such common stock on the principal exchange on which such stock is traded for the thirty (30) calendar days preceding the first day of the of the Performance Period.

“Ending Price” means, with respect to the Company’s and any other Peer Group member’s common stock, the average of the closing sale prices of a share of such company’s common stock on the principal exchange on which such stock is traded for thirty (30) calendar days ending with the last day of the Performance Period.

The “Peer Group” shall be the following companies:

<b>Celanese Corp.</b>	<b>Illinois Tool Works, Inc.</b>
<b>The Chemours Co.</b>	<b>Ingersoll-Rand, Plc</b>
<b>Danaher Corp.</b>	<b>Olin Corporation</b>
<b>Dover Corp.</b>	<b>Parker-Hannifin Corp.</b>
<b>Eastman Chemical Co.</b>	<b>PPG Industries Inc.</b>
<b>Ecolab, Inc.</b>	<b>Praxair, Inc.</b>
<b>Huntsman Corp.</b>	

The Peer Group may be modified by the Committee in the event of the merger, acquisition or bankruptcy of a Peer Group member. The Peer Group may also be modified by the Committee in connection with a corporate transaction of the Company.

“Total Shareholder Return” or “TSR” shall be the percent increase/decrease in value that would be experienced from purchasing a share of the Company’s or a Peer Group member’s common stock at the Beginning Price and holding it for the Performance Period and selling at the Ending Price of such a share, assuming that dividends and other distributions are reinvested in additional shares of such stock at the closing market price on the ex-dividend date. Any non-cash distributions shall be valued at market value that shall be determined by the Committee.

“TSR Rank” means the ranking of the Company’s TSR among the TSRs for the Peer Group members for the Performance Period. TSR Rank is determined by ordering the Peer Group members and the Company from highest to lowest based on TSR for the Performance Period and counting down from the company with the highest TSR (ranked first) to the Company’s position on the list. If two companies are ranked equally, the ranking of the next company shall account for the tie, so that if one company is ranked first, and two companies are tied for second, the next company is ranked fourth. In the event of any ambiguity, the determination of the Committee shall be final and binding.

4. TSR Percentile Rank. The TSR Percentile Rank will be determined as follows:

The  $n^{\text{th}}$  ranked company out of the  $N$  companies (including Air Products) would have the following TSR Percentile Rank

$$\text{TSR Percentile Rank} = \frac{(N - n)}{(N - 1)}$$

That is, if Air Products ranked 5<sup>th</sup> out of 16 companies, its TSR Percentile Rank would be 73.3%  $((16-5)/(16-1))$ , which would give an Initial Payout Factor of 193.3%.

## AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this “Agreement”) is made and entered into as of this 14<sup>th</sup> day of November 2017, by and between **Air Products and Chemicals, Inc.** (together with its affiliates and subsidiaries, the “Company”), and **Seifollah Ghasemi** (the “Executive”). This Agreement amends and restates in its entirety the Prior Agreement (as defined below) effective as of October 1, 2017 (the “Effective Date”).

### WITNESSETH:

WHEREAS, the Company and the Executive entered into an Employment Agreement effective as of June 17, 2014 (the “Prior Agreement”); and

WHEREAS, the Company desires to continue to employ the Executive and the Executive desires to continue employment with the Company, and the Company and the Executive wish to amend and restate the Prior Agreement on the terms and conditions herein.

NOW, THEREFORE, in accordance with Section 21 of the Prior Agreement, and in consideration of the promises and mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are mutually acknowledged, the Company and the Executive hereby agree as follows:

#### **Section 1. Definitions.**

(a) “Accrued Rights” shall mean (i) unpaid Base Salary; (ii) any Annual Incentive Plan bonus previously determined and awarded by the Committee but unpaid; (iii) any accrued but untaken and unpaid vacation; (iv) reimbursement for unreimbursed business expenses properly incurred to the date of termination; (v) such employee benefits for which the Executive may be eligible under the terms of such employee benefit plans; and (vi) any rights with respect to Company equity (or equity derivatives), in accordance with the terms contained therein.

(b) “Agreement” shall have the meaning set forth in the preamble hereto.

(c) “Annual Bonus” shall have the meaning set forth in Section 5(b) of this Agreement.

(d) “Base Salary” shall have the meaning set forth in Section 5(a) of this Agreement.

(e) “Board” shall mean the Board of Directors of the Company.

(f) “Cause” shall mean (a) the willful failure of the Executive to substantially perform his duties (other than any such failure due to Disability) after a demand for substantial performance is delivered, which demand shall identify the manner in which the Company believes that the Executive has not substantially performed his duties; (b) Executive engaging in willful and serious misconduct that has caused or would reasonably be expected to result in material injury to the Company or any of its affiliates; (c) Executive is convicted of, or enters a plead of *nolo contendere*, to a crime that constitutes a felony; (d) Executive engaging in (i) repeated acts of insubordination,

or (ii) an act of dishonesty which is inconsistent with the standard of behavior expected of the Chairman of the Board and Chief Executive Officer of a public corporation, or (iii) a material violation by the Executive of any provision of the Company's Code of Conduct.

An event (or, as the case may be, events, or omissions) shall not be Cause under any grant, program or agreement unless it (or they) would be Cause under the foregoing definition.

(g) "Change in Control Agreement" shall mean the Air Products and Chemicals, Inc. Change in Control Severance Agreement for an Executive Officer entered into with the Executive, dated August 1, 2015 and effective October 1, 2015, as amended in accordance with Section 12(h) herein.

(h) "Code" shall mean the Internal Revenue Code of 1986, as amended, and the rules and regulations promulgated thereunder.

(i) "Committee" shall mean the Management Development and Compensation Committee of the Board or any successor committee of the Board responsible for setting compensation of senior executive officers.

(j) "Company" shall have the meaning set forth in the preamble of this Agreement.

(k) "Disability" shall have the meaning set forth in the Separation Program.

(l) "Disqualifying Activities" shall have the meaning set forth in Section 4(b) of this Agreement.

(m) "Executive" shall have the meaning set forth in the preamble hereto.

(n) "Good Reason" shall have the meaning set forth in Section 2.15 of the Separation Program.

(o) "Highly Compensated Employee" shall have the meaning set forth in Section 2.16 of the Separation Program.

(p) "LTIP" means the Air Products and Chemicals, Inc. Long-Term Incentive Plan, approved by the Company's shareholders most recently on January 24, 2013, as amended, and any similar or successor plan.

(q) "Person" shall mean any individual, corporation, partnership, limited liability company, joint venture, association, joint stock company, trust (charitable or non-charitable), unincorporated organization, or other form of business entity.

(r) "Pension Plans" shall have the meaning set forth in Section 2.18 of the Separation Program.

(s) “Prohibited Activity” means the Executive:

(i) making any statement, written or verbal, in any forum or media, or taking any action in disparagement of the Company, including but not limited to negative references to the Company or its products, services, corporate policies, current or former officers, directors, employees, customers, suppliers, purchasers, business partners or associates. Notwithstanding the forgoing, nothing in this paragraph shall prevent the Executive from (A) discussing any matter in the good faith performance of his duties, (B) responding publicly to incorrect, disparaging or derogatory public statements to the extent reasonably necessary to correct or refute such public statements, and (C) making any truthful statement to the extent (1) necessary with respect to any litigation, arbitration or mediation involving this Agreement or the Prior Agreement, including but not limited to the enforcement of this Agreement or the Prior Agreement, or (2) required by law or by any court, arbitrator, mediator or administrative or legislative body (including any committee thereof) with actual or apparent jurisdiction to order such person to disclose or make accessible such information. The Executive, in the good faith performance of his duties may, for example, criticize an employee, or groups of employees, products, services, corporate policies, current or former officers or employees, customers, suppliers, or business partners or associates, and such negative comments, if in the course of performing an evaluation or other business-related purpose, shall not be considered engaging in a Prohibited Activity.

(ii) Except where the Executive is acting in the reasonable and good faith performance of his duties, publishing any opinion, fact, or material, delivering any lecture or address, participating in any film, radio broadcast, television transmission, internet posting, social media, and/or any other electronic media, or communicating with any representative of the media, relating to confidential matters regarding the business or affairs of the Company;

(iii) Except where the Executive is acting in the reasonable and good faith performance of his duties, failure to hold in confidence all Trade Secrets of the Company that came into the Executive’s knowledge during his employment by the Company, or disclosing, publishing, or making use of at any time such Trade Secrets, where the term “Trade Secret” means any technical or nontechnical data, formula, pattern, compilation, program, device, method, technique, drawing, process, financial data, financial plan, product plan, list of actual or potential customers or suppliers, or other information similar to any of the foregoing, which (A) derives economic value, actual or potential, from not being generally known to and not being readily ascertainable by proper means by, other persons who can derive economic value from its disclosure or use, and (B) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy;

(iv) Except where the Executive is acting in the reasonable and good faith performance of his duties, failure to hold in confidence all Confidential Information of the Company that comes into the Executive’s knowledge during his employment by the

Company, or disclosing, publishing, or making use of such Confidential Information, where the term “Confidential Information” means any data or information, other than Trade Secrets, that is valuable to the Company and not generally known to the public or to competitors of the Company;

(v) Failure, in the event of the Executive’s termination of employment for any reason, promptly to deliver to the Company all memoranda, notes, records, manuals, or other documents, including all electronic or other copies of such materials and all documentation prepared or produced in connection therewith, containing Trade Secrets or Confidential Information regarding the Company’s business, whether made or compiled by the Executive or furnished to the Executive by virtue of the Executive’s employment with the Company; or the Executive’s failure promptly to deliver to the Company all vehicles, computers, credit cards telephones, handheld electronic devices, office equipment, and other property furnished to the Executive by virtue of the Executives’ employment with the Company;

(vi) Rendering of services for any organization as an employee, officer, director, consultant, advisor, agent, broker, independent contractor, principal, or partner, or engaging directly or indirectly in any business which, in the sole judgment of the Company, is or becomes competitive with the Company during the one (1) year period following the termination or conclusion of the Executive’s employment; or directly or indirectly soliciting any customer, supplier, contractor, employee, agent, or consultant of the Company with whom the Executive had contact during the last two (2) years of Executive’s employment with the Company or became aware of through the Executive’s employment with the Company, to cease doing business with, or to terminate their employment or business relationship with, the Company; or

(vii) Material violation of any written policies of the Company applicable to the Executive, including, without limitation, the Company’s insider trading policy.

Notwithstanding anything herein to the contrary, it is not a Prohibited Activity: (A) For the Executive to make any disclosure or communication that is required by applicable law, regulation or legal process, and the Executive provides the Company with prior notice of the contemplated disclosure and cooperates with the Company at its expense in seeking a protective order or other appropriate protection of such information; (B) Where Executive reasonably relies and acts on the written advice of Company legal counsel; (C) For the Executive to passively invest in pooled accounts, provided that the Executive does not violate any Company investment policy; (D) Provided the Executive complies with his obligations concerning Confidential Information and does not commit or engage in what would otherwise be a Prohibited Activity, he may render services (i) as a director of an entity with a *de minimis* overlap with the business of the Company, (ii) to a private equity firm, but may not render services that relate to any business, product, Trade Secret, or invention of the Company, or (iii) to a private equity firm’s portfolio company, provided the portfolio company is not engaged in any business that relates to, or competes with, any business, product,

Trade Secret, or invention of the Company, or any business or product of the Company that was in planning and not abandoned during the Term. The caveats contained in this sub-paragraph, the time limits set forth in Section 13(b)(i), and the protected rights of Section 13(e), shall apply to every Prohibited Activity, restrictive covenant, definition of Cause, equity and equity derivative award document and any other agreement, plan or program applicable to the Executive.

(t) “Release Execution Period” shall have the meaning set forth in Section 12(g) hereof.

(u) “Restricted Period” is the Term of Employment and the one (1) year period immediately following the Term of Employment.

(v) “Retirement” shall have the meaning set forth in the LTIP, but in any event, the Executive shall be eligible for retirement treatment under all equity, equity derivative, and incentive awards after three (3) years of employment with the Company. For the avoidance of doubt, the Executive became eligible for Retirement prior to the Effective Date.

(w) “Retirement Savings Plan” shall mean the Air Products and Chemicals, Inc., Retirement Savings Plan as Amended and Restated Effective October 1, 2013, and as further amended from time to time.

(x) “Separation Program” shall mean the Air Products & Chemicals, Inc., Corporate Executive Committee Separation Program, as amended as of December 1, 2013.

(y) “Severance Benefits” shall have the meaning set forth in Section 12(g) hereof.

(z) “Start Date” is the date on which the Executive’s employment first began, which was July 1, 2014.

(aa) “Term” is the period from the Start Date through September 30, 2022.

(bb) “Term of Employment” shall mean the period specified in Section 12(a) hereof.

## **Section 2. Acceptance of Employment.**

The Company agrees to employ the Executive, and the Executive agrees to serve the Company, on the terms and conditions set forth herein, and for the Term as specified in Section 3.

## **Section 3. Term.**

The employment of the Executive by the Company as provided in this Agreement shall continue until September 30, 2022 (the “Term”), unless earlier terminated in accordance with the terms of Section 12 of this Agreement.

## **Section 4. Position, Duties, and Responsibilities; Place of Performance.**

(a) Position, Duties, and Responsibilities. During the Term, the Executive shall be employed by the Company as Chief Executive Officer, President, and Chairman (together with such



other position or positions consistent with the Executive's title as the Board shall reasonably specify from time to time) and shall have the duties, responsibilities, and authority commensurate with such title. The Executive will report directly to the Company's Board of Directors.

(b) Performance. During the Term, the Executive shall devote substantially all of the Executive's business time to the Company and not engage in any activity that (i) conflicts with the interests of the Company, (ii) interferes with the proper and efficient performance of the Executive's duties to the Company, (iii) interferes with the Executive's exercise of judgment in the Company's best interests, (iv) or which could otherwise materially interfere or conflict with the Executive performing his duties as Chief Executive Officer, President, and Chairman of the Company ("Disqualifying Activities"). However, provided that, in the aggregate, such activities do not rise to the level of Disqualifying Activities, the Executive may serve as a director of one other company, subject to the approval of the Board. The Executive may also be involved in charitable, civic, and professional activities, including, subject to the approval of the Company's Board of Directors, serving on the board of a charitable organization. Subject to the guidelines of the Company's legal and compliance departments, the Executive may manage his and his family's passive investments.

(c) Principal Place of Employment. The Executive's principal place of employment shall be at the Company's principal headquarters in Allentown, PA, although the Executive understands and agrees that his business duties and responsibilities will require that he travel often.

### **Section 5. Compensation.**

The Prior Agreement shall apply to Base Salary and Annual Bonus for periods of employment prior to October 1, 2017. Beginning October 1, 2017, and during the Term of Employment, the Executive shall be eligible to receive the following compensation:

(a) Base Salary. In accordance with the regular payroll practices of the Company, the Executive shall receive a salary at the rate of \$1,200,000 per entire fiscal year, as adjusted in accordance with this Section from time to time ("Base Salary"). The Board, or such committee of the Board as is responsible for setting compensation of senior executive officers, shall review the Executive's performance at the conclusion of each fiscal year and may increase but not decrease the Base Salary, except that the Company may reduce the Executive's Base Salary prospectively if such reduction is no less favorable to the Executive than the average annual percentage reduction during the applicable fiscal year for all Highly Compensated Employees; provided further that the Company may adjust its normal payroll practices with respect to the payment of the Executive's Salary provided that such adjustment is applicable to all Highly Compensated Employees.

(b) Annual Bonus. The Executive shall be eligible to participate in the Annual Incentive Plan and for a target annual cash bonus of one hundred fifty percent (150%) of Base Salary (the "Annual Bonus"). Actual annual incentive awards will be determined by the Board or the Committee following the fiscal year and may be above or below the target bonus depending upon the Company's fiscal year performance as measured by the performance measures and goals established by the Committee at the beginning of the fiscal year, and the Company's achievement

of certain nonfinancial objectives. Actual annual incentive awards can range from zero percent (0%) to two hundred thirty percent (230%) of target. The Company may increase the Executive's annual incentive opportunities but may not reduce the Executive's annual incentive opportunities, except that it may reduce such opportunities for a future year if such reduction is on a basis no less favorable to the Executive than the basis on which the Company reduces the annual incentive opportunities payable to all Highly Compensated Employees during the applicable Fiscal year. The Annual Bonus, if any, shall be paid to the Executive at the same time as bonuses are generally payable to other senior executives of the Company, subject to the Executive's continuous employment through the applicable payment date, but in no event later than the date that is two and one-half (2½) months following the later of (i) the end of the Executive's first taxable year in which the right to the bonus is no longer subject to a substantial risk of forfeiture or (ii) the end of the Company's first taxable year in which the right to the bonus is no longer subject to a substantial risk of forfeiture (subject to the Executive's right to defer his Annual Bonus under the Company's Deferred Compensation Plan).

(c) Long-Term Incentive Plan. The Executive shall be eligible to participate in the LTIP and receive an annual award, determined by the Committee, in its good faith discretion. The LTIP annual award shall have a grant date target value of at least \$7,000,000 based upon the Company's standard valuation practices for equity awards. Following the October 1 start of the fiscal year, LTIP Awards (as defined in the LTIP) typically are communicated after the November Board meeting, and granted in early December. LTIP Awards granted to the Executive shall be proportioned in the same manner as Highly Compensated Employees' equity awards and shall be based generally on the same form of award agreement as used for other Highly Compensated Employees, except that such award agreements shall be treated as providing for additional or continued vesting in accordance with Section 12(c), (d), (e), or (f) hereof, and such award agreements shall not require the Executive to be subject to any additional Prohibited Activities or a definition of Cause that is broader than referred to in this Agreement.

#### **Section 6. Defined Contribution Plan and Retirement Savings Plan.**

The Executive shall be eligible to participate in the Company's Deferred Compensation Plan and Retirement Savings Plan.

#### **Section 7. Employee Benefits.**

During the Term of Employment, the Executive shall be eligible to participate in such health, dental, disability insurance, life insurance, and other benefits as provided from time to time by the Company upon terms and conditions and at coverage levels and coverage scope (including domestic partners, spouses, and dependents) substantially equivalent, taken as a whole, to those provided generally to Highly Compensated Employees of the Company. The Company may reduce or adjust the aggregate benefits payable to the Executive if such reduction is on a basis no less favorable to the Executive than the basis on which the Company reduces aggregate benefits payable with respect to Highly Compensated Employees. Nothing contained herein shall be construed to limit the

Company's ability to amend, suspend, or terminate any employee benefit plan or policy at any time without providing the Executive notice, and the right to do so is expressly reserved.

#### **Section 8. Reimbursement of Business Expenses.**

The Executive is authorized to incur reasonable business expenses in carrying out his duties and responsibilities under this Agreement, and the Company shall promptly reimburse him for all such reasonable business expenses, subject to documentation and in accordance with the Company's generally applicable policies on reimbursement of employee business expenses, as in effect from time to time.

#### **Section 9. Aircraft and Company Provided Automobiles.**

The Executive will have access to the corporate aircraft, Company-provided automobiles, and Company-provided drivers for business and personal travel for security purposes. The Executive shall be responsible for taxes on personal usage of such aircraft, automobiles and drivers. The Board reserves the right to review, alter, and discontinue the use of corporate aircraft.

#### **Section 10. Vacation.**

The Executive will be entitled to annual vacation in accordance with the Company's vacation policy as in effect from time to time.

#### **Section 11. Directors and Officers Insurance.**

At all times after the Start Date, the Executive will be subject to and covered by the Company's indemnification policies, by-laws, and procedures, as they currently exist and as hereinafter amended. The Executive shall further be covered by the Company's then-current Directors and Officers insurance. The Executive understands and agrees that the policies, by-laws, and procedures as in existence on the Start Date or the Effective Date may be amended by the Board in its sole and absolute discretion, provided that the level of protection afforded the Executive shall in the aggregate not be reduced. This Section 11 shall survive the Executive's termination of employment.

#### **Section 12. Termination of Employment.**

(a) General. The Term of Employment commenced on the Start Date and will terminate upon the earliest to occur of (i) the Executive's death, (ii) termination by reason of a Disability, (iii) termination by the Company with or without Cause, (iv) termination by the Executive with or without Good Reason, and (v) expiration of the Term.

(b) Termination by the Company for Cause. The Company may terminate the Executive's employment at any time by providing Executive with written notice pursuant to Section 24 of this Agreement, that his employment has been terminated for Cause. If the Executive is terminated by the Company for Cause, he shall receive the Accrued Rights and continue to be

covered by the Company's policies and practices regarding indemnification and Director's and Officer's insurance in the same amount and to the same extent as the Company covers its other officers and directors.

(c) Termination by the Executive without Good Reason. The Executive may terminate his employment without Good Reason (including a termination by Retirement where such Retirement does not occur as a result of another basis for termination hereunder) by providing the Company one hundred eighty (180) days' written notice of such termination pursuant to Section 24 of this Agreement. In the event of a termination of employment by the Executive under this Section, the Executive shall be entitled only to the Accrued Rights; except that, with respect to all equity Awards under the LTIP, (i) Stock Options and Stock Appreciation Rights (each as defined in the LTIP) granted at least one year prior to the Executive's termination shall continue to vest and be exercisable for the full term set forth in the award agreement, (ii) Restricted Shares, Deferred Stock Units, (each as defined in the LTIP) and any similar awards (*e.g.*, restricted stock units) subject solely to time-based vesting conditions granted at least one year prior to the Executive's termination shall vest on the date of termination and be paid out in accordance with their terms, and (iii) Awards that are conditioned on the satisfaction of performance conditions, which are granted at least one year prior to the Executive's termination, shall be vested and paid out or distributed following the determination of performance for the applicable performance period at the same time as such Awards are generally paid or distributed to other senior executives of the Company, based on actual performance for the performance period, but prorated by a fraction, the numerator of which is the number of days elapsed between the first day of the performance period and the date of the Executive's termination and the denominator of which is the total number of calendar days in the performance period. In the event of termination of the Executive's employment under this Section, the Company may, in its sole and absolute discretion, by written notice pursuant to Section 24, accelerate such date of termination without changing the characterization of such termination as a termination by the Executive without Good Reason (and Retirement); and more specifically, such written notice and acceleration shall not constitute a termination without Cause by the Company, nor provide a basis for a claim of Good Reason, nor a "covered termination" nor a "Termination of Employment" within the meaning of the Separation Program. If the Executive terminates his employment without Good Reason, he shall continue to be covered by the Company's policies and practices regarding indemnification and Director's and Officer's insurance in the same amount and to the same extent as the Company covers its other officers and directors.

(d) Termination by the Company without Cause or Resignation by the Executive for Good Reason. If the Executive ceases to be employed by the Company prior to the expiration of the Term because the Executive was terminated without Cause or resigned for Good Reason, the Executive will: (i) be subject to the Separation Program; provided, however, if the date of termination occurs after September 30, 2020, the two years of salary and bonus payable to the Executive under the Separation Program shall be multiplied by a fraction, the numerator of which shall be the number of days from the last day of employment until September 30, 2022 and the denominator of which shall be 730, and shall not be payable if the last day of employment is on or after September 30,

2022; (ii) with respect to all equity Awards under the LTIP, (A) Stock Options and Stock Appreciation Rights shall continue to vest and be exercisable for the full term set forth in the award agreement, (B) Restricted Shares, Deferred Stock Units, and any similar awards (*e.g.*, restricted stock units) subject solely to time based vesting conditions shall vest on the date of termination, and (C) Awards that are conditioned on the satisfaction of performance conditions shall be vested and paid out or distributed following the determination of performance for the applicable performance period at the same time as such Awards are generally paid or distributed to other senior executives of the Company, based on actual performance for the performance period, and (iii) continue to be covered by the Company's policies and practices regarding indemnification and Directors and Officers insurance in the same amount and to the same extent as the Company covers its other officers and directors. The Executive shall also be treated as having a Retirement upon such a termination to the extent more favorable to Executive on an element by element basis. Other than as stated in this Section 12(d), the Executive shall have no other rights or remedies, unless such termination falls within the scope of the Change in Control Agreement, in which event the Change in Control Agreement shall apply.

(e) Termination Due to Death or Disability. If the Executive dies, or his Employment terminates by reason of Disability during the Term of this Agreement, the Executive's employment hereunder shall terminate upon his death or upon the determination of a termination for Disability, and all obligations of the Company hereunder shall terminate on such date, except that the Executive's estate or his designated beneficiary shall be entitled to (i) payment of the Accrued Rights; (ii) in lieu of the Annual Incentive Plan, a lump sum pro-rata portion of the Annual Bonus, based upon the percentage of the fiscal year that has elapsed through the date of termination, for the year in which such termination occurs, payable when such Annual Bonus would have otherwise been payable had the Executive's employment not terminated, and further based on one hundred percent (100%) of Target for the fiscal year in which termination occurs; (iii) with respect to all equity Awards under the LTIP, (A) Stock Options and Stock Appreciation Rights shall continue to vest and be exercisable for the full term set forth in the award agreement, (B) Restricted Shares, Deferred Stock Units, and any similar awards (*e.g.*, restricted stock units) subject solely to time-based vesting conditions shall vest on the date of termination, and (C) Awards that are conditioned on the satisfaction of performance conditions shall be vested and paid out or distributed following the determination of performance for the applicable performance period at the same time as such Awards are generally paid or distributed to other senior executives of the Company, based on actual performance for the performance period, but prorated by a fraction, the numerator of which is the number of days elapsed between the first day of the performance period and the date of the Executive's termination and the denominator of which is the total number of calendar days in the performance period, or such better treatment as is provided in any award, and (iv) if the Executive's employment is terminated for Disability, Executive shall receive any more favorable treatment for Retirement on an element by element basis, and (v) the Executive or his Estate, as the case may be, shall continue to be covered by the Company's policies and practices regarding indemnification and Directors and Officers insurance in the same amount and to the same extent as the Company covers its other officers and directors.

(f) Conclusion of the Term. In the event that the Executive's employment ends by reason of the expiration of the Term or thereafter, the conclusion of the Executive's employment will be treated as a Retirement. Notwithstanding anything to the contrary, with respect to all equity Awards under the LTIP, (i) Stock Options and Stock Appreciation Rights (each as defined in the LTIP), even if granted less than one year prior to the Executive's termination, shall continue to vest and be exercisable for the full term set forth in the award agreement, (ii) Restricted Shares, Deferred Stock Units, (each as defined in the LTIP) and any similar awards (e.g., restricted stock units) (even if granted less than one year prior to the Executive's termination) shall vest on the date of termination, and (iii) Awards that are conditioned on the satisfaction of performance conditions, (even if granted less than one year prior to the Executive's termination), shall be vested and paid out or distributed following the determination of performance for the applicable performance period at the same time as such Awards are generally paid or distributed to other senior executives of the Company, based on actual performance for the performance period. In addition, the Executive shall continue to be covered by the Company's policies and practices regarding indemnification and directors and officers insurance in the same amount and to the same extent as the Company covers its other officers and directors. The conclusion of employment as a result of the Executive continuing employment through the end of the Term and then departing due to expiration of the Term is neither a termination without Cause, nor Good Reason, nor a "covered termination" nor a "Termination of Employment" within the Separation Program. Retirement is neither a termination without Cause, nor Good Reason, nor a "covered termination" nor a "Termination of Employment" within the Separation Program.

(g) Conditions to Severance Benefits. Notwithstanding any provision herein to the contrary, the payment of any amount or provision of any benefit pursuant to this Section (other than the Accrued Rights and continued coverage by the Company's policies and practices regarding indemnification and Directors and Officers insurance in the same amount and to the same extent as the Company covers its other officers and directors) (collectively, the "Severance Benefits") in connection with any termination of the Executive's employment shall be conditioned upon the Executive's execution, delivery to the Company, and non-revocation of the Release of Claims in the form generally as in the attached Exhibit A (and the expiration of any revocation period contained in such Release of Claims), within the time specified therein (the "Release Execution Period"). If the Executive fails, after being presented with the Release of Claims by the Company in a timely manner, to execute the Release of Claims in such a timely manner so as to permit any revocation period to expire prior to the end of the Release Execution Period, or timely revokes his acceptance of such release following its execution, the Executive shall not be entitled to any of the Severance Benefits.

(h) Change in Control Agreement for Executive. The parties will execute the Company's Change in Control Agreement. Executive's benefits under such agreement shall not be subject to any reduction or elimination due to his age, except that in any valuation of a non-competition agreement performed in connection with mitigating an excise tax under Sections 280G and 4999 of the Code, the age of the Executive may be taken into account in performing such valuation. In

the event of a termination of employment that is subject to the Change in Control Agreement, the benefits under such Change in Control Agreement shall not result in less favorable treatment of any element than the Executive would receive if such agreement did not apply.

### **Section 13. Restrictive Covenants.**

(a) Non-Competition and Non-Solicitation. The Executive agrees and understands that the non-competition and non-solicitation covenants substantially in the form attached as Exhibit B to the Separation Program shall be applicable to the Executive and the Executive agrees to be so bound in accordance with the Separation Program, subject to the caveats contained in Section 1(s) herein. Notwithstanding anything that may be contained in any other document, the Restricted Period of non-competition and non-solicitation covenants shall be limited to the Term of Employment and the one (1) year immediately following the conclusion of the Term of Employment.

(b) (i) Prohibited Activities. The Executive agrees and understands that he may not, at any time during the Term of Employment and within one (1) year after the termination of the Executive's employment (the "Restricted Period"), for any reason, engage in Prohibited Activity. In the event that the Executive has engaged in a Prohibited Activity during the Restricted Period, the Company may forfeit, cancel, modify, rescind, suspend, withhold, or otherwise limit or restrict any unexpired, unpaid, unexercised, or deferred awards held by the Executive at the time of such engagement, and any exercise, payment, or delivery of an award or shares pursuant to such an award may be rescinded. In the event of any such rescission, the Executive shall pay to the Company the amount of any gain realized or payment received as a result of the rescinded exercise, payment, or delivery, in such manner and on such terms as may be required by the Company, and the Company shall be entitled to reduce any amount owed to the Executive by the Company by such gain or payment. This is not the Company's sole remedy to the Executive's engagement in Prohibited Activity, and the Executive understands, acknowledges and agrees that the Company may seek the remedy under this subsection without limitation. The provisions of this Section are in addition to, and shall not supersede, the terms of any other agreement entered at the time the Executive is employed by the Company. The Executive expressly acknowledges and agrees that the foregoing provisions of this Section are material and important terms of this Agreement and that the Executive's agreement to be bound by the terms of this Section is a condition precedent to the Company's consummation of this Agreement.

(ii) The Company agrees that its directors and Named Executive Officers shall not during the Term of Employment and for one year thereafter, publicly disparage the Executive with regard to his performance as Chairman, Chief Executive Officer, or President of the Company. Notwithstanding the foregoing, nothing in this paragraph shall prevent the Company or its employees executive officers and directors from (A) discussing any matter with any of the Company's directors, executive officers, employees, legal, compliance or human resources officers; (B) responding publicly to incorrect, disparaging or derogatory public statements to the extent reasonably necessary to correct or refute such public statements, or (C) making any truthful statement to the extent necessary (1) with respect to any litigation, arbitration or mediation involving this Agreement or

the Prior Agreement, including but not limited to the enforcement of this Agreement or the Prior Agreement, or (2) required by law or by any court, arbitrator, mediator or administrative or legislative body (including any committee thereof) with actual or apparent jurisdiction to order such person to disclose or make accessible such information.

(c) Injunction. The Executive acknowledges and agrees that, because of the unique and extraordinary nature of his services, any breach or threatened breach of any of the above provisions of this Section will cause the Company irreparable injury and incalculable harm and, therefore, the Company will have no adequate remedies at law. The Executive, therefore, agrees in advance that Company shall be entitled to injunctive and other equitable relief for such breach or threatened breach and that resort by the Company to such injunctive or other equitable relief shall not be deemed to waive or to limit in any respect any right or remedy which the Company may have with respect to such breach or threatened breach. The Executive agrees that in such action, if the Company makes a *prima facie* showing that the Executive has violated or apparently intends to violate any of the provisions of this Section, the Company need not prove either damage or irreparable injury in order to obtain injunctive relief. The Company and the Executive agree that any such action for injunctive or equitable relief shall be heard in a state or federal court situated in the Commonwealth of Pennsylvania and each of the parties hereto agrees to accept service of process by any form of notice described in Section 24 of this Agreement, and to consent to the jurisdiction of such courts.

(d) Severability. If any provision contained within this Section is found to be unenforceable by reason of the extent, duration or scope thereof, or otherwise, then such restriction shall be enforced to the maximum extent permitted by law, and the Executive agrees that such extent, duration or scope may be modified in any proceeding brought to enforce such restriction.

(e) Protected Rights. Nothing contained in this Agreement limits the Executive's ability to file a charge or complaint with the Equal Employment Opportunity Commission, the National Labor Relations Board, the Occupational Safety and Health Administration, the Securities and Exchange Commission or any other federal, state, or local governmental agency or commission ("Government Agencies"). This Agreement does not limit the Executive's ability to communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be conducted by any Government Agency, including providing documents or other information, without notice to the Company. This Agreement does not limit the Executive's right to receive an award for information provided to any Government Agencies.

#### **Section 14. Representations and Warranties of the Executive.**

The Executive represents and warrants to the Company that:

(a) The Executive is entering into this Agreement voluntarily and that his employment hereunder and compliance with the terms and conditions hereof will not conflict with or result in the breach by him of any agreement to which he is a party or by which he may be bound;



(b) The Executive has not violated, and in connection with his employment with the Company will not violate any non-solicitation, non-competition, or other similar covenant or agreement of a prior employer by which he was, is, or may be bound;

(c) In connection with his employment with the Company, the Executive will not be in violation of any agreement with any prior employer regarding the use of any confidential or proprietary information he may have obtained in connection with employment with any prior employer;

(d) To the best of his knowledge, the Executive is not, and has not been, the subject of any investigation, whether by any prior employer, any governmental or regulatory authority, or any self-regulatory organization; and

(e) The Executive has had a full and complete opportunity to consult with counsel of the Executive's own choosing concerning the terms, enforceability and implications of this Agreement, and the Company made no representations or warranties to the Executive concerning the terms, enforceability or implications of this Agreement other than as stated in this Agreement.

#### **Section 15. Company Policies.**

The terms and conditions of the Executive's employment are governed by the Company's standard policies and procedures except where otherwise stated in this Agreement. The Executive must acquaint himself with all such standard policies and comply with them during the Executive's employment. In addition, as a condition of this offer and Executive's employment with the Company the Executive will be required to participate in the Company's stock retention program, and shall, as a condition precedent to this Agreement, execute and comply with the terms of the Company's Employee Patent and Confidential Information Agreement.

#### **Section 16. Taxes.**

The Company may withhold from any payments made under this Agreement all applicable taxes, including but not limited to income, employment, and social insurance taxes, as shall be required by law. The Executive acknowledges and represents that the Company has not provided any tax advice to him in connection with this Agreement and that he has been advised by the Company to seek tax advice from his own tax advisors regarding this Agreement and payments that may be made to him pursuant to this Agreement, including specifically, the application of the provisions of Section 409A of the Code ("Section 409A") to such payments.

#### **Section 17. Section 409A.**

It is intended that the provisions of this Agreement comply with Section 409A, and all provisions of this Agreement shall be construed and interpreted in a manner consistent with the requirements for avoiding taxes or penalties under Section 409A.

Neither the Executive nor any of the Executive's creditors or beneficiaries shall have the right to subject any deferred compensation (within the meaning of Section 409A) payable under this Agreement or under any other plan, policy, arrangement, or agreement of or with the Company or any of its affiliates (this Agreement and such other plans, policies, arrangements, and agreements, the "Company Plans") to any anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment, or garnishment. Except as permitted under Section 409A, any deferred compensation (within the meaning of Section 409A) payable to the Executive or for the Executive's benefit under any Company Plan may not be reduced by, or offset against, any amount owing by the Executive to the Company or any of its affiliates.

If, at the time of the Executive's separation from service (within the meaning of Section 409A), (i) the Executive shall be a specified employee (within the meaning of Section 409A and using the identification methodology selected by the Company from time to time) and (ii) an amount payable under a Company Plan constitutes deferred compensation (within the meaning of Section 409A) the payment of which is required to be delayed pursuant to the six-month delay rule as set forth in Section 409A in order to avoid taxes or penalties under Section 409A, then the Company shall not pay such amount on the otherwise scheduled payment date but shall instead accumulate such amount and pay it, without interest, on the first business day after such six-month period (provided, in all events, the non-compete period shall be computed as if the payment of such amount had not been delayed).

Notwithstanding any provision of any Company Plan to the contrary, in light of the uncertainty with respect to the proper application of Section 409A, after consultation with the Executive, the Company reserves the right to make amendments to this Agreement and any other Company Plan as the Company deems necessary or desirable to avoid the imposition of taxes or penalties under Section 409A. In any case, the Executive is solely responsible and liable for the satisfaction of all taxes and penalties that may be imposed on the Executive for the Executive's account in connection with any Company Plan (including any taxes and penalties under Section 409A).

Notwithstanding any provision in this Agreement to the contrary: (i) each payment in a series of payments hereunder shall be deemed to be a separate payment for purposes of Section 409A of the Code; and (ii) to the extent that any right to reimbursement of expenses or payment of any benefit in-kind under this Agreement constitutes nonqualified deferred compensation (within the meaning of Section 409A of the Code), (A) any such expense reimbursement shall be made by the Company no later than the last day of the taxable year following the taxable year in which such expense was incurred by the Executive, (B) the right to reimbursement or in-kind benefits shall not be subject to liquidation or exchange for another benefit, and (C) the amount of expenses eligible for reimbursement or in-kind benefits provided during any taxable year shall not affect the expenses eligible for reimbursement or in-kind benefits to be provided in any other taxable year; provided that the foregoing clause shall not be violated with regard to expenses reimbursed under any

arrangement covered by Section 105(b) of the Code solely because such expenses are subject to a limit related to the period the arrangement is in effect.

#### **Section 18. Effect of Section 280G of the Code.**

(a) Notwithstanding any other provision of this Agreement to the contrary, and except as provided in this Section, to the extent that any payment or distribution of any type to or for the benefit of the Executive by the Company (or by any affiliate of the Company, any person or entity who acquires ownership or effective control of the Company or ownership of a substantial portion of the Company's assets, within the meaning of Section 280G of the Code, and the regulations thereunder), or any affiliate of such person or entity, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise (the "Total Payments"), is or will be subject to the excise tax imposed under Section 4999 of the Code (the "Excise Tax"), then the Total Payments shall be reduced (but not below zero) only if and to the extent that a reduction in the Total Payments would result in the Executive retaining a larger amount, on an after-tax basis (taking into account federal, state and local income taxes and the Excise Tax), than if the Executive received the entire amount of such Total Payments. Unless the Executive shall have given prior written notice specifying a different order to the Company to effectuate the foregoing, the Company shall reduce or eliminate the Total Payments, by first reducing or eliminating the portion of the Total Payments which are not payable in cash and then by reducing or eliminating vesting of whole shares not subject to Treasury Regulation 280G-1, Q&A 24(c), then by reducing options subject to Treasury Regulation 280G-1, Q&A 24(c) and finally by reducing whole shares subject to Treasury Regulation 280G-1, Q&A 24(c), in each case in reverse order beginning with payments or benefits which are to be paid the farthest in time from the Determination (as defined herein). Any notice given by the Executive pursuant to the preceding sentence shall take precedence over the provisions of any other plan, arrangement or agreement governing the Executive's rights and entitlements to any benefits or compensation.

(b) The determination of whether the Total Payments shall be reduced as provided in this Section and the amount of such reduction shall be made at the Company's expense by an accounting firm jointly selected by the Company and the Executive from among its independent auditors and the five (5) largest accounting firms (an "Eligible Accounting Firm") in the United States (the "Accounting Firm"). The Accounting Firm shall provide its determination (the "Determination"), together with detailed supporting calculations and documentation to the Company and the Executive within ten (10) days of the last day of the Executive's employment. If the Accounting Firm determines that no Excise Tax is payable by the Executive with respect to the Total Payments, it shall furnish the Executive with an opinion reasonably acceptable to the Executive that no Excise Tax will be imposed with respect to any such payments and, absent manifest error, such Determination shall be binding, final and conclusive upon the Company and the Executive. If the Accounting Firm determines that an Excise Tax would be payable the Executive shall have the right to accept the Determination of the Accounting Firm as to the extent of the reduction, if any, pursuant to this Section, or to have such Determination reviewed by another Eligible Accounting

Firm selected by the Executive, at the expense of the Company, in which case the determination of such second accounting firm shall be binding, final and conclusive upon the Company and the Executive.

#### **Section 19. Legal Fees.**

The Company shall reimburse all reasonable and documented legal fees and commercially reasonable expenses incurred in connection with the review, negotiation and execution of the Executive's employment agreement. In order to be entitled to reimbursement: (i) the Executive must execute this Agreement and continue employment; and (ii) the Company must receive a bill from the Executive's counsel which is sufficiently detailed to enable the Company to assess the reasonableness of any fees and costs but without the narrative as to any time entries or work performed.

#### **Section 20. Successors and Assigns; No Third-Party Beneficiaries.**

(a) Assignability. This Agreement, and the Executive's rights and obligations hereunder, may not be assigned by the Executive. The Company may assign its rights, together with its obligations hereunder only to a successor to all or substantially all of the business and/or assets of the Company, provided that the Company shall require such successor to expressly assume and agree in writing to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place. This Agreement shall inure to the benefit of and be binding upon the Company and its successors.

(b) No Third-Party Beneficiaries. Except as otherwise set forth herein, nothing expressed or referred to in this Agreement will be construed to give any Person other than the Company and the Executive any legal or equitable right, remedy, or Claim under or with respect to this Agreement or any provision of this Agreement.

#### **Section 21. Waiver and Amendments.**

Any waiver, alteration, amendment, or modification of any of the terms of this Agreement shall be valid only if made in writing and signed by each of the parties hereto; provided, however, that any such waiver, alteration, amendment, or modification must be consented to on the Company's behalf by the Board. No waiver by either of the parties hereto of their rights hereunder shall be deemed to constitute a waiver with respect to any subsequent occurrences or transactions hereunder unless such waiver specifically states that it is to be construed as a continuing waiver.

#### **Section 22. Survival.**

All sections of this Agreement survive beyond the Term of Employment except as otherwise specifically stated.

#### **Section 23. Governing Law**

This agreement is governed by and is to be construed under the laws of the Commonwealth of Pennsylvania, without regard to its conflict of laws jurisprudence. Any dispute arising hereunder or concerning or relating to the Executive's employment shall be finally settled by the state and federal courts sitting in the Commonwealth of Pennsylvania and each of the parties hereto agrees to accept service of process by registered mail and to otherwise consent to the jurisdiction of such courts.

**Section 24. Notices.**

(a) Place of Delivery. Every notice or other communication relating to this Agreement shall be in writing, and shall be mailed to or delivered to the party for whom or which it is intended at such address as may from time to time be designated by it in a notice mailed or delivered to the other party as herein provided. Unless and until some other address be so designated, all notices and communications by the Executive to the Company shall be mailed or delivered to the Company at its principal executive office, Attention General Counsel, with a copy (which shall not constitute notice) to the Chairman of the Committee; and all notices and communications by the Company to the Executive may be given to the Executive personally or may be mailed to the Executive at the Executive's last known address, as reflected in the Company's records, with a copy (which shall not constitute notice) to: Michael Sirkin, Esq., Proskauer Rose LLP, Eleven Times Square, New York, NY 10036.

(b) Date of Delivery. Any notice so addressed shall be deemed to be given (i) if delivered by hand, or by e-mail, on the date of such delivery, (ii) if mailed by courier or by overnight mail, on the first business day following the date of such mailing, and (iii) if mailed by registered or certified mail, on the third business day after the date of such mailing.

**Section 25. Section Headings.**

The headings of the sections and subsections of this Agreement are inserted for convenience only and shall not be deemed to constitute a part thereof or affect the meaning or interpretation of this Agreement or of any term or provision hereof.

**Section 26. No Presumption of Authorship.**

This Agreement has been thoroughly negotiated and there is no presumption that either party drafted this agreement.

**Section 27. Entire Agreement.**

This Agreement, together with the attached exhibits and Company Plans and programs referred to herein, constitutes the entire understanding and agreement of the parties hereto regarding the employment of the Executive. This Agreement supersedes all prior negotiations, discussions, correspondence, communications, understandings, and agreements between the parties relating to the subject matter of this Agreement, including the Prior Agreement.

**Section 28. Counterparts.**

This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument. The execution of this Agreement may be by actual or facsimile signature.

\* \* \*

[Signatures to appear on the following page.]

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first above written.

**AIR PRODUCTS AND CHEMICALS, SEIFOLLAH GHASEMI**  
**INC.**

By: \_\_\_\_\_ Date: November \_\_\_\_, 2017

Title: Lead Director

Date: November \_\_\_\_, 2017





**EXHIBIT 1**  
**GENERAL RELEASE**

1. I, \_\_\_\_\_ (the "Executive"), for and in consideration of (a) certain severance benefits, equity rights and other benefits to be paid and provided to me by Air Products and Chemicals, Inc. (the "Company") pursuant to the Employment Agreement between Executive and the Company dated \_\_\_\_\_ (the "Agreement"), and under the Air Products and Chemicals, Inc. Corporate Executive Committee Separation Program as in effect on July 1, 2014 (the "Plan"), and (b) the Company's execution of a release in favor of the Executive, on the date this General Release becomes irrevocable, and conditioned upon such payments and provisions, do hereby REMISE, RELEASE, AND FOREVER DISCHARGE Air Products and Chemicals, Inc. (the "Company") and each of its past or present subsidiaries and affiliates, its and their past or present officers, directors, shareholders, employees and agents, in such capacities their respective successors and assigns, heirs, executors and administrators, the pension and employee benefit plans of the Company, or of its past or present subsidiaries or affiliates, and the past or present trustees, administrators, agents, or employees of the pension and employee benefit plans (hereinafter collectively included within the term "Company"), acting in any capacity whatsoever, of and from any and all manner of actions and causes of actions, suits, debts, claims and demands whatsoever in law or in equity, which I ever had, now have, or hereafter may have, or which my heirs, executors or administrators hereafter may have, by reason of any matter, cause or thing whatsoever from the beginning of my employment with the Company to the date of these presents and particularly, but without limitation of the foregoing general terms, any claims arising from or relating in any way to my employment relationship and the termination of my employment relationship with the Company, including but not limited to, any claims which have been asserted, could have been asserted, or could be asserted now or in the future under any federal, state or local laws, including any claims under the Pennsylvania Human Relations Act, 43 PA. C.S.A. §§ 951 et seq., as amended, the Rehabilitation Act of 1973, 29 USC §§ 701 et seq., as amended, Title VII of the Civil Rights Act of 1964, 42 USC §§ 2000e et seq., as amended, the civil Rights Act of 1991, 2 USC §§ 60/ et seq., as applicable, the Age Discrimination in Employment Act of 1967, 29 USA §§ 621 et seq., as amended ("ADEA"), the Americans with Disabilities Act, 29 USC §§ 706 et seq., and the Employee Retirement Income Security Act of 1974, 29 USC §§ 301 et seq., as

amended, any contracts between the Company and me and any common law claims now or hereafter recognized and all claims for counsel fees and costs; provided, however, that this Release shall not apply to any entitlements under the terms of the Agreement or the Plan or under any other plans or programs of the Company in which I participated and under which I have accrued and become entitled to a benefit other than under any Company separation or severance plan or programs. Notwithstanding the foregoing, I understand that I shall be indemnified by the Company as to any liability, cost or expense for which I would have been indemnified during employment or directorship, and covered under insurance coverages in force for officers and directors.

2. Subject to the limitations of paragraph 1 above, I expressly waive all rights afforded by any statute which expressly limits the effect of a release with respect to unknown claims. I understand the significance of this release of unknown claims and the waiver of statutory protection against a release of unknown claims.

3. I hereby agree and recognize that my employment by the Company was/will be permanently and irrevocably severed on \_\_\_\_\_, 2017 and the Company has no obligation, contractual or otherwise to me to hire, rehire or reemploy me in the future. I acknowledge that the terms of the Plan provide me with payments and benefits which are in addition to any amounts to which I otherwise would have been entitled.

4. I hereby agree and acknowledge that the payments and benefits provided by the Company are to bring about an amicable resolution of my employment arrangements and are not to be construed as an admission of any violation of any federal, state or local statute or regulations, or of any duty owed by the Company and that this Release is executed voluntarily to provide an amicable resolution of my employment relationship with the Company.

5. I hereby acknowledge that nothing in this Release shall prohibit or restrict me from: (a) making any disclosure of information required by law; (b) providing information to or testifying or otherwise assisting in any investigation or proceeding brought by, any federal regulatory or law enforcement agency or legislative body, any self-regulatory organization, or the Company's designated legal, compliance or human resources officers; or (c) filing, testifying, participating in or otherwise assisting in a proceeding relating to an alleged violation of any

federal, state or municipal law relating to fraud, or any rule or regulation of the Securities and Exchange Commission or any self-regulatory organization.

6. I hereby certify that I have read the terms of this Release, that I have been advised by the Company to discuss it with my attorney, that I have received the advice of counsel and that I understand its terms and effects. I acknowledge, further, that I am executing this Release of my own violation with a full understanding of its terms and effects and with the intention of releasing all claims recited herein in exchange for the consideration described above, which I acknowledge is adequate and satisfactory to me. None of the above named persons, nor their agents, representatives or attorneys has made any representations to me concerning the terms or effects of this Release other than those contained herein.

7. I hereby acknowledge that I have been informed that I have the right to consider this Release for a period of 21 days prior to execution. I also understand that I have the right to revoke this Release for a period of seven days following execution by giving written notice to the Company at 7201 Hamilton Boulevard, Allentown Pennsylvania 18195-1501, Attention: General Counsel.

Intending to be legally bound hereby, I execute the foregoing Release this \_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Executive

**AIR PRODUCTS AND CHEMICALS, INC.**

**RETIREMENT SAVINGS PLAN**

**AS AMENDED AND RESTATED**

**EFFECTIVE November 1, 2017**

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**AIR PRODUCTS AND CHEMICALS, INC.**  
**RETIREMENT SAVINGS PLAN**

**ARTICLE I**

**PURPOSES**

1.01 **Purposes.** This Plan is established to facilitate the accumulation and investment of retirement and other savings for eligible employees and to provide such employees with an opportunity to acquire a stock interest in Air Products and Chemicals, Inc. (the “Company”), and is intended to be a profit-sharing plan described in Code Section 401(a) with a cash or deferred arrangement described in Code Section 401(k) and an employee stock ownership plan component as defined in Code Section 4975(e), all in accordance with the terms and conditions hereinafter set forth. Unless otherwise stated or required by applicable law, the effective date of the current amendment and restatement shall be November 1, 2017, and shall not be applicable to persons retiring or otherwise terminating employment with the Company and its Affiliated Companies prior to November 1, 2017, except as otherwise provided herein.

**ARTICLE II**

**DEFINITIONS**

As used in this Plan, the terms listed below shall have the meanings assigned below; provided, however, that special definitions for purposes of Sections 3.07, 3.14, and 3.15 are contained in Paragraphs 3.07(a), 3.14(a), and 3.15(a), respectively.

2.01 **Affiliated Company** means each trade or business (whether or not incorporated) while it, together with the Company, is treated as a controlled group of corporations (as defined in Code Section 414(b)), as under common control (as defined in Code Section 414(c)), or as an affiliated service group (as defined in Code Section 414(m)), or is required to be aggregated with the Company pursuant to the regulations under Code Section 414(o); provided, however, that for purposes of Section 3.15 of the Plan and where otherwise applicable, the modification provided for in Code Section 415(h) shall be taken into account.

2.02 **After-Tax Contributions** mean contributions made by a Participant to the Plan on an after-tax basis. Effective January 1, 2016, the Plan will no longer permit After-Tax Contributions. The Plan, however, will maintain the After-Tax Contribution Account of a Participant.

2.03 **After-Tax Contribution Account** means the account to which a Participant's After-Tax Contributions, if any, are allocated.

2.04 **Annual Salary** means the total annual salary of a Participant, as determined by the Employer based solely on its records, including elective contributions made by an Employer on behalf of the Employee that are not includible in federal taxable income under Code Section 125 or Code Section 402(e)(3), excluding:

(a) Discretionary bonuses or grants, including, without limitation, income howsoever derived from any stock options or other equity-based awards, scholastic aid, payments and awards for suggestions and patentable inventions, other merit awards or variable compensation, expense allowances, and noncash compensation (including imputed income);

(b) Payments of Company Matching Contributions under Section 3.03 and Company Core Contributions under Section 3.04 of this Plan, accruals or distributions under this Plan, or payments, accruals, or distributions under any severance, incentive, or welfare plan or other retirement, pension, or profit-sharing plan of an Employer;

(c) Overtime, commissions, mileage, shift premiums, and payments in lieu of vacation; and

(d) All supplemental compensation for domestic and overseas assignments, including without limitation, premium pay, cost of living and relocation allowances, mortgage interest allowances and forgiveness, tax-equalization payments, and other emoluments for such service.

In the case of a Participant who is a full-time hourly or a weekly salaried production and maintenance employee, Annual Salary shall be determined by multiplying his base hourly pay rate by 2,080 hours. In the case of a Participant who is a part-time hourly employee or a part-time non-exempt salaried employee, Annual Salary shall be determined by multiplying his base hourly pay by his scheduled annual hours. Notwithstanding the above, Annual Salary means 125% of the amount determined in accordance with the preceding two sentences for any Participant who is employed as an over-the-road truck driver by an Employer, is paid on a mileage and hourly basis or who receives trip pay, and whose employment is based at a

liquid bulk distribution terminal designated from time to time by the Senior Vice President - Human Resources as a "Designated Terminal" and identified as such on Exhibit I.

For Employees who are receiving compensation directly from the Employer during periods of short-term disability, Annual Salary for purposes of Core Contributions will be computed in the same manner as if in active employment.

Notwithstanding the above, "Annual Salary" shall not exceed the limitation provided under Code Section 401(a)(17) as adjusted pursuant to Code Section 401(a)(17)(B) for any Plan Year.

2.05 **Before-Tax Contributions** mean contributions made by the Employer on behalf of a Participant pursuant to the Participant's Deferral Election under Paragraph 3.02(a) or Deemed Election under Paragraph 3.02(d).

2.06 **Before Tax Contribution Account** means the account to which a Participant's Before Tax Contributions, if any, are allocated.

2.07 **Beneficiary** or **Beneficiaries** mean the person(s), trust(s), or other recipient(s) as determined under the provisions of Section 5.02, who or which shall receive all amounts credited to the Participant's Plan accounts following the death of the Participant.

2.08 **Board** means the board of directors of the Company or any Committee thereof acting on behalf of the Board pursuant to its charter or other delegation of power from the Board, or the Chairman of the Board acting pursuant to a delegation of authority from the Board.

2.09 **Business Day** means any day the New York Stock Exchange is open for business.

2.10 **Catch-up Contributions** mean contributions made by the Employer on behalf of a Participant pursuant to the Participant's Deferral Election under Paragraph 3.02(c). The term "Catch-Up Contribution" shall include "Roth Catch-up Contributions". A "Roth Catch-up Contribution" is a Catch-up Contribution which is includable in a Participant's gross income at the time the Catch-up Contribution is made to the Plan.

2.11 **Catch-Up Contribution Account** means the account to which a Participant's, Catch-Up Contributions, if any, are allocated. The term "Catch-Up Contribution Account" shall include the account for Roth Catch-Up Contributions which, if any, will be separately accounted for.

2.12 **Claims Committee** means the committee appointed by the Senior Vice President-Human Resources to review and determine appeals of claims arising under the Plan in accordance with Section 6.05.

2.13 **Code** means the Internal Revenue Code of 1986, as amended from time to time, and regulations thereunder.

2.14 **Company** means Air Products and Chemicals, Inc., or any successor in interest thereto.

2.15 **Company Core Contributions** mean contributions made by the Employer under Section 3.04.

2.16 **Company Core Contribution Account** means the account to which a Participant's Core Contributions, if any, are allocated.

2.17 **Company Matching Contributions** mean contributions made by the Employer under Section 3.03.

2.18 **Company Matching Contribution Account** means the account to which a Participant's Company Matching Contributions, if any, are allocated.

2.19 **Company Stock** means common stock of the Company.

2.20 **Core Contribution Participant** shall mean an Electing Employee or a salaried Employee whose Employment Commencement Date or Reemployment Commencement Date occurs after October 21, 2004, or who otherwise becomes a salaried Employee after such date, a non-union hourly Employee whose Employment Commencement Date or Reemployment Commencement date occurs after February 1, 2011, or an employee who otherwise becomes a non-union hourly Employee after February 1, 2011 provided such employee is not accruing benefits in the Hourly Pension Plan. With respect to Employees who were employed by EPCO Carbon Dioxide Products, Inc. on May 31, 2013 and who were hired by the Company on June 1, 2013, such Employees shall become a Core Contribution Participant effective July 1, 2013. Effective November 1, 2017, the term Core Contribution Participant shall also include Employees covered by the terms of a collective bargaining agreement whose terms provide for a Core Contribution.

2.21 **Credited Service** means credited service as defined in the Salaried Pension Plan or Hourly Pension Plan, as applicable.

2.22 **Deemed Election** means a passive election to make Before-Tax Contributions to the Plan pursuant to Section 3.02(d).

2.23 **Deferral Election** means the election made by a Participant in accordance with Section 3.02.

2.24 **Defined Benefit Plan** means any Retirement Plan which does not meet the definition of a Defined Contribution Plan.

2.25 **Defined Contribution Plan** means a Retirement Plan which provides for an individual account for each participant and for benefits based solely on the amount contributed to the participant's account and on any income, expenses, gains, and losses, and any forfeitures of accounts of other participants, which may be allocated to such participant's account. For this purpose, any Participant's contributions made pursuant to a Defined Benefit Plan maintained by the Company or an Affiliated Company shall be treated as a separate Defined Contribution Plan.

2.26 **Distribution Event** means: a Participant's severance from employment with the Company and all Affiliated Companies, death or disability, in each case as defined by Code Section 401(k)(2)(B)(i).

2.27 **Electing Employee** means an Employee who voluntarily elects to cease accruing years of Credited Service under the Salaried Pension Plan as of the Retirement Program Change Effective Date in order to receive Company Core Contributions and increased Company Matching Contributions.

2.28 **Employee** means (a) any salaried employee of an Employer or (b) any non-union hourly paid employee who is employed by an Employer at one of the locations from time to time designated by the Senior Vice President - Human Resources and listed on Exhibit I attached hereto and made a part hereof, as said Exhibit I is updated from time to time or (3) any employee of the Employer who is covered by a collective bargaining agreement and the terms of such collective bargaining agreement provide for participation in the Plan; provided however, that no person shall be an Employee if such person is a leased employee (as defined below) of an Employer, a participant in the Supplemental Employment Program, a foreign national on a temporary assignment to an Employer, or an employee working under a Summer Internship Program, a Cooperative Education Program, or other temporary or supplemental employment program of an Employer. An employee of an Employer who is covered by a collective bargaining agreement shall not be an Employee unless the terms of such collective bargaining agreement provide for participation in the Plan. Notwithstanding the foregoing, if a leased employee or an employee of an Affiliated Company becomes an Employee, his service with the Company and Affiliated Companies prior to becoming an Employee shall be taken into account for eligibility and vesting purposes under the Plan. The term "employee" as used herein shall mean any common law employee of the Company or an Affiliated Company but shall exclude any person classified by the Company as an independent contractor even if such individual is subsequently reclassified as a common law employee by the Internal Revenue Service or any other agency, entity, or person.

For purposes of the preceding paragraph, a “leased employee” is any person (other than an employee of the Employer) who pursuant to an agreement between the Employer and any other person (leasing organization) has performed services for the Employer (or for the Employer and related persons determined in accordance with Code Section 414(n)(6)) on a substantially full-time basis for a period of at least one year, and such services are performed under primary direction or control by the Employer.

2.29 **Employer** means the Company and/or any Participating Employer, either collectively or separately as the context requires.

2.30 **Employment Commencement Date** means the date on which the Employee first performs an Hour of Service under Section 2.34 for an Employer or an Affiliated Company.

2.31 **ERISA** means the Employee Retirement Income Security Act of 1974, as amended from time to time.

2.32 **Fair Market Value**, as of any Business Day with respect to Company Stock, means the closing sale price for Company Stock for such date on the New York Stock Exchange, or, if no such sale occurred, the average of the closing bid and asked prices for such date on the New York Stock Exchange.

2.33 **Five Year Taxable Period** means with respect to a Roth 401(k) Contribution the period of time beginning on the first day of the taxable year for which the Participant made a designated Roth 401(k) Contribution to the Plan and ending after five consecutive taxable years have passed. With respect to a direct Roth Rollover from another plan, the period begins on the first day of the taxable year that the Participant made the designated Roth contribution to the other plan and ends after five consecutive taxable years have passed. For purposes of the Five Year Taxable Period, a reemployed veteran making a Roth 401(k) Contribution will be treated as having made in the taxable year of qualified military service that the veteran designates at the year to which the Roth 401(k) Contribution was made.

2.34 **Hour of Service** means:

(a) each hour for which an employee (whether or not as an Employee) is directly or indirectly paid, or entitled to payment, for the performance of duties for the Company or an Affiliated Company during the applicable computation period;

(b) each hour for which an employee (whether or not as an Employee) is directly or indirectly paid, or entitled to payment, by the Company or an Affiliated Company on account of a period of time during which no duties are performed (irrespective of whether the employment relationship has terminated) due to vacation, holiday, illness, incapacity (including short-term disability), layoff, jury duty, military duty, or leave of absence;

(c) each hour for which back pay, irrespective of mitigation of damages, is either awarded or agreed to by the Company or an Affiliated Company, with respect to an employee (whether or not an Employee), provided such hours have not previously been credited under either Paragraphs (a) or (b) above; and

(d) In the case of an employee who is reemployed by the Company or an Affiliated Company in accordance with the requirements of applicable federal law following an authorized leave of absence due to service in the Armed Forces of the United States, each hour during which such employee (whether or not as an Employee) is not performing duties for the Company or an Affiliated Company due to such military leave whether or not such employee is paid, or entitled to payment, by the Company or an Affiliated Company.

For purposes of this Section, a payment shall be deemed to be made by or due from the Company or an Affiliated Company whether such payment is directly made by or due from the Company or Affiliated Company, or indirectly made through, among other sources, a trust fund or insurer to which the Company or Affiliated Company contributes or pays premium (e.g., for group term life insurance).

For purposes of Paragraphs (b) and (c) above, the following rules shall apply:

(i) No more than five hundred and one (501) Hours of Service shall be credited on account of any single continuous period during which the employee performs no duties for the Company or an Affiliated Company (whether or not such period occurs in a single computation period) except for short term disability salary continuation;



(ii) No Hours of Service shall be credited for a payment made or due under a plan maintained solely for the purpose of complying with applicable workers' compensation, unemployment compensation, or disability insurance laws; and

(iii) No Hours of Service shall be credited for a payment which solely reimburses an employee for medical or medically related expenses incurred by the employee.

In the case of a payment which is made or due on account of a period during which an employee performs no duties for the Company or an Affiliated Company, and which results in the crediting of Hours of Service under Paragraphs (b) or (c) above, the number of hours and the period to which such hours are to be credited shall be determined in accordance with the rules promulgated by the United States Department of Labor in paragraphs (b), (c), and (d) of the regulations at 29 CFR § 2530.200b-2 or any future regulations which change, amend, or supersede such regulations, which regulations are incorporated by reference herein.

2.35 **Hourly Pension Plan** means the Pension Plan for Hourly Rated Employees of Air Products and Chemicals, Inc., as amended from time to time.

2.36 **IGS Savings Plan** means the Industrial Gas and Supply Company Retirement Savings Plan which was merged into the Plan effective as of March 31, 2000.

2.37 **Investment Committee** means the Pension Investment Committee of the Company, consisting of persons appointed by the Finance Committee of the Board and authorized, directed and empowered to supervise, monitor and review the management, custody, control and investment performance of the assets of the Plan.

2.38 **Investment Vehicle** means any security or other investment in which the Trustee is authorized to invest Participant Contributions transferred to a particular Participant Investment Fund, other than cash or interest-bearing investments of a short-term nature in which such Participant Contributions may be temporarily invested pending investment in such security or other investment.

2.39 **Matched Contributions** means Before-Tax Contributions and Roth 401(k) Contributions that are matched by the Employer in accordance with Section 3.03.

2.40 **Normal Retirement Age** means age 65.

2.41 **Participant** means: (a) any Employee who is eligible to participate in the Plan in accordance with Section 3.01, or (b) any former Employee by whom or for whom contributions have been made under Sections 3.02, 3.03, 3.04, 3.12, or 3.13, and (c) any participant in the IGS Savings Plan on March 30, 2002, until such time as all such contributions and earnings thereon have been withdrawn by or distributed to such Employee, former Employee or IGS Savings Plan Participant.

2.42 **Participant Contributions** mean, collectively, funds held and invested by the Trustee under the Trust Agreement which were, when first transferred to the Trustee, Matched Contributions, Unmatched Contributions, rollover contributions as described in Section 3.12, or assets received in plan-to-plan transfers or mergers as described in Section 3.13, together with earnings thereon.

2.43 **Participant Investment Funds** mean the funds described in Appendix A, as amended from time to time, which other than the Company Stock Fund, are chosen by the Investment Committee, in which Participant Contributions and Company Core Contributions are held for investment.

2.44 **Participating Employer** means those Affiliated Companies listed as Participating Employers on Schedule I hereto, while such designation is in effect, and any Affiliated Company which is later designated by the Board or pursuant to authority delegated by the Board as a Participating Employer under the Plan, whose designation has not been revoked. An Affiliated Company's status as a Participating Employer shall be automatically revoked upon its ceasing to be an Affiliated Company. A Participating Employer or the Board or person acting pursuant to authority delegated by the Board may revoke such designation at any time, but until such acceptance has been revoked, all of the provisions of the Plan and amendments thereto shall apply to the Employees and former Employees of the Participating Employer. In the event the designation of a Participating Employer is revoked, the Plan shall be deemed discontinued only as to such Participating Employer.

2.45 **Party in Interest** has the meaning provided in ERISA Section 3(14), or regulations promulgated thereunder or any future regulations which change, amend, or supersede such regulations.

2.46 **Period of Severance** means a 12-consecutive-month period beginning on an individual's Severance from Service Date or any anniversary thereof and ending on the next succeeding anniversary of such date during which the individual is not credited with at least one Hour of Service.

2.47 **Plan** means the "Air Products and Chemicals, Inc. Retirement Savings Plan" as set forth herein and as amended from time to time.

2.48 **Plan Administrator** means the Senior Vice President – Human Resources, or such other person or entity as he or she shall appoint to fill such role.

2.49 **Plan Year** means the annual period beginning on October 1 and ending on September 30 of the following calendar year. A Plan Year shall be designated according to the calendar year in which such Plan Year ends. The Plan Year shall also be the limitation year for purposes of applying the limitation of Code Section 415.

2.50 **Qualified Default Investment Alternative** means the Participant Investment Fund chosen by the Investment Committee, as designated in Appendix A, to meet the requirements of ERISA Section 404(c)(5) and the regulations thereunder.

2.51 **Qualified Domestic Relations Order** means: (a) any qualified domestic relations order as defined in Code Section 414(p) and ERISA Section 206(d), or (b) any other domestic relations order permitted to be treated as a qualified domestic relations order by the Plan Administrator under the provisions of the Retirement Equity Act of 1984 and which the Plan Administrator determines to treat as a qualified domestic relations order.

2.52 **Reemployment Commencement Date** means the first day on which an individual performs an Hour of Service under Section 2.34 after incurring a Period of Severance.

2.53 **Retirement Plan** means: (a) any profit-sharing, pension, or stock bonus plan described in Code Sections 401(a) and 501(a), (b) any annuity plan or annuity contract described in Code Sections 403(a) or 403(b) of the Code, or (c) any individual retirement account or individual retirement annuity described in Code Sections 408(a) or 408(b).

2.54 **Retirement Program Change Effective Date** means January 1, 2005, except that (a) for Employees at the South Brunswick, New Jersey facility who were hourly-rated instrument and electrical technicians, warehouse technicians, laboratory technicians, maintenance technicians, operation technicians, or production technicians as of January 1, 2005, the Retirement Program Change Effective Date shall be January 1, 2006, and (b) for salaried Employees who were on military leave on January 1, 2005, the Retirement Program Change Effective Date shall be the first of the month following 30 days after returning from military leave.

2.55 **Rollover Contribution Account** means the account to which a Participant's Rollover Contributions made in accordance with Code Section 402(c)(2), if any, are allocated. The Rollover Contribution Account shall not contain any allocations of Roth Rollover Contributions; rather, Roth Rollover Contributions shall be allocated to the Roth Rollover Contribution Account.

2.56 **Roth 401(k) Contribution** means a Participant's Elective Deferral that is (a) includable in the Participant's gross income at the time that the Elective Deferral is deferred, and (b) has been irrevocably designated as a Roth 401(k) Contribution.

2.57 **Roth 401(k) Contribution Account** means the account to which a Participant's Roth 401(k) Contributions, if any, are allocated. No contributions other than Roth 401(k) Contributions and properly attributable earnings will be credited to a Participant's Roth 401(k) Contribution Account; and gains, losses and other credits or charges will be allocated on a reasonable and consistent basis to such Roth 401(k) Contribution Account. The Plan will maintain a record of the amount of Roth 401(k) Contributions in each Participant's Roth 401(k) Contribution Account. Distributions from a Participant's Roth 401(k) Contribution Account (other than corrective distributions) are not includable in the Participant's gross income if the distribution is made after the Five Year Taxable Period and after the Participant's death, disability or age 59 1/2. Earnings on corrective distributions of Roth 401(k) Contribution are includable in a Participant's gross income in the same manner as earnings on corrective distributions of Before-Tax Contributions; however, corrective distributions of Roth 401(k) Contributions are not includable in the Participant's gross income.

2.58 **Roth Rollover Contribution** means the direct rollover from a Roth elective deferral account under an applicable retirement plan described in Code Section 402A(e)(1) and only to the extent the rollover is permitted under Code Section 402(c).

2.59 **Roth Rollover Contribution Account** means the account to which a Participant's Roth Rollover Contributions, if any, are allocated. The Plan will maintain a record of the amount of Roth Rollover Contributions in each Participant's Roth Rollover Contribution Account.

2.60 **Salaried Pension Plan** means the Air Products and Chemicals, Inc. Pension Plan for Salaried Employees, as amended from time to time.

2.61 **Severance from Service Date** occurs on the earlier of (i) the date on which an employee retires, voluntarily terminates, or is discharged from employment with an Employer and all Affiliated Companies or dies; or (ii) the first anniversary of the first date of a period in which an Employee remains absent from service (with or without pay) with the Employer and all Affiliated Companies for any reason other than voluntary termination, retirement, discharge, or death, such as vacation, holiday, sickness, disability, leave of absence, or layoff; provided that, in the case of an individual who is absent from work for maternity or paternity reasons, a Severance from Service Date shall not occur until the second anniversary of the date the individual begins such maternity or paternity leave. For purposes of the foregoing, an Employee's absence from work for maternity or paternity reasons means an absence (a) by reason of the pregnancy of the Employee, (b) by reason of the birth of a child of the Employee, (c) by reason of the placement of a child with the Employee in connection with the adoption of such child by such Employee, or (d) for purposes of caring for such child for a period beginning immediately following such birth or placement; provided that the Employee has provided to the Plan Administrator, in the form and manner prescribed by the Plan Administrator, information establishing (a) that the absence from work is for maternity or paternity reasons and (b) the number of days for which there was such an absence. Nothing in this Section shall be construed as expanding or amending any maternity or paternity leave policy of the Employer. Notwithstanding the above, an individual who is absent from work due to a leave of absence, whether or not for maternity or paternity reasons, who returns to work immediately following the leave of absence shall be deemed not to have a Severance from Service date.

2.62 **Trust Agreement** means the trust agreement referred to in Article IV, as the same may be amended from time to time.

2.63 **Trust Fund** means the assets held in trust for purposes of the Plan.

2.64 **Trustee** means such trustee or trustees as shall be appointed by the Investment Committee under the Trust Agreement.

2.65 **Unmatched Contributions** mean any Roth 401(k) Contributions which are not Matched Contributions, Before-Tax Contributions which are not Matched Contributions or Catch-up Contributions.

2.66 **Senior Vice President-Human Resources** shall mean the Senior Vice President, Human Resources of the Company, or any successor to that position.

2.67 **Years of Service** mean the service credited to a Participant for purposes of determining the amount of Company Core Contributions allocated to the Participant's account under Section 3.04. The following rules shall apply in calculating Years of Service under this Plan:

(a) An Employee shall be credited with a Year of Service for each 12 consecutive month period during the period beginning on the Employee's Employment Commencement Date and ending on the Employee's Severance from Service Date.

(b) If an Employee has a Severance from Service Date and after January 1, 2005 is rehired by the Employer as a salaried Employee or after February 1, 2011 is rehired by the Employer as a non-union hourly Employee, Years of Service prior to the Employee's Severance from Service Date shall not be taken into account as Years of Service. The Employee's date of reemployment shall be the Employee's Employment Commencement Date for purposes of (a) above.

(c) Notwithstanding the foregoing, an hourly employee who is receiving credited service in the Hourly Pension Plan and becomes a salaried Employee after January 1, 2005, or a salaried employee who is receiving credited service in the Salaried Pension Plan and becomes a non-union hourly Employee after February 1, 2011 will be credited with Years of Service beginning with the date he or she first earned Credited Service under the Salaried Pension Plan or the Hourly Pension Plan, as applicable, but excluding any period when he or she was not employed by the Company or an Affiliated Company, and any period of active employment with respect to which service is not taken into account in calculating his or her Accrued Benefit under such Plan.

(d) Notwithstanding the foregoing, for periods of service prior to January 1, 2005, an Employee who was a Core Contribution Participant as of January 1, 2005, will be credited with Years of Service beginning with the date he or she first earned Credited Service under the Salaried Pension Plan or the Hourly Pension Plan, but excluding any period when he or she was not employed by the Company or an Affiliated Company, and any period with respect to which service is not taken into account in calculating his or her Accrued Benefit under such Plan as of January 1, 2005.

(e) An Employee who was an employee of E. I. du Pont de Nemours and Company (“DuPont”) and who was hired by the Company in connection with the purchase of DuPont Air Products NanoMaterials L.L.C. on April 2, 2012, shall be credited with a Year of Service for each 12 consecutive month period during the period beginning on the Employee’s service date with DuPont and ending on the Employee’s Severance from Service Date.



2.68 **Years of Vesting Service** means the service credited to an Employee for purposes of determining the Employee's vested interest in the portion of his account attributable to Company Core Contributions and related investment earnings and losses. The following rules shall apply in calculating Years of Vesting Service under this Plan:

(a) An Employee shall be credited with full and partial Years of Vesting Service for the period from the Employee's Employment Commencement Date to the Employee's Severance from Service Date and, if applicable, from the Employee's Reemployment Commencement Date to the Employee's subsequent Severance from Service Date; provided that, an Employee who is absent from work due to maternity or paternity leave as defined in subsection 2.61 immediately prior to their Severance from Service Date shall not be credited with Vesting Service for any period of such maternity or paternity leave that extends beyond the one year anniversary of the date the individual begins such maternity or paternity leave. Years of Vesting Service shall be calculated on the basis that 12 consecutive months of employment equal one year. For this purpose, partial Years of Vesting Service shall be aggregated.

(b) If an Employee retires, voluntarily terminates, or is discharged from employment with the Employer and all Affiliated Companies and is subsequently reemployed, the period commencing on the Employee's Severance from Service Date and ending on the reemployment date shall be taken into account, if such period is 12 months or less in duration; provided that, if an Employee retires, voluntarily terminates, or is discharged from employment with the Employer and all Affiliated Companies during a period when the Employee was absent for another reason and is subsequently reemployed, the period commencing on the Employee's Severance from Service Date and ending on the reemployment date shall be taken into account, but only if the reemployment date occurs within 12 months of the first date of absence.

(c) If an Employee is reemployed after incurring five consecutive Periods of Severance, and the Employee had never previously earned any vested benefits under the Plan, including Company Matching Contributions, Years of Vesting Service after such Periods of Severance shall not be taken into account for purposes of determining the vested interest in the portion of his account attributable to Company Core Contributions made before such Periods of Severance, and Years of Vesting Service before such Periods of Severance shall not be taken into account for the purpose of determining the vested interest in the portion of his account attributable to Company Core Contributions made after such Periods of Severance.

(d) Years of Vesting Service shall include all periods described in paragraphs (a), and (b) above (including those periods during which the Employee was a leased employee within the meaning of section 414(n) or 414(o) of the Code) whether or not the Employee qualified as an Employee during those periods.

(e) An Employee who was an employee of DuPont and who was hired by the Company in connection with the purchase of DuPont Air Products NanoMaterials L.L.C. on April 2, 2012, shall be credited with full and partial Years of Vesting Service for the period from the Employee's service date with DuPont to the Employee's Severance from Service Date.

### **ARTICLE III**

#### **ELIGIBILITY, CONTRIBUTIONS, WITHDRAWALS, DISTRIBUTIONS, ROLLOVERS, AND PLAN-TO-PLAN TRANSFERS**

##### **3.01 Eligibility and Commencement of Participation.**

(a) An Employee shall be eligible to participate in the Plan upon meeting the requirements of (i) or (ii) as follows:

(i) An Employee shall be eligible to participate in the Plan upon completion of thirty (30) days of service after the date as of which the Employee is first scheduled or expected to be credited with one thousand (1,000) Hours of Service as an Employee during the next twelve (12)-month period. Such Employee will begin his participation as of the first complete pay period following the completion of such thirty (30) days of service if such Employee shall make an affirmative election to participate in accordance with procedures adopted by the Plan Administrator under Paragraph 3.02(a), (b), or (c) , or a Deemed Election pursuant to Paragraph 3.02(d). Notwithstanding the foregoing, a Core Contribution Participant shall be eligible to participate in benefits under Section 3.04 of the Plan on the later of the Retirement Program Change Effective Date or the date he becomes a Core Contribution Participant, provided that he is scheduled or expected to be credited with one thousand (1,000) Hours of Service during the next twelve (12)-month period.

(ii) An Employee who has not satisfied the service requirements of the preceding paragraph shall be eligible to participate in the Plan, upon such Employee's completion of 1,000 Hours of Service during an eligibility computation period. An eligibility computation period is the twelve (12) month period beginning on the Employee's Employment Commencement Date, or, in the event such Employee does not complete 1,000 Hours of Service in such twelve (12) month period, all Plan Years beginning after the first day of such twelve (12) month period. Such an Employee may begin his participation as of the first full pay period which includes the earlier of (i) the first day of the Plan Year which follows his satisfaction of the eligibility requirements in the preceding sentence, or (ii) the date which is six months after the date on which he satisfied such eligibility requirements, if such Employee makes an affirmative election to participate in accordance with Paragraph 3.01(a)(i). A Core Contribution Participant who has not satisfied the service requirements of the preceding paragraph shall be eligible to participate in benefits under Section 3.04 of the Plan upon such Participant's completion of 1,000 Hours of Service during an eligibility computation period.

(iii) Employees who were former participants of the IGS Savings Plan shall be eligible to participate upon their becoming an Employee provided they make an affirmative election to participate in accordance with the procedures adopted by the Plan Administrator under subsection 3.02(a), (b), or (c) or a Deemed Election pursuant to subsection 3.02(d).

(iv) An Employee who was an employee of DuPont and who was hired by the Company in connection with the purchase of DuPont Air Products NanoMaterials L.L.C. on April 2, 2012, shall be eligible to participate in the Plan as soon as administratively possible upon his becoming an Employee provided he makes an affirmative election to participate in the Plan in accordance with the procedures adopted by the Plan Administrator under subsection 3.02(a), (b), or (c) or a Deemed Election pursuant to subsection 3.02(d).

(b) An Employee eligible to participate in the Plan shall remain eligible to participate (subject to the applicable suspension provisions of Sections 3.02, 3.07, and 3.08) for so long as he is an Employee. An Employee who terminates his employment with the Company and all Affiliated Companies after becoming eligible to participate in the Plan, or an Employee who otherwise ceases to be employed as an Employee, shall, upon reemployment by an Employer as an Employee, be eligible to participate in the Plan and may begin his participation as soon as administratively possible so long as an election is properly made as provided in Paragraph 3.02; except that such reemployed Core Contribution Participant shall be eligible to participate in Company Core Contributions as of the later of the Retirement Program Change Date or his Reemployment Commencement Date (or, if no Severance from Service has occurred, the later of the Retirement Program Change Date or the date he once again meets the definition of Employee). An Employee who becomes represented by a collective bargaining agent will remain eligible to participate in the Plan until a collective bargaining agreement is executed by the Employer by which the Employee is employed and the bargaining agent and, subsequent thereto, will only remain eligible to participate in the Plan if the collective bargaining agreement so provides. An Employee who terminates employment with the Company and all Affiliated Companies prior to becoming eligible to participate in the Plan shall be treated as a new Employee for purposes of this Section 3.01 upon reemployment by an Employer.

(c) Notwithstanding any other provision of this Plan, the availability of Before-Tax Contributions, Roth 401(k) Contributions, Catch-up Contributions, Company Core Contributions and Company Matching Contributions shall not discriminate in favor of Highly Compensated Employees.

3.02 **Before-Tax, Roth 401(k) and Catch-up Contributions**. Each Employee shall commence participation in the Plan by making an election to make contributions to the Plan as described in (a), (b), (c), or (d) below (the “Deferral Election”).

(a) **Before-Tax Contributions**. An Employee may make an election to reduce periodic installments of his Annual Salary otherwise payable for each succeeding pay period and direct the Employer to make a contribution to the Plan on his behalf in an amount equal to a whole number from 3 to 50 percent of such periodic installment of his Annual Salary (subject to the provisions of Section 3.07). The combined Before-Tax Contribution and Roth 401(k) Contribution cannot exceed the limitations under Code Section 402(g) or 50 percent of a Participant’s periodic installment of Annual Salary.

(b) **Roth 401(k) Contributions**. An Employee may make an election to contribute an amount equal to a whole number from 3 to 50 percent of each such periodic installment of his Annual Salary (subject to the provisions of Section 3.07) to the Plan. The combined Before-Tax Contribution and Roth 401(k) Contribution cannot exceed the limitations under Code Section 402(g) or 50 percent of a Participant’s periodic installment of Annual Salary.

(c) **Catch-up Contributions**. Effective October 1, 2002, a Participant who attains age 50 by the end of the applicable calendar year and who has made Before-Tax Contributions or Roth 401(k) Contributions for the calendar year or Plan Year, as applicable, up to the lesser of the statutory limit described in Section 3.07(c)(i), the Plan limit described in Section 3.02(a), or, if such Participant is a Highly Compensated Employee, the highest amount of Before Tax Contributions or Roth 401(k) Contributions that can be retained in the Plan with respect to such Participant without violating the Average Deferral Percentage Test described in Section 3.07(b)(1), shall be eligible to make additional Before-Tax Contributions or Roth 401(k) Contributions to the Plan in the amount of \$5,000, which amount shall be adjusted pursuant to cost of living adjustments described in Code Section 414(v)(2)(c).

(d) **Deemed Election.** (i) Each salaried Employee who becomes eligible to participate in the Plan on or after the Retirement Program Change Effective Date, (ii) each hourly Employee who becomes eligible to participate in the Plan on and after October 1, 2007, and (iii) each Employee who is covered by a collective bargaining agreement on or after November 1, 2017 and the terms of such agreement provide for participation in the Plan, shall be considered to have directed the Employer to reduce his salary in order to make a Before-Tax Contribution in an amount equal to six (6) percent of each periodic installment of his Annual Salary (subject to the provisions of Section 3.07) on his behalf to the trust for the Plan established under the Trust Agreement unless such Employee files (or has filed) a Deferral Election with the Employer. Such Deemed Election shall be effective in accordance with procedures established by the Plan Administrator after written notice has been provided to the Employee.

(e) **Limits on Contributions.** Notwithstanding the foregoing, the maximum combined total of Roth 401(k) Contributions and Before-Tax Contributions being made by or on behalf of a Participant at any time may not exceed 50 percent of the Participant's installments of Annual Salary payable at the time, and Roth 401(k) Contributions and Before-Tax Contributions may be made only to the extent that such Contributions to a Participant's account for any Plan Year do not cause the limitations on Annual Additions to a Participant's account as set forth in Section 3.14 to be exceeded.

(f) **Election Changes.** An Employee may, by giving notice to the Plan Administrator, change his Deferral Election, including a Deemed Election, and direct the Employer to reduce or contribute, as the case may be, different permitted percentages of his periodic installments of Annual Salary, effective as soon as administratively practicable thereafter. In the event of a change in Annual Salary, the Employee's then current contribution percentage shall automatically be applied to the new Annual Salary, as soon as administratively practicable thereafter.

(g) **Suspension of Elections**. An Employee may, by notice to the Plan Administrator, initiate a suspension of his Deferral Election beginning as soon as administratively practicable thereafter. In addition, suspension shall be automatic as of the first pay in which a Participant ceases to be an Employee. In the event the participant initiates the suspension, the Participant may elect to resume his Deferral Election in accordance with the provisions of Section 3.01 effective as soon as administratively practicable thereafter, provided that he is an Employee as of the date when the Deferral Election resumes.

(h) **Termination of Elections**. Subsequent to a Distribution Event, the Participant shall have no right to continue making contributions to the Plan, but shall have the right to redirect the investment of the amounts in his accounts in accordance with Section 4.03 and to change or revoke his written designation of Beneficiary in accordance with Section 5.02.

(i) **Administrative Rules**. The Plan Administrator may from time to time establish such rules and procedures for determining and adjusting the percentages of Annual Salary subject to Deferral Elections as the Plan Administrator shall in his sole discretion deem to be necessary or desirable for the administration of the Plan in accordance with the Code and ERISA, including, without limitation, rules and procedures establishing limitations on the frequency with which all or certain Participants may alter the percentage of their Annual Salary which are subject to Deferral Elections and rules and procedures allowing for the contributions of a specified dollar amount of Before-Tax Contributions, Roth 401(k) Contributions or Catch-Up Contributions in lieu of fixed whole percentage. Notwithstanding any provision in the Plan to the contrary, solely with respect to a Participant in the Air Products Deferred Compensation Plan, the Plan Administrator may from time to time adjust the percentage of Annual Salary Deferral Elections as the Plan Administrator shall in his sole discretion deem to be necessary or desirable for the administration of both the Plan and the Air Products Deferred Compensation Plan.

(j) **Vesting.** A Participant shall have a fully vested, nonforfeitable right to any benefits derived from Before-Tax Contributions, Roth 401(k) Contributions, After-Tax Contributions and Catch-up Contributions made under this Section 3.02.

3.03 **Company Matching Contributions.** The Employer shall make Company Matching Contributions to the Plan on behalf of each Employee who participates in the Plan in accordance with the following provisions:

(a) **Enhanced Formula.** Effective as of the later of the Retirement Program Change Effective Date or the date he becomes a Core Contribution Participant, each Core Contribution Participant shall receive Company Matching Contributions as soon as administratively practicable after each pay date from the Employer equal to the sum of (i) and (ii) below:

(i) 75 percent of the first (4) percent of the Participant's Annual Salary that is deferred by the Participant each pay period to the Plan as Before-Tax Contributions or Roth 401(k) Contributions provided that the Participant has elected to contribute at least three (3) percent as Before-Tax Contributions or Roth 401(k) Contributions, excluding Catch-up Contributions, and

(ii) 50 percent of the next two (2) percent of the Participant's Annual Salary that is deferred by the Participant each pay period to the Plan as Before-Tax Contributions or Roth 401(k) Contributions, excluding Catch-up Contributions.

(b) **Regular Formula.** Each Participant who is not eligible to receive Company Matching Contributions in accordance with (a) above, shall receive Company Matching Contributions as of the end of each pay period from the Employer equal to the sum of (i) and (ii) below:



(i) 75 percent of the first (3) percent of the Participant's Annual Salary that is deferred by the Participant each pay period to the Plan provided that the Participant has elected to contribute at least three (3) percent as Before-Tax Contributions or Roth 401(k) Contributions, excluding Catch-up Contributions, and

(ii) 25 percent of the next three (3) percent of the Participant's Annual Salary that is deferred by the Participant each pay period to the Plan as Before-Tax Contributions or Roth 401(k) Contributions , excluding Catch-up Contributions.

(c) **Form of Company Matching Contribution.** A Company Matching Contribution will be made to the Trustee at least annually, but (unless the Company determines otherwise) only out of the Employer's current or accumulated earnings and profits, and may be made in whole or in part in cash or Company Stock. Company Matching Contributions to be made in Company Stock shall be valued for such purpose at the Fair Market Value on the last Business Day of the period for which the Company Matching Contribution is made. If the Company shall not have taken action to discontinue the Plan in accordance with the provisions of Section 7.01 prior to the end of any Plan Year, the Employer's Company Matching Contribution for such Plan Year shall become a fixed obligation as of the end of such Plan Year to the extent of the Employer's current or accumulated earnings and profits.

(d) **Reconciliation of Company Matching Contribution.** Effective January 1, 2018, on an annual basis, the Employer shall ensure that a Participant's Company Matching Contribution is equal to the maximum contribution the Participant would receive under the Enhanced Formula for Core Contribution Participants and the Regular Formula for all other eligible Participants for the calendar year based upon the Participant's Before-Tax and Roth 401(k) Contributions for the entire calendar year. The Employer shall make the appropriate Matching Contribution to the Plan.

(e) **Limits on Company Matching Contributions.** Notwithstanding the foregoing, no Company Matching Contribution shall be made for the account of any Participant to the extent that such Company Matching Contribution, after the adjustments provided for in the following sentence, would violate the Actual Contribution Percentage Test, as described in Section 3.07. Any corrective actions taken to avoid such violations shall be performed in accordance with Section 3.07.

(f) **Vesting.** A Participant shall have a fully vested, nonforfeitable right to any benefits derived from Company Matching Contributions, subject to the forfeiture provisions of Section 3.07 and Paragraph 3.14(c).

(g) **Collectively Bargained Employees.** A Participant whose terms and conditions of employment are covered by a collective bargaining agreement shall not be entitled to receive a Matching Contribution unless the terms and conditions of such agreement provide for a Company Matching Contribution.

3.04 **Company Core Contributions.** Effective as of the Retirement Program Change Effective Date, each Core Contribution Participant shall receive Company Core Contributions from the Employer in accordance with the following provisions:

(a) **Formula.** The Employer shall allocate a Company Core Contribution at least annually to the account of each eligible Participant at any time during the Plan Year in accordance with the following schedule:

<b>Years of Service</b>	<b>Amount of Company Core Contributions</b>
Less than 10 Years of Service	4% of Annual Salary
10-19 Years of Service	5% of Annual Salary
20 or more Years of Service	6% of Annual Salary

(b) Notwithstanding the foregoing, Annual Salary for purposes of determining the amount of Company Core Contributions under (a), above, shall not include any Annual Salary earned by a Participant before the Participant became eligible to receive Company Core Contributions.

(c) **Collectively Bargained Employees.** A Participant whose terms and conditions of employment are covered by a collective bargaining agreement shall not be entitled to receive a Company Core Contribution unless the terms and conditions of such agreement provide for a Company Core Contribution.

3.05 **Company Core Contribution Vesting Rules.** A Participant's Company Core Contributions and related investment earnings and losses shall be subject to the following vesting rules:

(a) **Vesting Schedule.** Effective on and after October 1, 2007, a Participant who is an Employee shall have a vested, nonforfeitable right to the portion of a Participant's account attributable to Company Core Contributions, including any related investment earnings and losses, according to the following vesting schedule, or, if earlier, after attaining Normal Retirement Age while employed by the Employer or an Affiliated Company:

<b>Years of Vesting Service</b>	<b>Percent Vested</b>
Less than 1	0%
1	20%
2	40%
3	60%
4	80%
5	100%

Prior to October 1, 2007, a Participant who is an Employee would have a fully vested, nonforfeitable right to the portion of a Participant's account attributable to Company Core Contributions, including any related investment earnings and losses, after completing at least 5 Years of Vesting Service, or, if earlier, after attaining Normal Retirement Age while employed by the Employer or an Affiliated Company.

Effective September 30, 2016, a Participant who was an Employee of Versum Materials, US LLC on September 30, 2016 shall have a vested, nonforfeitable right to the portion of the Participant's account attributable to Company Core Contributions, including any related investment earnings and losses.

Effective the later of January 3, 2017 or the Closing, in the case of a Participant who prior to the Closing as defined in the Purchase Agreement by and between Air Products and Chemicals, Inc., and Evonik Industries AG Dated as of May 6, 2016 (the "Evonik Agreement") was employed by the Company's PMD Business as that term is defined in the Evonik Agreement and who upon the Closing will become an employee of Evonik Industries AG or one of its affiliates, such Participant shall have a vested, nonforfeitable right to the portion of the Participant's account attributable to Company Core Contributions, including any related investment earnings and losses.

Effective January 1, 2018, a Participant shall have a vested, nonforfeitable right to the portion of the Participant's account attributable to Company Core Contributions, including any related investment earnings and losses. The Vesting Schedule as detailed above will no longer be applicable to any Participant.

(b) **Forfeitures.**

(i) If a Participant is not fully vested in Company Core Contributions as described in (a) above at the time he incurs a Severance from Service Date, the unvested portion of the Participant's account attributable to Company Core Contributions and related investment earnings and losses shall be forfeited as of the earlier of:

(A) the date on which he receives a distribution of his entire vested interest in his account; or

(B) the date on which he incurs five consecutive Periods of Severance.

(ii) A Participant who has no portion of his account attributable to Company Matching Contributions, Participant Before-Tax Contributions or Roth 401(k) Contributions and whose vested interest in the portion of his account attributable to Company Core Contributions is zero shall be deemed to have received a distribution of his account as of his Severance from Service Date.

(iii) If a Participant is rehired by the Employer or an Affiliated Company before incurring five consecutive Periods of Severance, any amount forfeited under subsections (i) or (ii) shall be restored to his account as soon as administratively practicable. Such restoration shall be made from currently forfeited amounts in accordance with subsection (iv), or from additional contributions by the Employer and shall be invested in the Qualified Default Investment Alternative.

(iv) Amounts forfeited shall be used to first restore future amounts required to be restored in accordance with subsection (iii) with respect to the Plan Year. After such restoration, if any, is made, such amounts shall be used to reduce future Company Core Contributions and Company Matching Contributions made by the Employer by which the former Participant was employed, or to defray administrative costs of the Plan as determined by the Company.

(v) Notwithstanding anything in the Plan to the contrary, in the event a portion of a Participant's account is forfeited in accordance with Section 3.05(b), the portion of a Participant's account attributable to the Company Stock Fund may only be forfeited after all other available assets under the Plan have been forfeited.

(vi) Effective January 1, 2018, a Participant shall have a vested, nonforfeitable right to the portion of the Participant's account attributable to Company Core Contributions, including any related investment earnings and losses.

3.06 **Timing of Contributions.** Before-Tax, Roth 401(k) and Catch-up Contributions shall be transferred to the Trustee as soon as practicable following the date on which the Participant's pay is reduced by the amount of the contribution. Company Matching Contributions and Company Core Contributions shall be transferred to the Trustee at least annually, but in all cases no later than the last date on which amounts so paid may be deducted for federal income tax purposes for the taxable year of the Employer in which the Plan Year ends.

3.07 **Nondiscrimination Limitations and Corrective Measures.**

(a) For purposes of this Section 3.07, the following terms shall have the meanings indicated below:

(i) **Actual Contribution Percentage.** The Actual Contribution Percentages for a Plan Year for the group of all Highly Compensated Employees and for the group of all Nonhighly Compensated Employees respectively are the averages, calculated to the nearest one-hundredth of a percentage point (.01%), of the ratios, calculated separately to the nearest one-hundredth of a percentage point (.01%) for each Employee in the respective group, of the amount of Company Matching Contributions and After Tax Contributions (and any Qualified Non-Elective Contribution made under Paragraph 3.07(c)(x) for purposes of satisfying the Actual Contribution Percentage Test) made to the Plan on behalf of each such Employee for such Plan Year, to the Employee's Compensation for such Plan Year, whether or not the Employee was a Participant for the entire Plan Year. The Actual Contribution Percentage calculation may include Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions, so long as: (A) the Actual Deferral Percentage Test is met before such Before-Tax Contributions and Roth 401(k) Contributions are used in the Actual Contribution Percentage Test, and continues to be met following the exclusion of those Before-Tax Contributions and Roth 401(k) Contributions that are used to meet the Actual Contribution Percentage Test and (B) the requirements of Treasury Regulation §1.401(m)-1(b)(5) are satisfied. For purposes of determining the Actual Contribution Percentage, only those Employees who are eligible to elect After Tax Contributions or to receive Company Matching Contributions for all or a portion of the applicable Plan Year, or who would be so eligible absent a suspension in accordance with the terms of the Plan, are taken into account; any such Employee who would be a Participant if such Employee made an After Tax Contribution or had a Before-Tax

Contribution or Roth 401(k) Contribution made on his behalf shall be treated as an eligible Employee on behalf of whom no After Tax Contributions or Company Matching Contributions are made.

For purposes of this Section, and except as otherwise provided in Treasury regulations, if the Plan and any other plan are aggregated for purposes of Code Section 410(b) (other than for purposes of the average benefit percentage test), such plans (including the Plan) shall be treated as one (1) plan for purposes of calculating the Actual Contribution Percentage. Except as otherwise provided in Treasury regulations, if any Highly Compensated Employee who is a Participant in this Plan also participates in any other plan of the Employer to which employee or matching contributions are made, all such plans (including the Plan) shall be treated as one (1) plan with respect to such Participant.

(ii) **Actual Contribution Percentage Test** means the test described in Paragraph 3.07(b)(ii).

(iii) **Actual Deferral Percentage**. The Actual Deferral Percentages for a Plan Year for the group of all Highly Compensated Employees and for the group of all Non-highly Compensated Employees respectively are the averages, calculated to the nearest one-hundredth of a percentage point (.01%), of the ratios, calculated separately to the nearest one-hundredth of a percentage point (.01%) for each Employee in the respective group, of the amount of Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions (and Qualified Non-Elective Contributions made under Paragraph 3.07(c)(x) for purposes of satisfying the Actual Deferral Percentage Test), paid under the Plan on behalf of each such Employee for such Plan Year, including Excess Deferrals, to the Employee's Compensation for such Plan Year (whether or not the Employee was a Participant for the entire Plan Year) but excluding Before-Tax Contributions and Roth 401(k) Contributions that are taken into account in the Actual Contribution Percentage Test. Only those Employees who are eligible to elect Before-Tax Contributions or Roth 401(k) Contributions for all or a portion of the applicable Plan Year, or who would be so eligible absent a suspension in accordance with the terms of the Plan, are taken into account; any such Employee who would be a Participant but for the failure to have Before-Tax Contributions or Roth 401(k) Contributions made on his behalf shall be treated as an eligible Employee on whose behalf no Before-Tax Contributions or Roth 401(k) Contributions are made.

For purposes of this Section and except as otherwise provided in Treasury regulations, if the Plan and any other plan which includes a cash or deferred arrangement (within the meaning of Code Section 401(k)) are aggregated for purposes of Code Section 410(b) (other than for purposes of the average benefit percentage test), the cash or deferred arrangements in such plans (including the Plan) shall be treated as one (1) plan for purposes of calculating the Actual Deferral Percentage. Except as otherwise provided in Treasury regulations, if any Highly Compensated Employee who is a Participant in this Plan also participates in any other cash or deferred arrangement (within the meaning of Code Section 401(k)) of the Company or an Affiliated Company, all such cash or deferred arrangements (including under the Plan) shall be treated as one (1) cash or deferred arrangement with respect to such Participant.

(iv) **Actual Deferral Percentage Test** means the test described in Paragraph 3.07(b)(i).

(v) **Compensation** shall mean, except as otherwise provided in the definition of “Highly Compensated Employee”, a definition of compensation which satisfies Code Section 414(s) and regulations thereunder, and which is consistently used in any one Plan Year for purposes of this Section 3.07.



(vi) **Excess Aggregate Contributions** mean, with respect to any Highly Compensated Employee for a Plan Year, the excess of:

(A) The total After Tax Contributions and Company Matching Contributions (and, where applicable, Before-Tax Contributions and Roth 401(k) Contributions, taken into account under the Actual Contribution Percentage Test) made on behalf of such Highly Compensated Employee taken into account in computing the Actual Contribution Percentage for such Plan Year, over

(B) The maximum amount of After Tax Contributions and Company Matching Contributions (and, where applicable, Before-Tax Contributions and Roth 401(k) Contributions, taken into account under the Actual Contribution Percentage Test) on behalf of such Highly Compensated Employee which are permitted by the Actual Contribution Percentage Test.

(vii) **Excess Contributions** mean, with respect to any Highly Compensated Employee for a Plan Year, the excess of:

(A) The total Before-Tax Contributions and Roth 401(k) Contributions made on behalf of such Highly Compensated Employee taken into account in computing the Actual Deferral Percentage of Highly Compensated Employees for such Plan Year, over

(B) The maximum amount of such Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions, on behalf of such Highly Compensated Employee which are permitted by the Actual Deferral Percentage Test.

(viii) **Excess Deferrals** mean the Before-Tax Contributions and Roth 401(k) Contributions that are includible in a Participant's gross income because they have exceeded the dollar limitation contained in Code Section 402(g).

(ix) **Highly Compensated Employee** means any Employee who performs service for the Company or an Affiliated Company during the determination year (as defined below) and who was: (A) a Five-Percent Owner at any time during the current or preceding Plan Year, or (B) for the preceding Plan Year had Compensation from the Employer or an Affiliated Company in excess of \$115,000 (as adjusted pursuant to Code Section 414(q)). At the election of the Plan Administrator and, as provided for in Exhibit III, in a manner consistent with Code Section 414(q) and any regulations or other IRS pronouncements thereunder, clause (B) in the preceding sentence can be limited to those Employees who are in the top twenty percent (20%) of Employees ranked on the basis of compensation for such look-back year. At the election of the Plan Administrator, as provided for in Exhibit III, Compensation for the purpose of this Paragraph 3.07(a)(ix) may be determined on the basis of a calendar year, rather than the Plan Year.

(x) To the extent required by applicable law "Highly Compensated Employee" shall also include a highly compensated former employee, which is any employee who separated from service prior to the current Plan Year and who was either a Highly Compensated Employee in any determination year ending on or after the Employee's attainment of age fifty five (55).

For purposes of this definition, Compensation is as defined in Code Section 415(c)(3).

(xi) **Nonhighly Compensated Employee** means any employee who is not a Highly Compensated Employee.

(xii) **Qualified Non-Elective Contributions** mean contributions made by the Company described in Paragraph 3.07(c)(x).

(xiii) **Five Percent Owner** means an Employee who shall be considered to be a Five Percent Owner for any Plan Year if at any time during such year such Employee was a five percent owner of the Employer, determined in accordance with the rules of Code Section 416(i)(1).

(b) **Nondiscrimination Tests.**

(i) **Actual Deferral Percentage Test.** Notwithstanding any provision herein to the contrary, the Actual Deferral Percentage for the group of all eligible Highly Compensated Employees for each Plan Year must not exceed the greater of:

(A) the Actual Deferral Percentage for the previous Plan Year for the group of all eligible Nonhighly Compensated Employees multiplied by 1.25; or

(B) the Actual Deferral Percentage for the previous Plan Year of such group of Nonhighly Compensated Employees multiplied by 2.0, but in no event more than two (2) percentage points greater than the Actual Deferral Percentage for the previous Plan Year of such group of Nonhighly Compensated Employees.

The Senior Vice President - Human Resources, by written notice to the Plan Administrator may elect to entirely exclude from the Actual Deferral Percentage test those Employees who could be excluded from participation under the minimum age and service requirements of Code Section 410(a)(1)(A) ("early participation employees"), other than those early participation employees who are Highly Compensated Employees, to the extent permitted under Code Section 401(k)(3)(F). Any such election shall be reflected in Exhibit III.

The Actual Deferral Percentage test set forth in this Paragraph 3.07(b)(i) shall be performed in accordance with Code Section 401(k), the regulations thereunder, and any related IRS pronouncements, including IRS Notice 98-1 to the extent applicable. The Actual Deferral Percentage test set forth in this Paragraph 3.07(b)(i) may be performed with current year Non-Highly Compensated Employee data, rather than prior year data, if so elected by the Employer. Any such election shall be made by the Senior Vice-President - Human Resources and shall be reflected in Exhibit III.

(ii) **Actual Contribution Percentage Test.** Notwithstanding any provision herein to the contrary, the Actual Contribution Percentage for the group of all eligible Highly Compensated Employees for each Plan Year must not exceed the greater of:

(A) The Actual Contribution Percentage for the previous Plan Year for the group of all eligible Nonhighly Compensated Employees multiplied by 1.25; or

(B) The Actual Contribution Percentage for the previous Plan Year of such group of Nonhighly Compensated Employees multiplied by 2.0, but in no event more than two (2) percentage points greater than the Actual Contribution Percentage for the previous Plan Year of such group of Nonhighly Compensated Employees.

The Senior Vice President - Human Resources, by written notice to the Plan Administrator may elect to entirely exclude from the Actual Contribution Percentage Test those Employees who could be excluded from participation under the minimum age and service requirements of Code Section 410(a)(1)(A) ("early participation employees"), other than those early participation employees who are Highly Compensated Employees, to the extent permitted under Code Section 401(m)(5)(C). Any such election shall be reflected in Exhibit III.

The Actual Contribution Percentage test set forth in this Paragraph 3.07(b)(ii) shall be performed in accordance with Code Section 401(m), the regulations thereunder, and any related IRS pronouncements, including IRS Notice 98-1 to the extent applicable. The Actual Contribution Percentage test set forth in this Paragraph 3.07(b)(ii) may be performed with current year Non-Highly Compensated Employee data, rather than prior year data, if so elected by the Employer. Any such election shall be made by the Senior Vice President - Human Resources and shall be reflected in Exhibit III.

(iii) For purposes of Paragraph 3.07(b), a Participant is a Highly Compensated Employee for a particular Plan Year if he or she satisfies the definition of a Highly Compensated Employee in effect for that Plan Year. Similarly, a Participant is a Nonhighly Compensated Employee for a particular Plan Year if he or she does not satisfy the definition of a Highly Compensated Employee in effect for that Plan Year.

(c) Notwithstanding any other provision of the Plan to the contrary, the percentages of Annual Salary specified by a Participant in his Deferral Election shall be subject to adjustment or other corrective measures by the Plan Administrator at any time and from time to time as follows:

(i) Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions, shall not be accepted with respect to any Participant for a calendar year to the extent such Before-Tax Contributions and Roth 401(k) Contributions, together with any other elective contributions of the Participant to a plan maintained by the Company or an Affiliated Company, exceed \$9,500 (as adjusted in accordance with Code Section 402(g)); accordingly, the Plan Administrator shall adjust downward the percentage of Annual Salary specified by a Participant in his Deferral Election to be contributed to the Plan as Before-Tax Contributions and Roth 401(k) Contributions, as may be necessary to prevent such Excess Deferrals.

(ii) Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions, for any Plan Year must satisfy the Actual Deferral Percentage Test; accordingly, the Plan Administrator shall adjust downward the percentage of Annual Salary specified by a Participant in his Deferral Election, to the extent which the Plan Administrator in his sole discretion determines is necessary to maintain the Plan's compliance with the Average Deferral Percentage Test.

(iii) After Tax Contributions and Company Matching Contributions for any Plan Year must satisfy the Actual Contribution Percentage Test (after taking into account any Before-Tax Contributions and Roth 401(k) Contributions included in such test pursuant to Paragraph 3.07(a)(i)); accordingly, the Plan Administrator shall adjust downward the percentage of Annual Salary specified by a Participant in his Deferral Election to the extent which the Plan Administrator in his sole discretion determines is necessary to maintain the Plan's compliance with the Actual Contribution Percentage Test.

(iv) When a downward adjustment has been made pursuant to Paragraph (i), (ii), or (iii) above, the Plan Administrator may thereafter adjust any such percentage upward to bring it up to or closer to the percentage specified in the Participant's most recent Deferral Election whenever the Plan Administrator determines that such an upward adjustment can be made without exceeding the limits described in Paragraph (i), (ii), or (iii). In the event of such upward adjustment, each affected Participant shall be given the opportunity to affirmatively elect to have such higher percentage apply to him.

(v) Any downward or upward adjustment in the percentage of Annual Salary specified by a Participant in his Deferral Election to be contributed to the Plan as Before-Tax Contributions and Roth 401(k) Contributions other than Catch-up Contributions shall, with the Participant's consent and unless the Plan Administrator directs otherwise, result in a corresponding increase or decrease, if the Participant is eligible, to Catch-up Contributions.

(vi) If, after application of the above provisions of Paragraph 3.07(c), Excess Deferrals are made to the Plan, such Excess Deferrals shall be re-characterized as Catch-up Contributions to the extent that a Participant who is eligible to make Catch-up Contributions has not reached the applicable Catch-up Contribution limit for the calendar year described in Section 3.02(c). Any Excess Deferrals remaining after application of the preceding sentence shall be returned to the Participant with earnings through the end of the calendar year in accordance with Treasury Regulation §1.402(g)-1, no later than April 15 following the close of the calendar year in which such contributions were made. Distributions shall first be made from Unmatched Contributions, excluding Catch-up Contributions, then from Matched Contributions. The return of any Matched Contributions shall be accompanied by a forfeiture of the related Company Matching Contributions and any income attributable thereto. Such forfeited amounts shall be held by the Trustee in a suspense account and applied towards subsequent Company Matching Contributions.

(vii) After the close of a calendar year, but no later than the last Business Day before April 15 (or such earlier date required by Treasury regulations) following such calendar year, a Participant who was also a participant in another plan to which the limitation on deferrals described in Code Section 402(g) applies may notify the Plan Administrator that the Participant has had deferrals contributed to the Plan and such other plan in excess of such limitation for such preceding calendar year and shall inform the Plan Administrator of the amount of such Excess Deferrals. Such Participant may request a distribution of such Excess Deferrals. Such Excess Deferrals shall first be re-characterized as Catch-up Contributions to the extent that a Participant who is eligible to make Catch-up Contributions has not reached the applicable Catch-up Contribution limit for the calendar year described in Section 3.02(c). Any Excess Deferrals remaining after application of the preceding sentence shall be distributed with the earnings attributable thereto through the end of the calendar year in accordance with Treasury Regulation §1.402(g)-1 no later than the April 15 following such notification. Distributions shall first be made from Unmatched Contributions, excluding Catch-up Contributions, and the return of any Matched Contributions shall be accompanied by a forfeiture of the related Company Matching Contributions and any income attributable thereto. Such forfeited amounts shall be held by the Trustee in a suspense account and applied towards subsequent Company Matching Contributions.

(viii) If, after application of the above provisions of Paragraph 3.07(c), Excess Contributions are made to the Plan, such Excess Contributions shall be re-characterized as Catch-up Contributions to the extent that a Participant who is eligible to make Catch-up Contributions has not reached the applicable Catch-up Contribution limit for the calendar year described in Section 3.02(c). Any Excess Contributions and the earnings attributable thereto through the end of the calendar year remaining after application of the preceding sentence shall be distributed to Highly Compensated Employees making such Excess Contributions no later than December 15 following the close of such Plan Year. The Highly Compensated Employee with the largest amounts of Before-Tax Contributions and Roth 401(k) Contributions shall have his Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions, reduced to the greater of: (A) the highest dollar amount of Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions, that can be made without violating the limit of Paragraph 3.07(b)(i), or (B) the next highest dollar amount of Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions, of any other Highly Compensated Employee. Such process is repeated until Paragraph 3.07 (b)(i) is satisfied in accordance with Treasury Regulation §1.401(k)-1(f)(4)(ii). Distributions shall first be made from Unmatched Contributions, excluding Catch-up Contributions, then from Matched Contributions. The return of any Matched Contributions shall be accompanied by a forfeiture of the related Company Matching Contributions and any income attributable thereto. Such forfeited amounts shall be held by the Trustee in a suspense account and applied towards subsequent Company Matching Contributions.

(ix) If, after application of the above provisions of Paragraph 3.07(b)(ii), Excess Aggregate Contributions are made to the Plan, such Excess Aggregate Contributions shall be re-characterized as Catch-up Contributions to the extent that a Participant who is eligible to make Catch-up Contributions has not reached the applicable Catch-up Contribution limit for the calendar year described in Section 3.02(c). Any Excess Aggregate Contributions and the earnings attributable thereto through the end of the calendar year remaining after application of the preceding sentence shall be distributed to Highly Compensated Employees making such Excess Aggregate Contributions no later than December 15 following the close of the Plan Year. The Highly Compensated Employee with the largest amounts of contributions taken into account in computing the Actual Contribution Percentage Test ("ACP contributions") shall have his ACP contributions reduced to the greater of: (A) the highest dollar amount of ACP contributions that can be made without violating the limit of Paragraph 3.07(b)(ii), or (B) the next highest dollar amount of ACP contributions of any other Highly Compensated Employee. Such process is repeated until Paragraph 3.07(b)(ii) is satisfied in accordance with Treasury Regulation §1.401(m)-1(e)(3)(iv).



(x) Notwithstanding any other provision of this Section 3.07 or of the Plan to the contrary, the Employer may, by action of the Company, determine to make a special Employer contribution (a “Qualified Non-Elective Contribution”) to the Plan for the account of certain Participants who are Nonhighly Compensated Employees in order to maintain the Plan's compliance with the non-discrimination requirements of Code Sections 401(k) and 401(m) and in lieu of (or in combination with) making the adjustment in the percentage of Annual Salary specified by Participants in their Deferral Elections or returning Contributions as provided in this Section 3.07. Any such Qualified Non-Elective Contribution shall be in such amount as is determined by the Company and will be allocated as determined by the Company to the individual accounts of Participants who are Nonhighly Compensated Employees and who actively contributed to the Plan during, and are Employees at the end of, the Plan Year for which such contribution is made. Any such Qualified Non-Elective Contribution shall be nonforfeitable and shall be treated for all purposes as a Before-Tax Contribution under the Plan, including for purposes of the limitations on distribution described in this Article 3, except that such contribution shall not be applied against or counted for purposes of determining compliance with the percent limitation on Before-Tax Contributions in Section 3.02, the combined percent limitation on Before-Tax Contributions and Roth 401(k) Contributions contained in Section 3.02, or the limitation on Before-Tax Contributions and Roth 401(k) Contributions contained in this Section 3.07. Any such Qualified Non-Elective Contribution shall be made to the Trustee no later than the last day of the Plan Year next succeeding the Plan Year for which the contribution is made, and may be made in whole or in part in cash or in shares of Company Stock. Payment of any such Qualified Non-Elective Contribution (whether in the form of cash or Company Stock) for a Plan Year which is made by the Employer after the close of such Plan Year shall be treated by the Plan in the same manner as if it were received on or before the last day of such Plan Year.

3.08 **In- Service Withdrawals by Participants of After-Tax Contributions, Rollover Contributions, Company Matching Contributions, Before-Tax and Catch-up Contributions and Roth 401(k) Contributions.** The following Section 3.08 shall apply with respect to a Participant who has not separated from service with the Employer.

(a) **Age 59 ½ Withdrawal.** Upon attainment of age 59 ½ and upon application to the Trustee, a Participant may withdraw all available amounts credited to any After-Tax Contributions account, to any Rollover Contributions Account, to any Company Matching Contributions Account, or to any Before-Tax Contributions Account. The Participant may also withdraw all available amounts credited to any Roth 401(k) Contribution Account or Roth Rollover Account. The Plan Administrator shall withdraw the amount requested first from all available funds in any After-Tax Contributions account, second from all available funds in any Rollover Contributions Account, third from all available funds in any Company Matching Contributions Account, fourth from all available funds in any Before-Tax Contributions Account or Roth 401(k) Contribution Account, and finally from all available funds in his Roth Rollover Account.

(i) An individual who attains age 59 ½ may take such Age 59 ½ Withdrawal once during each 12 month period. Any individual who attains age 59 ½ and who takes such Age 59 ½ Withdrawal during a twelve month period, if applicable, remains eligible to take an additional distribution pursuant to Section 3.08(b),(c),(d), and (e) during such 12 month period.

(ii) An individual who takes an Age 59 ½ Withdrawal shall not have his election to make Before-Tax Contributions or Roth 401(k) Contributions, including Catch-up Contributions, be affected by such withdrawal.

(b) **Hardship Withdrawal.** Upon application to the Trustee, a Participant who qualifies for a hardship withdrawal may withdraw all available amounts credited to any After-Tax Contributions account, to any Rollover Contributions Account, any Roth Rollover Contribution Account, to any Company Matching Contributions Account or to any Before-Tax Contributions Account or Roth 401(k) Contribution Account. The Plan Administrator shall withdraw the amount requested first from all available funds in any After-Tax Contributions account, second from all available funds in any Rollover Contributions Account, third from all available funds in any Company Matching Contributions Account, fourth from all available funds in any Before-Tax Contributions Account or any Roth 401(k) Contribution Account, and finally from all available funds in the Roth Rollover Contributions Account

(i) A withdrawal will be deemed to constitute a hardship withdrawal if: (1) the Participant has an immediate and heavy financial need; and (2) a distribution from the Plan is necessary to meet that need. A Participant will be treated as having an immediate and heavy financial need only if the funds are required to cover one of the following:

(A) Expenses for medical care described in Code Section 213(d) previously incurred by the Participant or the Participant's spouse or dependents (as defined in Code Section 152) or necessary for these persons to obtain such medical care, or, effective October 1, 2007, expenses for medical care previously incurred by a primary Beneficiary of the Participant or expenses necessary for a primary Beneficiary to obtain such medical care;

(B) Costs directly related to the purchase (excluding mortgage payments) of a principal residence for the Participant;

(C) Post-secondary education tuition, related educational fees, and room and board expenses for the Participant or the Participant's spouse, children, or other dependents (as defined in Code Section 152) for the next twelve (12) months, or, effective October 1, 2007, such fees and expenses for a primary Beneficiary of the Participant for the next twelve (12) months;

(D) Payment of amounts necessary to prevent the eviction of the Participant from his principal residence or foreclosure on the mortgage of the Participant's principal residence;

(E) Effective October 1, 2006, payments for funeral or burial expenses for a deceased parent, spouse, child or dependent, and effective October 1, 2007, such payments for a primary Beneficiary of the Participant;

(F) Effective October 1, 2006, repair to a principal residence for damage that would qualify for the casualty deduction under Code Section 165 (determined without regard to whether the loss exceeds 10 percent of adjusted gross income); or

(G) Any other purposes for which the Internal Revenue Service specifically determines, under the authority given to it under Treasury Regulation §1.401(k)-1(d)(3)(v), that such circumstances constitute an immediate and heavy financial need.

(ii) For the purposes of this section, a “primary Beneficiary” is an individual who is named as a Beneficiary under the Plan and has an unconditional right to all or a portion of the Participant’s account balance under the Plan upon the death of the Participant.

(iii) If an immediate and heavy financial need is deemed to exist, a distribution from the Plan will be deemed necessary to meet such need if, and only if, the following conditions are met:

(A) the distribution is not in excess of the amount of the immediate and heavy financial need of the Participant, including amounts necessary to pay any federal, state, or local income taxes or penalties reasonably anticipated to result from the distribution;

(B) the Participant has obtained all distributions, other than hardship distributions, and has applied for all nontaxable (at the time of the loan) loans currently available under all plans maintained by the Company or an Affiliated Company; and

(C) the Participant will be prohibited from making elective contributions (as defined in Treas. Reg. §1.401(k)-6) or receiving employer contributions (as defined in Treas. Reg. §1.401(m)-1(f)(6)) to any qualified or non-qualified deferred compensation plans maintained by the Company or an Affiliated Company (as determined in accordance with Treas. Reg. §1.401(k)-1(d)(3)(iv)(E)(2)) for six (6) months commencing as soon as administratively possible following the hardship withdrawal.

(iv) No hardship withdrawal of earnings on Before-Tax, Roth 401(k) Contributions, or Catch-up Contributions shall be permitted to the extent that such earnings are attributable to periods after December 31, 1988.

(c) **Qualified Reservist Distribution.** Upon application to the Trustee, a Participant who meets the requirements of Code Section 72(t)(2)(G)(iii) may withdraw all or a portion of the amounts available in any Before-Tax Contributions Account or Roth 401(k) Contributions Account. Any individual who meets the requirements to receive a Qualified Reservist Distribution and who takes such Qualified Reservist Distribution during a twelve month period, if applicable, remains eligible to take an additional distribution pursuant to Section 3.08(a), (b), (c), (d), and (e) during such 12 month period. An individual who takes a Qualified Reservist Distribution shall not have his election to make Before-Tax Contributions, including Catch-up Contributions, or After-Tax Contributions be affected by such withdrawal.

(d) **Heroes Earnings Assistance and Relief Tax Act of 2008.** A Participant who meets the requirements of Section 3.16(d) shall have a distribution event pursuant to Section 3.10. A Participant who takes such distribution will be prohibited from making elective contributions (as defined in Treas. Reg. §1.401(k)-6) or receiving employer contributions (as defined in Treas. Reg. §1.401(m)-1(f)(6)) to any qualified or non-qualified deferred compensation plans maintained by the Company or an Affiliated Company (as determined in accordance with Treas. Reg. §1.401(k)-1(d)(3)(iv)(E)(2)) for six (6) months commencing as soon as administratively possible following such distribution.

(e) **Other In-Service Withdrawals.**

(i) **After-Tax Contributions.** Upon application to the Trustee at any time no sooner than twelve (12) months after any earlier withdrawal by such Participant of After-Tax Contributions under Section 3.08(e)(i), Rollover Contributions under Section 3.08(e)(ii), or Company Matching Contributions under Section 3.08(e)(iii), a Participant may withdraw amounts then credited to his After-Tax Contributions account but excluding earnings on these amounts and provided such amounts have been in the Plan for at least two years.

There shall be no suspension of the withdrawing Participant's right to make Before-Tax Contributions or After-Tax Contributions following a withdrawal under this Paragraph 3.08(e)(i).

(ii) **Rollover Contributions.** Upon application to the Trustee at any time no sooner than twelve (12) months after any earlier withdrawal by him under this Section 3.08(e)(ii), After-Tax Contributions under Section 3.08(e)(i), or Company Matching Contributions under Section 3.08(e)(iii), a Participant may withdraw all or a portion of the amounts then credited to his Rollover Contributions account; provided, however, that such Participant shall first have withdrawn, or shall have applied to make a concurrent withdrawal of all eligible amounts credited to his After-Tax Contributions account. There shall be no suspension of the withdrawing Participant's right to make Before-Tax Contributions or Roth 401(k) Contributions following a withdrawal under this Paragraph 3.08(e)(ii).

(iii) **Company Matching Contributions.** Upon application to the Trustee at any time no sooner than twelve (12) months after any earlier withdrawal by him under this Section 3.08(e)(iii), After-Tax Contributions under Section 3.08(e)(i), or Rollover Contributions under Section 3.08(e)(ii), a Participant may withdraw amounts then credited to his Company Matching Contributions account but excluding earnings on these amounts and provided such amounts have been in the Plan for at least two years; provided, however, that such Participant shall first have withdrawn, or shall have applied to make a concurrent withdrawal of all his eligible After-Tax Contributions and his Rollover Contributions . There shall be no suspension of the withdrawing Participant's right to make Before-Tax Contributions or Roth 401(k) Contributions following a withdrawal under this Paragraph 3.08(e)(iii).

(iv) **Roth Rollover Contributions.** Upon application to the Trustee at any time no sooner than twelve (12) months after any earlier withdrawal by him under this Section 3.08(e)(ii), After-Tax Contributions under Section 3.08(e)(i), or Company Matching Contributions under Section 3.08(e)(iii), a Participant may withdraw all or a portion of the amounts then credited to his Roth Rollover Contributions account; provided, however, that such Participant shall first have withdrawn, or shall have applied to make a concurrent withdrawal of all eligible amounts credited to his After-Tax Contributions Account. There shall be no suspension of the withdrawing Participant's right to make Before-Tax Contributions or Roth 401(k) Contributions following a withdrawal under this Paragraph 3.08(e)(ii).

(f) **Before-Tax Contributions.** A Participant cannot withdraw amounts credited to his Before-Tax Contribution accounts, except that a Participant may withdraw all or a portion of such amounts pursuant to Sections 3.08(a), 3.08(b), 3.08(c) and 3.16.

(g) **Roth 401(k) Contributions.** A Participant cannot withdraw amounts credited to his Roth 401(k) Contribution Account, except that a Participant may withdraw all or a portion of such amounts pursuant to Sections 3.08(a), 3.08(b), 3.08(c) and 3.16.

(h) **Withdrawal Procedures.** The Plan Administrator shall establish administrative procedures for obtaining withdrawals.

3.09 **Loans to Participants.** Upon application to the Trustee by a Participant or Beneficiary who is not a Party in Interest, the Plan Administrator may authorize the Trustee to make a loan or loans to such Participant or Beneficiary. Any such loans shall be subject to at least the following requirements:

(a) Loans shall be made available on a uniform and nondiscriminatory basis.

(b) Loans must bear a reasonable interest rate which will be determined by the Plan Administrator and which will be fixed for the term of the loan. All loans will be secured by up to fifty percent (50%) of the borrower's vested Plan accounts (determined as of the time of the loan).

(c) The minimum loan amount is \$1,000.

(d) No loan can be made to the extent that such loan, when added to the outstanding balance of all other loans to the borrower under this Plan and any other plan of the Company or an Affiliated Company, would exceed the lesser of: (i) fifty thousand dollars (\$50,000), reduced by the excess of (A) the highest outstanding balance of loans to the borrower from the Plan and such other plans during the one-year period ending on the day before the date the loan is made over (B) the outstanding loan balance on the date the loan is made, or (ii) one-half of the vested value of the borrower's accounts under this Plan and such other plan(s). In addition, no loan under this Plan, when added to any existing loans hereunder, shall exceed the value of the amounts credited to the borrower's After-Tax Contributions, Before-Tax Contributions, Roth 401(k) Contribution and Company Matching Contributions Accounts, plus the borrower's vested Company Core Contribution Account.

(e) Any loan shall, by its terms, require repayment within five (5) years unless such loan is used to acquire a dwelling unit which, within a reasonable time (determined at the time the loan is made), will be used as the principal residence, within the meaning of Code Section 121, of the borrower, in which case the loan shall be repaid within such period as may be established by the Senior Vice President – Human Resources. , At the discretion of the Plan Administrator, such loan is directly rolled over to a qualified plan of a subsequent employer of the Participant pursuant to an agreement between the Company and the subsequent employer. The maximum number of loans which a borrower may have outstanding at one time is one residential and one non-residential loan.

(f) Certain fees apply when obtaining a loan through the Plan. Such fees, as they are in effect from time to time, will be set forth in the Summary Plan Description or in loan documentation provided to the borrower.

(g) Repayment of Participant loans shall be by payroll deduction or other method approved by the Plan Administrator on a level amortized basis with repayments made as specified in the loan documentation, but, in all cases, at least quarterly; except that a borrower may prepay any amount of the outstanding balance of his loan at any time in accordance with procedures established by the Plan Administrator. Loan repayments may be suspended for one year during a Participant's authorized unpaid leave of absence, or during such other period permitted by applicable law. Loan repayments may be suspended as permitted under Code Section 414(u)(4) for any period in which the Participant is on a qualified military leave.



(h) Loans must be evidenced by a written promissory note. In the event that a borrower fails to make a required payment when due, the loan shall be in default if the borrower fails to become current in his payments within ninety (90) days of such missed payment, or, if earlier, the default date as indicated in the loan documentation. Upon default, the outstanding principal balance of the loan and all accrued interest thereon will be immediately due and payable, and will be satisfied from the borrower's Plan accounts (at such time(s) as permitted by applicable law) upon the occurrence of a Distribution Event or upon the Participant's attainment of age fifty-nine and one-half (59½).

(i) Each loan shall be a separate investment of the borrower's Plan accounts. The amount of the loan will first reduce the borrower's Before-Tax, and Catch-up Contributions Accounts, then the borrower's After-Tax Contributions Account, then the borrower's Rollover Contributions Account, then the borrower's Company Matching Contributions Account, then the borrower's vested Company Core Contributions Account, then the Roth 401(k) Account and then the Roth Rollover Account. Amounts within the Plan accounts allocated to each Participant Investment Fund also shall be reduced ratably.

(j) Loan repayments, including both principal and interest, shall be credited back to the source from which the loan was redeemed. All payments shall be allocated among the Participant Investment Funds in accordance with the borrower's most recent investment direction election for new contributions.

Notwithstanding the foregoing, loans made pursuant to this Section 3.09 may be subject to such additional uniform and nondiscriminatory rules as may from time to time be adopted by the Board, the Investment Committee or the Plan Administrator, which rules shall comply with the Code, ERISA, and other applicable law and may impose limitations on, or requirements for obtaining Plan loans which are in addition to or more restrictive than those limitations and requirements set forth above in this Section 3.09.

**3.10 Distributions Following Distribution Events.**

(a) Except as otherwise provided for in Paragraph 3.10(d) herein, after a Distribution Event other than death occurs as to the Participant, the following will apply:

(i) All amounts credited to such Participant's Accounts shall be retained in the Plan until the earliest of the Participant's death, the Participant's consent to and application for the Trustee to distribute the aggregate amounts in all of Participant's Plan Accounts to him in a lump sum or the Participant's consent to and application for the Trustee to commence distribution of installment payments of his account to him in accordance with Section 5.01. Notwithstanding the preceding sentence, distributions of a Participant's Plan accounts shall commence no later than April 1 of the calendar year following his attainment of age 70½. Participants who attain age 70½ on or after January 1, 2003, and continue employment with the Employer beyond age 70½ may defer commencement of distribution under this Section until no later than April 1<sup>st</sup> of the calendar year following the calendar year in which the Participant retires. Notwithstanding the above, any required distributions after age 70 ½ that are due to be paid in calendar year 2009 shall be waived unless an affirmative election to receive the distribution has been made by the Participant.

(ii) In the event that the Participant consents to a lump sum distribution of the aggregate amounts in all of his Plan accounts, by filing an election with the Trustee effective on or after the date of (A) the Participant's termination of employment with the Company or an Affiliated Company, or (B) a Distribution Event as to the Participant, the Participant shall receive a distribution of all amounts credited to such Participant's Plan accounts, in the manner described in Section 5.01. In addition, a second distribution of any amount subsequently credited to a Participant's Company Matching Contributions Account in accordance with Section 3.03 or to a Participant's Company Core Contributions Account in accordance with Section 3.04 shall be made as soon as practicable after actual receipt by the Trustee of the Company Stock or cash contribution.

(b) In the event of the Participant's death, the Participant's Beneficiary shall receive a distribution of all amounts credited to the Participant's Plan Accounts according to the distribution elections provided in Section 5.01. Subject to Paragraph 3.10(d), such distribution shall be made as soon as practicable after the Participant's death.

(c) Notwithstanding the previous paragraphs of this Section 3.10, if the aggregate vested amount credited to the Participant's Plan Accounts does not exceed \$1,000, such amount will, subject to Paragraph (d) below, be distributed to the Participant (or, in the case of the Participant's death, the Participant's Beneficiary or Beneficiaries) in the manner provided in Section 5.01.

(d) At least thirty (30) days, but no more than one hundred eighty (180) days, before a distribution is made to a Participant, a Participant shall be given notice of: (1) his ability to delay distribution in accordance with Paragraph 3.10(a)(i) above (if applicable), (2) his ability to elect a direct rollover in accordance with Section 5.03, and (3) for former participants of the IGS Savings Plan, the ability to elect the optional forms of payment as provided in Exhibit II. At least thirty (30) days, but no more than one hundred eighty (180) days, before benefits begin to a Beneficiary (including an alternate payee under a Qualified Domestic Relations Order), such Beneficiary must be given notice of his ability to elect a direct rollover under Section 5.03. A distribution may be made less than thirty (30) days after receipt of the notice required by this Paragraph 3.10(d); provided that: (i) the notice clearly informs the Participant or Beneficiary of the right to consider the decision regarding distribution or direct rollover for a period of thirty (30) days after the notice is provided, and (ii) after receiving the notice, the Participant or Beneficiary waives the thirty (30) day period by electing a distribution.

3.11 **Distributions Pursuant to a Qualified Domestic Relations Order.** Notwithstanding any other provisions of the Plan, following the Plan Administrator's determination that a domestic relations order received by the Plan Administrator and applicable to a Participant and any of such Participant's Plan accounts is a Qualified Domestic Relations Order, such distribution or distributions shall be made from such Participant's Plan account or accounts, in accordance with such Qualified Domestic Relations Order and the Plan's Qualified Domestic Relations Order procedures, and in the manner described in Section 5.01, to the alternate payee or payees specified in such Qualified Domestic Relations Order. If so specified in a Qualified Domestic Relations Order, a distribution to an alternate payee may be made prior to the date on which the Participant attains his "earliest retirement age" (as defined in Code Section 414(p)(4) and ERISA Section 206(d)(3)(E)).

3.12 **Rollovers into the Plan.** Each Employee who is eligible pursuant to Paragraph 3.01(a) to participate in the Plan, and any other Employee who is expected to become eligible to participate in the Plan who has received an eligible rollover distribution described in Code Section 402(c)(4), may make a cash contribution to the Plan (a "Rollover Contribution" or "Roth Rollover Contribution") of all or a portion of any such rollover distribution, provided that: (a) the acceptance of such Rollover Contribution will not adversely affect the continued qualified status of the Plan, and (b) the Plan Administrator in due course receives all the documentation and other relevant information pertaining to such Rollover Contribution or Roth Rollover Contribution deemed necessary by the Plan Administrator for the proper administration of the Plan. Notwithstanding the above, the Plan does not accept After-Tax Contributions that are a part of an eligible rollover distribution. The Plan does accept Roth Rollover Contributions. Any such Rollover Contribution shall not be taken into account for purposes of determining: (i) the limitations set forth in Sections 3.02, 3.07, and 3.14; (ii) whether the Plan is "top-heavy" (as such term is defined in Code Section 416(g), unless the Rollover Contribution originates from the plan of the Company or an Affiliated Company); or (iii) the Company Matching Contributions under Section 3.03. For the period during which an Employee is not otherwise a Participant, such Employee shall be treated as a Participant solely for the purpose of and with respect to such Rollover Contribution.

3.13 **Plan-to-Plan Transfers; Plan Mergers.**

(a) At the discretion of the Investment Committee, the Trustee may accept directly from a trustee or custodian any or all of the assets, including outstanding participant loans, held under another plan which is qualified under Code Section 401(a) for the benefit of Participants or any other Employees who are expected to become Participants, either as a part of a transfer of assets from the trust for such other plan or a merger of such other plan with the Plan, provided that: (a) the acceptance of such transferred assets will not adversely affect the continued qualified status of the Plan, (b) the Plan Administrator in due course receives all the documentation and other relevant information pertaining to such transferred assets deemed necessary by the Plan Administrator for the proper administration of the Plan, and (c) any other conditions or requirements which may be established by the Investment Committee or the Plan Administrator are satisfied. Any assets which were held by the transferor plan under a qualified cash or deferred arrangement, as such term is defined in Code Section 401(k), shall be treated as Before-Tax Contributions. Any assets which were held by the transferor plan as Roth Contributions as that term is defined in Code Section 402A shall be treated as Roth 401(k) Contributions. Any assets which were held by the transferor plan pursuant to an election to make employee Catch-up Contributions shall be treated as Catch-up Contributions. Any assets which were held by the transferor plan pursuant to an election to make employee after-tax contributions shall be treated as After-Tax Contributions. Any other transferred assets shall be treated as Rollover Contributions or Roth Rollover Contributions for all purposes under the Plan, except that such transferred assets shall not be taken into account for purposes of determining: (i) the limitations set forth in Section 3.02, 3.07, and 3.14; (ii) whether the Plan is “top-heavy” (as such term is defined in Code Section 416(g), unless the transferor plan is a plan of the Company or an Affiliated Company); or (iii) the Company Matching Contributions under Section 3.03.

Notwithstanding any contrary provisions of Section 3.08, the withdrawal by a Participant of any or all of such transferred assets or any other assets derived from the investment thereof shall not result in a suspension of such Participant's right to make contributions to the Plan or to have contributions made on his behalf under the Plan. Alternate forms of benefits, and other benefits, rights, and features under the transferor or merged plan (including those identified in Section 5.05) shall be continued to the extent required to comply with ERISA and the Code. For the period during which an Employee is not otherwise a Participant, such Employee shall be treated as a Participant solely for the purpose of and with respect to the portion of such transferred assets allocated to his Plan account.

(b) At the discretion of the Investment Committee, the Trustee may transfer directly to a trustee or custodian any or all of the assets, including outstanding participant loans, held for the benefit of Participants or any other Employees who are expected to become participants, either as part of a transfer of assets from the Trust to such other plan or a merger of the Plan with such other plan provided that the transfer of assets is to a plan which is a qualified plan under Code Section 401(a).

### 3.14 **Limitation on Annual Additions to Participants' Accounts.**

(a) **Definitions.** For purposes of this Section 3.14, the following definitions shall apply:

(i) **Annual Additions** mean, in the case of this Plan and any other Defined Contribution Plan maintained by the Company or an Affiliated Company, the aggregate of: (A) the amount of Company and Affiliated Company contributions including, but not limited to, Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions, and Company Matching Contributions, Company Core Contributions, Qualified Non-Elective Contributions (as defined in Paragraph 3.07(a)(xiii)), and any forfeitures allocated to a Participant's account during the Plan Year but excluding any amounts returned to a Participant under Treasury Regulation §1.402(g)-1(e)(2) or (3), (B) the amount of a Participant's After-Tax Contributions and any other after-tax contributions to a plan of the Company or an Affiliated Company, (C) amounts described in Code Sections 415(l)(1) and 419A(d)(2).

(ii) **Participant's Compensation** means compensation which is paid to the Participant by the Company or an Affiliated Company for the Plan Year and which is required to be reported as wages for Federal income tax purposes on the Participant's Form W-2. Participant's Compensation shall also include any Before-Tax Contributions, and any amount which is contributed or deferred by the Employer at the election of the Participant and which is not includible in the gross income of the Participant under Code

Sections 125 or 457. Notwithstanding the above, effective October 1, 2007, "Participant's Compensation" shall not exceed the limitation provided under Code Section 401(a)(17) as adjusted pursuant to Code Section 401(a)(17)(B) for any Plan Year.

(b) **Basic Limitation.** Notwithstanding anything to the contrary contained in this Plan, the Annual Additions allocated to a Participant under the Plan and any other Defined Contribution Plan maintained by the Company or an Affiliated Company in respect of any Plan Year (which shall be the limitation year) shall not exceed in the aggregate the lesser of \$40,000 (as adjusted by Code Section 415(d)) or 100% of the Participant's Compensation for such Plan Year.

(c) **Additional Rules.** Notwithstanding the foregoing, effective for plan years beginning before October 1, 2007, if the Participant's Annual Addition to this Plan for any Plan Year would exceed the limitations of this Section 3.14 because of the allocation of forfeitures, a reasonable error in estimating a Participant's Compensation, a reasonable error in estimating the amount of Before-Tax Contributions, or for other reasons as permitted by the Commissioner of Internal Revenue, the excess of such Annual Addition over the amount which is permissible under this Section 3.14 shall be disposed of as follows: After-Tax Contributions and, if necessary, Before-Tax Contributions (in that order), and gains or other earnings allocable thereto, to the extent they would reduce the excess amount, will be returned to the Participant, while any Company Matching Contributions attributable thereto and any earnings on such Company Matching Contributions shall be forfeited, placed in a suspense account, and applied towards subsequent Company Matching Contributions. For Plan Years beginning on and after October 1, 2007, any correction of excess contributions will be made pursuant to Section 7.04.

3.15 **Application of Top-Heavy Provisions.** The Plan will be a top-heavy plan if: (a) the Plan is not required to be aggregated with any other plan under Paragraph 3.15(b)(i), and if the sum of the accounts of Participants who are “Key Employees” exceeds 60 percent of the sum of the accounts of all employees (subject to adjustment below), or (b) if the Plan must be aggregated with one or more other plans under Paragraph 3.15(b)(ii), and if the Plan is part of a top-heavy group; provided, however, that the Plan will not be a top-heavy plan if it is a member of a group of plans described in Paragraph (b)(iii) below which is not a top-heavy group. In the event that the Plan becomes top-heavy, the minimum benefit requirement of Paragraph 3.15(e) shall become applicable.

The date for determining the applicability of this Section 3.15 for any Plan Year is the last day of the preceding Plan Year (“determination date”).

The date for determining the value of the employees' accounts (“valuation date”) shall be the determination date.

(a) **Key Employees.** For purposes of this Section 3.15, the term “Key Employee” means any employee or former employee (or a beneficiary of either in the event that such employee or former employee is deceased) who at any time during a Plan Year or any of the four preceding Plan Years is:

(i) An officer of the Company or an Affiliated Company having annual compensation greater than \$130,000 (as adjusted by Code Section 416(i)(1)(A)); provided, however, that no more than the lesser of (A) fifty (50) employees, or (B) the greater of three (3) employees or 10 percent of all employees are to be treated as officers;

(ii) A 5 percent owner of the Company or an Affiliated Company; or

(iii) A 1 percent owner of the Company or an Affiliated Company having an annual compensation of more than one hundred fifty thousand dollars (\$150,000).

For purposes of this Paragraph 3.15(a), an employee's compensation shall mean compensation as determined under Code Section 414(q)(4).

An employee shall be considered to own more than a 5 percent interest if the employee owns more than 5 percent of the Company's or an Affiliated Company's outstanding stock or stock possessing 5 percent of the total combined voting power of all of the stock of the Company or an Affiliated Company. An employee shall also be treated as owning stock owned by certain members of the employee's family as



provided in Code Section 318, as modified by Code Section 416(i)(1)(B). The same rules shall apply to determine whether an employee is a 1 percent owner. If an employee ceases to be a Key Employee, such employee's account shall be disregarded as an account of a Participant who is a Key Employee under the top-heavy plan computation for any Plan Year following the last Plan Year for which such employee was treated as a Key Employee.

(b) **Top-Heavy Group.** For purposes of determining whether the Plan is part of a top-heavy group as referred to above in this Section 3.15, the following rules shall apply:

(i) All plans maintained by the Company or an Affiliated Company which cover a Key Employee and any other plan which enables a plan covering a Key Employee to meet the requirements of Code Sections 401(a)(4) or 410 shall be aggregated to determine whether the plans, as a group, constitute a top-heavy group.

(ii) An aggregation group shall be a top-heavy group if, as of the determination date, the sum of (A) the accounts of Key Employees under all defined contribution plans included in the group and (B) the present value of the accumulated accrued benefits for Key Employees under all defined benefit plans in the group, exceeds 60 percent of the sum of such accounts and present values for all employees under all such plans in the group. If the aggregation group is not a top-heavy group, no plan in the aggregation group shall be a top-heavy plan.

(iii) In any Plan Year, in testing for top-heaviness under this Paragraph 3.15(b), the Employer may in its discretion expand the aggregation group to take into account any other plan maintained by it or an Affiliated Company, so long as such expanded aggregation group continues to meet the requirements of Paragraphs 401(a)(4) and 410 of the Code. If the expanded aggregation group is not a top-heavy group (as determined in accordance with the preceding paragraph), no plan in such expanded aggregation group shall be a top-heavy plan.

(c) **Additional Rules.** In determining the present value of the accumulated accrued benefits under a Defined Benefit Plan and the sum of the account balances under a Defined Contribution Plan, both Company and Affiliated Company contributions and employee contributions shall be taken into account. The present value of the accrued benefit in a Defined Benefit Plan or the account balance in a Defined Contribution Plan shall include any amount distributed to an employee within the one-year period ending on the determination date for the Plan Year, except for in-service withdrawals. The present value of the accrued benefit in a Defined Benefit Plan shall be calculated for any employee other than a Key Employee under (a) the method, if any, that uniformly applies for accrual purposes under all plans maintained by the Company or an Affiliated Company, or (b) if there is no such method, an accrual rule rate which is not more rapid than the slowest accrual rate allowed under the fractional accrual rate of Code Section 411(b)(1)(C). If there is more than one Defined Benefit Plan in an aggregation group, the actuarial assumptions used for such Defined Benefit Plans must be the same. If an employee has not performed services for the Company or an Affiliated Company during the one-year period ending on the determination date for the Plan Year, any accrued benefit or account balance for such individual shall not be taken into account.

(d) **Vesting Requirements**. If this Plan is determined to be top-heavy in any Plan Year under the provisions of this Section 3.15, account balances will be or become fully vested in accordance with the vesting schedules under Sections 3.02, 3.03, and 3.05, or, if earlier, after a Participant completes at least three (3) Years of Vesting Service.

(e) **Minimum Benefit**. If this Plan is determined to be top-heavy in any Plan Year under the provisions of this Section 3.15, then the Employer's contribution for such Plan Year to be allocated to each Participant who is not a Key Employee and is not covered by a collective bargaining agreement in such Plan Year shall not be less than three (3) percent of such Participant's compensation (as defined in Treasury Regulation §1.415(c)-2) or such lesser percentage (taking into account Before-Tax Contributions and Roth 401(k) Contributions, excluding Catch-up Contributions, and Company Matching Contributions and Company Core Contributions) as may be made with respect to the Key Employee who had the highest such percentage in such Plan Year.

3.16 **Heroes Earnings Assistance and Relief Tax Act of 2008**

(a) Death Benefits. In the case of a death occurring on or after January 1, 2007, if a Participant dies while performing qualified military service (as defined in Code Section 414(u)), the survivors of the Participant are entitled to any additional benefits (other than benefit accruals relating to the period of qualifying military service) provided under the Plan as if the Participant had resumed and then terminated employment on account of death.

- (b) Differential Wage Payments. For years beginning after December 31, 2008, (i) an individual receiving a differential wage payment, as defined by Code Section 3401(h)(2), shall be treated as an employee of the employer making the payment, (ii) differential wage payment shall be treated as Compensation, and (iii) the Plan shall not be treated as failing to meet the requirements of any provision described in Code Section 414(u)(1)(C) by reason of any contribution or benefit which is based on the differential wage payment. Notwithstanding anything in the Plan to the contrary, differential wage payments shall not be treated as Compensation for purposes of determining contributions under the Plan.
- (c) Nondiscrimination Requirement. Section 3.16(b)(iii) shall apply only if all employees of the employer performing service in the uniformed services described in Code Section 3401(h)(2)(A) are entitled to receive differential wage payments (as defined in Code Section 3401(h)(2)) on reasonably equivalent terms and, if eligible to participate in a retirement plan maintained by the employer, to make contributions based on the payments on reasonably equivalent terms (taking into account Code Section 410(b)(3),(4) and (5)).
- (d) For years beginning after December 31, 2008, an individual who is performing service in the uniformed services described in Code Section 3401(h)(2)(A) for a period of at least 30 days, for purposes of Code Section 401(k)(2)(B)(i)(I) shall be treated as severed from employment with the Company and shall have a Distribution Event under Plan Section 3.10. An individual receiving such distribution shall not be able to make an elective deferral to the Plan during the six month period beginning on the date of distribution.”

## ARTICLE IV

### TRUST FUND AND PARTICIPANT INVESTMENT FUNDS

4.01 **Trust Agreement.** The Company has entered into a Trust Agreement for the Plan establishing the Trust Fund and the Participant Investment Funds. The Trustee under such Trust Agreement shall hold, invest, distribute, and administer the Trust Fund in accordance with the terms of the Plan and the Trust Agreement and shall hold the contributions to each Participant Investment Fund, including income therefrom, as a unit. Any portion of a Participant Investment Fund may, pending its permanent investment in an Investment Vehicle or distribution, be invested in interest-bearing investments of a short-term nature, even though the same may not be legal investments for trust funds under the laws applicable thereto. Any portion of a Participant Investment Fund may be maintained in cash. The Trustee shall be responsible for making the final decision as to managing, acquiring, or disposing of that portion of any of the Participant Investment Funds described below, if any, not subject to the management of investment manager or managers or to directions of the Investment Committee given pursuant to Paragraphs 6.04(a)(ii) or 6.04(b) respectively.

(a) **Participant Investment Funds.** All Participant Contributions transferred to the Trustee pursuant to Sections 3.02, 3.12, or 3.13 and Company Core Contributions transferred to the Trustee pursuant to Section 3.04 shall be held and invested by the Trustee in the Participant Investment Funds in accordance with the directions of Participants given as hereinafter provided. The Company, by resolution of the Board or the Investment Committee, shall have the right, in its discretion, to amend the Plan to establish additional Participant Investment Funds in which Participant Contributions may be invested in accordance with the directions of Participants or to discontinue existing Participant Investment Funds.

(b) **Investment of Company Matching Contributions.** All Company Matching Contributions shall be invested in the Company Stock Fund, except as otherwise provided in Section 4.04.

4.02 **Investment of Contributions in the Participant Investment Funds.** Subject to the provisions of Section 4.03, each Participant in the Plan, in accordance with procedures established by the Plan Administrator, will direct that the Trustee hold and invest in one or more Participant Investment Funds all amounts credited to such Participant's Plan Accounts in respect of that Participant's Matched Contributions and Unmatched Contributions thereafter deducted from his Annual Salary and in respect of any Company Core Contributions under Section 3.04, Rollover Contributions under Section 3.12, or plan-to-plan asset transfers or mergers under Section 3.13, credited to his Plan Accounts. A Participant shall allocate his Participant Contributions and Company Core Contributions among the available Participant Investment Funds in multiples of one percent (1%); provided, however, that the total of such allocations must equal one hundred percent (100%). No Participant shall have the right to give separate investment directions for amounts in respect of his Matched Contributions and Unmatched Contributions or in respect of his Company Core Contributions, Before-Tax Contributions, Roth 401(k) Contributions, Catch-up Contributions and After-Tax Contributions. Notwithstanding the above, if the Trustee does not receive direction from the Participant regarding amounts credited to such Participant's Plan accounts, such amounts shall be held and invested in the Qualified Default Investment Alternative. The Plan is intended to be a Participant-directed "Section 404(c) Plan" under ERISA Section 404(c) and the regulations thereunder, and the provisions of the Plan are to be interpreted so as to effectuate such intent.

Each of the Participant Investment Funds is currently invested in the particular Investment Vehicle specified in Appendix A, although the Investment Committee may from time to time replace, add to, or discontinue such Investment Vehicles, excluding the Company Stock Fund, without amending the Plan, upon notice to Participants.

(a) **Company Stock Fund.** All Participant Contributions to the Company Stock Fund and Company Matching Contributions made on or after October 1, 2002 and before October 1, 2007, shall be held in the Company Stock Fund – Current Year until the end of the Plan Year in which such Contributions are made. Throughout this Plan, prior to October 1, 2007, "Company Stock Fund" will refer collectively to The Company Stock Fund – ESOP and Company Stock Fund – Current Year unless otherwise specified. On and after October 1, 2007, the Company Stock Fund will no longer be split into the two funds mentioned above, and "Company Stock Fund" will refer to a single fund. Contributions to the Company Stock Fund shall be invested by the Trustee primarily in Company Stock, although a cash position is maintained to provide a liquidity level necessary for daily transactions. All Participant Contributions and Company Matching Contributions shall both be invested in the Company Stock Fund by the Trustee as liquidity and investment manager; provided, however, that separate subaccounts shall be maintained for amounts attributable to Participant Contributions and Company

Matching Contributions. For Plan Years prior to October 1, 2007, all Participant Contributions and Company Matching Contributions held in the Company Stock Fund – Current Year as of the close of the New York Stock Exchange on the last Business Day of each Plan Year will be transferred to the Company Stock Fund – ESOP prior to the start of business on the first Business Day of the following Plan Year.

4.03 **Redirection of Investments of Participant Contributions**. Each Participant may from time to time change his last prior investment direction pursuant to Section 4.02 or this Section 4.03 to any other investment direction then permitted pursuant to Section 4.02, in accordance with procedures established by the Plan Administrator. Each such change of investment direction pursuant to this Section 4.03 shall apply, at the Participant's election, to (a) all amounts then credited to the Participant's accounts (except as provided in Section 4.04 below) and/or (b) all contributions thereafter made by or on the Participant's behalf (except as provided in Section 4.04 below); provided, however, that the Plan Administrator may from time to time impose restrictions on the right to change prior investment directions as to Participant Contributions to one or more other particular Participant Investment Funds, if the Plan Administrator determines that such restrictions on redirections are necessary to comply with the terms of the Investment Vehicles held in any Participant Investment Fund in which any amounts then credited to Participants' accounts are held. Notwithstanding the above, prior to October 1, 2007, Participants may not redirect Participant Contributions or Company Core Contributions from the Company Stock Fund – Current Year to the Company Stock Fund – ESOP and may not redirect Participant Contributions or Company Core Contributions from the Company Stock Fund ESOP to the Company Stock Fund – Current Year.

Any change in investment direction by a Participant for all or any portion of the Participant Contributions and Company Core Contributions, including related investment earnings or losses, then credited to the Participant's accounts will generally be effective as of the same Business Day on which notice is received, provided that notice is given prior to the close of the New York Stock Exchange on such day, and will be effective as of the following Business Day if such notice is given after the close of the New York Stock Exchange. Any change in investment direction for future contributions will be effective as soon as administratively possible. A Beneficiary shall have the right to change the investment direction for amounts in a Participant's account until such account has been distributed in accordance with Section 3.10(b).

4.04 **Investment of Company Matching Contributions.** All amounts in each Participant's Company Matching Contributions account shall be invested in the Company Stock Fund in accordance with Section 4.02(a); provided, however, that Participant Contributions, Company Core Contributions and Company Matching Contributions which are commingled in the Company Stock Fund shall be accounted for in separate subaccounts and shall remain subject to the separate Plan provisions which relate to each type of contribution.

A Participant shall be eligible to redirect the investment of all Company Matching Contributions from the Company Stock Fund to another Participant Investment Fund.

4.05 **Participants' Accounts.** The Plan Administrator shall cause to be established and maintained for each Participant an account for all amounts in respect of (a) Before-Tax Contributions made on his behalf, (b) his After-Tax Contributions, (c) Catch-up Contributions, (d) Rollover Contributions, (e) Company Core Contributions, (f) Company Matching Contributions attributable to his Matched Contributions (g) Roth 401(k) Contributions and (h) Roth Rollover Contributions made during each Plan Year. Effective October 1, 2006, for purposes of this Section 4.05, transferred assets described in Section 3.13 shall be credited to a Participant's Rollover Contributions account (except as otherwise provided in Section 3.13 in the case of certain assets which are treated as Before-Tax Contributions or Catch-up Contributions). Prior to October 1, 2006, transferred assets described in Section 3.13 were credited as earnings to a Participant's After-Tax Contributions account (except as otherwise provided in Section 3.13 in the case of certain assets which were treated as Before-Tax Contributions or Catch-Up Contributions). Credits to Participants' accounts for amounts invested pursuant to Section 4.02 in each of the Participant Investment Funds shall be allocated to the Participant's Before-Tax Contributions, After-Tax Contributions, Catch-up Contributions, Company Core Contributions and Company Matching Contributions accounts in proportion to the amounts credited to such accounts during the period for which such allocation is made.

Credits to Participants' accounts for amounts held and invested pursuant to Section 4.02 in the Participant Investment Funds, including the Company Stock Fund shall be expressed in terms of their dollar value. Shares of Company Stock which are purchased from time to time during any Plan Year out of cash funds held by the Trustee under the Trust Agreement shall be valued for purposes of the Plan at the average of the actual cost thereof, including transfer taxes, brokerage commissions, etc., if any, incident to the purchase thereof. Shares of Company Stock which are made available through Participant cash distributions, loans, or investment changes shall be valued for purposes of the Plan at the Fair Market Value thereof at the close of the Business Day that the Participant's application or direction to the Trustee is received for such transaction, provided such application or direction is received prior to the close of that Business Day, and at the Fair



Market Value thereof at the close of the following Business Day if the application or direction is received after the close of the Business Day. Each Participant Investment Fund shall be valued daily by the Trustee.

Beginning with the last prior valuation made, amounts credited to each Participant's accounts maintained hereunder shall be adjusted to reflect the effect of income collected and accrued, realized and unrealized profits and losses, expenses, and all other transactions affecting the Participant Investment Funds since the prior valuation of the Participant Investment Funds. Such valuations and such adjustments of the amounts credited to Participants' accounts shall be made so as to preserve for each Participant that Participant's proportional beneficial interest in each Participant Investment Fund, based upon contributions made by or on his behalf and invested in each such Participant Investment Fund.

The fact that credits shall be made to a Participant's account in respect of Company Matching Contributions shall not vest in such Participant any right, title, or interest in the assets of the Company Stock Fund, except at the time or times and upon the terms and conditions provided in the Plan. Except as provided in Section 4.07, a Participant shall have no right of request, direction, or demand upon the Trustee to exercise in the Participant's behalf any rights to purchase or sell securities which may be granted to the Trustee. The Trustee, in its discretion, may exercise or sell any rights to purchase other securities appertaining to securities held by the Trustee, whether or not allocated to individual accounts. The accounts of Participants shall be appropriately credited.

No person shall have any right to, or interest in, any assets of the Participant Investment Funds upon termination of employment or otherwise, except as provided from time to time under this Plan, and then only to the extent of the benefits payable to such person under the Plan. All payments of benefits as provided for in this Plan shall be made solely out of the assets of the Participant Investment Funds and no fiduciary shall be liable therefore in any manner. No fiduciary or other person or entity guarantees the Participant Investment Funds in any manner against investment loss or depreciation in asset value.

4.06 **Account Statements; Investment Information.** At such times as required by law or as the Plan Administrator deems necessary or desirable for the purpose of administering the Plan, each Participant will be furnished with a statement showing the status of his or her Plan accounts as of such dates as are selected by the Plan Administrator. In addition, sufficient information shall be available to Participants to permit informed investment decisions as to the Participant Investment Funds and Investment Vehicles in which Participant Contributions and Company Core Contributions may be invested.

Information relating to Participants' purchase, holding, and sale of units of interest in Company Stock and exercise of voting, tender, and similar rights shall be maintained in accordance with procedures which shall be adopted and amended from time to time in writing by the Plan Administrator (the "Confidentiality Procedures") that are designed to safeguard the confidentiality of such information (except as necessary to comply with federal or applicable state law, such as securities law reporting rules for insiders). The Confidentiality Procedures shall incorporate at least the safeguards of confidentiality as to exercising voting, tendering, and similar rights as are set forth in Section 4.07; and name a fiduciary to be responsible for receiving and acting on investment directions and/or monitoring compliance with the Confidentiality Procedures and who shall be empowered to determine when an independent fiduciary should be designated to carry out such activities as to Company Stock relating to situations which such responsible fiduciary determines will have a potential for undue influence (such as tender offers, exchange offers, and contested Board elections) all as contemplated by ERISA Section 404(c).

**4.07 Voting, Tendering, and Similar Rights as to Company Stock.** Before each annual or special meeting of the stockholders of the Company, the Trustee or its agent shall furnish or cause to be furnished to each Participant for whom an account is established and maintained under the Plan and to which units of interest in Company Stock are allocated a copy of the proxy solicitation material for such meeting, which is provided to stockholders of the Company who are not Plan Participants, together with a request for the Participant's confidential directions to the Trustee as to how the full shares of Company Stock then represented by the units of interest allocated to such Participant's account should be voted. Upon timely receipt of such directions, the Trustee shall vote such full shares as directed. Any such shares held by the Trustee as to which it receives no voting directions and fractional shares shall be voted by the Trustee in the same proportions as shares to which voting directions have been received.

Each Participant shall have the right, to the extent of the number of shares of Company Stock represented by the units of interest allocated to his account, to confidentially direct the Trustee in writing as to the manner in which to respond to a tender or exchange offer with respect to shares of Company Stock. The Trustee shall use its best efforts to timely distribute or cause to be distributed to each Participant the information distributed to stockholders of the Company who are not Plan Participants in connection with any such tender or exchange offer. Upon timely receipt of such directions, the Trustee shall respond as directed with respect to such shares of Company Stock. If the Trustee shall not receive timely direction from a Participant as to the manner in which to respond to such a tender or exchange offer, the Trustee shall not tender or exchange any shares of Company Stock with respect to which such Participant has the right of direction. The Trustee shall respond as to fractional shares in the same proportions as the shares as to which Participant directions have been received.

Each Participant is, for purposes of this Section 4.07, hereby designated a "named fiduciary" within the meaning of ERISA Section 403(a)(1) with respect to voting and responding to tender and exchange offers with respect to full shares of Company Stock as to which units of interest are allocated to his account, except to the extent otherwise permitted by ERISA Section 404(c) because such Participant has exercised independent control over assets in his or her individual account in the manner described in Department of Labor Reg. §2550.404c-1 promulgated thereunder. "Participant" as used in this Section 4.07 shall include in the event of the death of a Participant, his Beneficiary, and in the event a Qualified Domestic Relations Order is applicable to an account, each alternate payee under such Qualified Domestic Relations Order. Directions received by the Trustee from individual Participants as provided in this Section 4.07 shall be held by the Trustee in confidence and shall not be divulged or released to any person, including directors, officers, or employees of the Company or any Affiliated Company, except as permitted by the Confidentiality Procedures.

The Trustee is hereby empowered to set such deadlines for Participant returns of proxy, tender, exchange, or similar directions as are necessary to assure the proper tally of such returns and timely action based on such response, consistent with the Confidentiality Procedures and the directions of any independent fiduciary appointed as contemplated by the Confidentiality Procedures.

## ARTICLE IV-A

### ESTABLISHMENT OF AN EMPLOYEE STOCK OWNERSHIP PLAN

4.01-A Effective May 15, 2002, the Company Stock Fund described in Section 4.02(a) is converted to an employee stock ownership plan ("ESOP") as defined in Section 4975(e) of the Code and the regulations thereunder. The ESOP is intended to form a portion of the Plan, the balance of which includes a qualified profit-sharing plan described in Section 401(a) of the Code which is not an ESOP. The ESOP shall hold Participant Contributions pursuant to Deferral Elections described in Section 3.02, Company Core Contributions described in Section 3.04, and Company Matching Contributions described in Section 3.03. Prior to October 1, 2007, the ESOP shall be the Participant Investment Fund described as the Air Products Company Stock Fund - ESOP. On and after October 1, 2007, the ESOP shall be the Participant Investment Fund described in Appendix A of the Plan as the Air Products Company Stock Fund.

4.02-A The ESOP shall be primarily invested in Company Stock as described in Section 4.02(a). Company Stock as defined herein is traded publicly on the New York Stock Exchange. A Participant may direct the Trustee to vote the Company Stock allocated to his account as described in Section 4.07. A Participant may elect a distribution of his account balance in the Company Stock Fund to be paid in Company Stock or in cash as described in Section 5.01. A Participant may elect to diversify his account in the Company Stock Fund to the extent described in Section 4.03 and 4.04. A Participant may begin receiving distributions of his accounts, including the Company Stock Fund, as provided in Section 3.08 or upon the occurrence of a Distribution Event as described in Section 2.21. Allocations of Participant Contributions and Company Matching Contributions to the ESOP are made in proportion to the compensation of each Participant based on his or her Deferral Elections as described in Section 3.02.

4.03-A . Participants having all or a portion of their Participant accounts invested in Company Stock in the ESOP may elect to receive a distribution of dividends paid on Company Stock that are allocated to their Participant accounts, paid to the ESOP first and then distributed no later than 90 days after the close of the Plan Year in which they were paid, or to reinvest such dividends in the ESOP pursuant to Section 404(k)(2)(A) of the Code, and the regulations thereunder. Reinvested dividends shall be 100% vested. Dividends paid on the portion of a Participant's account attributable to Company Core Contributions, including any related investment earnings and losses, may only be reinvested to the extent Company Core Contributions and related earnings and losses are vested under Section 3.05(a) of the Plan. A Participant who does not make an affirmative election under this Section 4.03-A shall be deemed to have elected to reinvest such dividends in the

ESOP. The Plan Administrator shall determine the procedure for making such election available to eligible Participants.

4.04-A Participants who are employees of Affiliates of the Company that are subject to taxation as partnerships are permitted to participate in the ESOP and invest their Participant accounts in Company Stock, but are excluded from receiving dividends paid on Company Stock to the Company Stock Fund – ESOP, or after October 1, 2007, the Company Stock Fund.

## ARTICLE V

### MANNER OF DISTRIBUTION OF PARTICIPANT ACCOUNTS

5.01 **General.** Subject to Sections 5.03 and 5.05, distribution to any person entitled to receive any amounts then held by the Trustee in the Participant Investment Funds described in Article IV shall be made by the Trustee in a lump sum or, at the election of such person, in installments not to exceed one installment per month, in the manner described in (a) and (b) below

(a) **Cash Distributions.** Amounts credited to a Participant's accounts which are held by the Trustee in any Participant Investment Fund other than the Company Stock Fund shall be distributed in cash.

(b) **Company Stock Distributions.** Amounts credited to a Participant's accounts which are held by the Trustee in the Company Stock Fund shall be distributed in cash. Notwithstanding the foregoing, amounts credited to a Participant's account in the Company Stock Fund may be distributed in the form of shares of Company Stock at the election of the Participant or the Participant's Beneficiary or alternate payee, as the case may be. Distribution of a Participant's interest in a fractional share of Company Stock shall be made in cash. Notwithstanding the above, for persons electing installment distributions commencing on or after October 1, 2006, distributions of amounts credited to the Company Stock Fund must be made in cash.

The amount to be withdrawn or distributed from a Participant's account or accounts under Section 3.08 or 3.10, or pursuant to a Qualified Domestic Relations Order, shall be the amount or specified portion thereof credited to such Trustee account or accounts as of: (i) the Business Day on which the account distribution or withdrawal request is received by the Plan Administrator; provided, however, that valuation shall take place as of the following Business Day if the request is received after the close of the New York Stock Exchange; or (ii) if no request is received, the first Business Day in March of the calendar year

following the year in which the Participant attains age seventy and one-half (70½) or, if later, the calendar year in which the Participant retires if the Participant attained age seventy and one-half (70½) on or after January 1, 2003. In the case of a Qualified Domestic Relations Order, if so provided in the Qualified Domestic Relations Order, the amount to be withdrawn or distributed shall be the amount specified in such Order.

Payment or delivery of an amount to be withdrawn or distributed shall be made as soon as practicable after the applicable date determined under the preceding paragraph, but in any event by the April 1 which follows the year in which the Participant attains age seventy and one-half (70½), or if later, the April 1 which follows the year the Participant retires if the Participant attains age seventy and one-half (70½) after January 1, 2003. The payment of benefits under the Plan to a Participant (or to his Beneficiary or Beneficiaries) who has a severance from employment with the Company and all Affiliated Companies with amounts credited to his Plan accounts of \$1,000 or less, or upon the Participant's death, will begin as soon as administratively practicable after the Participant makes his last contribution.

Any distributions made pursuant to this Article V shall be subject to the requirements of Code Section 401(a)(9) and the regulations thereunder, including the minimum distribution incidental benefit requirement of Q&A-1(d) of section 1.401(a)(9)-5 of the final regulations effective January 1, 2003.

5.02 **Designation of Beneficiaries; Spousal Consents.** Unless otherwise designated as provided in the next paragraph of this Section 5.02, each Participant's Beneficiary shall be the Participant's spouse. If the Participant dies with no surviving spouse, or so designates a Beneficiary other than his spouse in accordance with the provisions of the next paragraph, the Beneficiary or Beneficiaries to receive the Plan benefits hereunder shall be as designated by the Participant in accordance with procedures specified by the Plan Administrator and filed with the Plan Administrator during the Participant's lifetime. Any such designation may be revoked or changed by the Participant at any time and from time to time, without the consent of any prior Beneficiary (other than the Participant's spouse, whose consent shall be required as provided in the next paragraph) in the same manner as the original designation. If either no such designation is made or, if made, none of the designated Beneficiaries, whether primary or contingent, is living at the time of payment, Plan benefits shall be paid to the Participant's surviving spouse, if any, and otherwise to the Participant's estate.

The designation of a Beneficiary other than the Participant's spouse shall be ineffective unless either: (i) the Participant's spouse consents in writing to such designation, the spouse's consent specifically identifies the nonspouse Beneficiary, the Participant's spouse acknowledges the effect of such designation, and such consent is witnessed by a notary public; or (ii) it is established to the satisfaction of the Plan Administrator or a representative of the Plan Administrator that no such consent may be obtained because there is no spouse of the Participant, the spouse cannot be located, or because of such other circumstances as may be prescribed in regulations issued by the Secretary of the United States Treasury. Any consent by a spouse required by any provision of the Plan shall be irrevocable by the spouse and any such consent by the spouse (or establishment that the consent of the spouse may not be obtained) shall only be effective with respect to such spouse. No Beneficiary designation shall be effective prior to the time it is received by the Plan Administrator.

Notwithstanding the foregoing, for former Participants in the IGS Savings Plan the terms of Exhibit II shall apply.



### 5.03 Direct Rollovers

(a) Any Participant, any spouse of a Participant (including a former spouse who is an alternate payee under any Qualified Domestic Relations Order) or, effective April 1, 2007, any Beneficiary of a Participant (each referred to herein as a “distributee”) who is entitled to receive an “eligible rollover distribution” (as defined below) from the Plan may make a special election to avoid the imposition of automatic withholding of Federal income taxes from the distribution. The special election is to have all or part of the distribution paid by the Trustee directly to an eligible retirement plan (as defined below) in lieu of receiving the distribution from the Plan. In order for such direct rollover to be made, the special election must be made in accordance with the procedures established by the Plan Administrator, the eligible retirement plan must be clearly specified, and the specified plan must be willing to accept the rollover. Any eligible rollover distribution described in Section 5.03(d)(i) that includes After-Tax Contributions or Roth 401(k) Contributions which a distributee elects to rollover to a qualified defined contribution plan described in Section 401(a) or an annuity plan described in Code Section 4.03(b) must be directly rolled over to such plan pursuant to the special election in this Section 5.03(a) and must be separately accounted for as required by Code Section 402(c)(2)(A) and 402A.

(b) Notwithstanding the foregoing, a direct rollover shall not be permitted if the distributee's eligible rollover distributions during the calendar year are reasonably expected to total less than \$200, and a partial direct rollover may not be made in an amount which is less than \$500. Each eligible rollover distribution may be directly rolled over to only one eligible retirement plan.

(c) The limits set forth in this Section may be modified by the Plan Administrator to the extent permitted by Code Sections 401(a)(31), 402, and 3405 and regulations or rulings issued thereunder. Moreover, the provisions of this Section shall be interpreted and applied consistently with Sections 521 through 523 of the Unemployment Compensation Amendments of 1992, and shall be deemed to be automatically amended, without the necessity of adopting a specific amendment, to the extent that applicable law, regulations, or rulings modify, amend, supersede, eliminate, clarify, or otherwise change the requirements of said Sections 521 through 523.

(d) An “eligible rollover distribution” hereunder is any distribution to or withdrawal by a distributee, except that an eligible rollover distribution does not include any portion of a distribution to the extent it is: (i) not included in gross income (without regard to the exclusion for net unrealized appreciation with respect to employer securities) provided, however, that eligible rollover distributions on or after January 1, 2002, shall include the portion of a distribution not otherwise

included in gross income (i.e., After-Tax Contributions), if any, (ii) required under Code Section 401(a)(9), (iii) a deemed distribution of a defaulted loan which is unaccompanied by an actual distribution, (iv) any distribution that is one in a series of substantially equal periodic payments (not less frequently than annually) made for one or more lives or for a specified period of ten (10) years or more; (v) any hardship distribution described in Code Section 401(k)(2)(B)(i)(iv); (vi) any dividends paid on employer securities held by an ESOP which are paid directly to the Participant and not reinvested in the ESOP or (vii) any other amount which is excluded under the Code or Treasury Regulations. An “eligible retirement plan” is an individual retirement account or annuity described in Code Sections 408(a) and 408(b) (collectively, an “IRA”), an annuity plan described in Code Section 403(a) which accepts rollover distributions, a qualified plan described in Code Section 401(a) which accepts rollover distributions, or an annuity plan described in Code Section 403(b) which accepts rollover distributions, or a Code Section 457 governmental plan which accepts rollover distributions; provided, however, that with respect to a non-spouse Beneficiary, “eligible retirement plan” shall mean only an inherited IRA within the meaning of Code Section 408(d)(3)(c) and in accordance with Code Section 402(c)(11) and Code Section 401(a)(9)(B)(ii).

5.04 **Trustee-to-Trustee Transfer.** Upon the direction of the Plan Administrator, the Trustee may transfer all amounts credited to a Participant's accounts held by the Trustee to another retirement benefit plan qualified under Code Section 401(a) in connection with or following a Distribution Event with respect to such Participant.

5.05 **Protected Distribution Forms for Certain Transferred Balances.**

(a) In the case of a Participant who had funds transferred to the Plan from the GSF Energy Inc. Retirement Savings Plan (the "GSF Plan") during 1989, a term annuity may be purchased with all or part of that portion of the Participant's distribution which is attributable to funds transferred in 1986 from the former Getty savings plan to the GSF Plan. The fixed payment period cannot exceed 240 months and the amount of payments must be greater than \$25 per month.

(b) In the case of a Participant employed by Pacific Anchor Chemical Corporation who had funds transferred from the Pacific Anchor Chemical Corporation 401(k) Plan (the "Pacific Anchor Plan") to the Plan as of July 1, 1989, such a Participant may elect to receive the amount credited to his account as of the date of such transfer in installment payments over a period not to exceed the life expectancy of the Participant or the joint life expectancy of the Participant and the Participant's spouse, if any.

(c) In the case of a Participant employed by Industrial Gas and Supply Company ("IGS") who had funds transferred from the IGS Savings Plan due to the merger of the IGS Savings Plan into the Plan as of March 31, 2000, such a Participant may elect to receive the amount credited to his account as of the date of such transfer, in installment payments over a period not to exceed the life expectancy of the Participant or the joint life expectancy of the Participant and the Participant's spouse, if any. The applicable provisions are set forth in Exhibit II.

**ARTICLE VI**  
**ADMINISTRATION**

6.01 **Plan Administrator.** The Plan Administrator shall be responsible for the administration of the Plan to the extent provided herein and except to the extent that some other person or entity shall be expressly authorized by the Board. The Plan Administrator shall not receive any compensation from the Plan for his services as such, but may be reimbursed for reasonable expenses actually incurred in the administration of the Plan.

6.02 **Expenses of Administration.** The reasonable expenses incident to the administration, management, and operation of the Plan, including (but not limited to) the compensation of legal counsel, auditors, accountants, actuaries, the Trustee, and investment managers, if any, and other costs such as recordkeeping fees, proxy voting fees, communication costs, and the cost of clerical and technical assistance which may be required, shall be payable from Participant's accounts in a manner determined by the Plan Administrator and shall be communicated to Participants in a manner that is consistent with ERISA Section 408(b)(2) and the Treasury Regulations issued thereunder. The Investment Committee may provide that certain Plan expenses shall be charged to a Participant's account and shall be communicated to Participants in a manner that is consistent with ERISA Section 408(b)(2) and the Treasury Regulations issues thereunder. Notwithstanding the foregoing, the Employer, in its absolute discretion, may elect at any time to pay part or all thereof directly, and any such election shall not bind the Employer as to its right to elect with respect to the same or other expenses at any other time to have such expenses paid from the Participant's accounts.

6.03 **Powers and Duties of the Plan Administrator.** In addition to any implied powers and duties which may be necessary to carry out the provisions of the Plan and any explicit powers and duties set forth elsewhere in the Plan, the Plan Administrator shall have the following specific discretionary powers and duties:

(a) To make and enforce such rules and regulations and adopt such procedures as he shall deem necessary or proper for the efficient administration of the Plan which are not inconsistent with the Code, ERISA, or any grant of authority to another person hereunder, including without limitation rules to be followed by Participants filing notices, elections, directions, and designations under the Plan and for the furnishing and verification of evidence and proofs necessary to establish the rights of any person to benefits under the Plan;

(b) Subject to and consistent with the Code and ERISA, discretionary authority and power to construe and interpret the Plan and to decide any and all matters arising thereunder, including the right to (i) decide all questions of eligibility for benefits; (ii) determine the amount, time, and manner of payment; (iii) authorize the payment of benefits; (iv) remedy possible ambiguities, inconsistencies, or omissions; provided, however, that all such interpretations and decisions shall be applied in a uniform manner to all Participants who are similarly situated; and (v) to determine all questions of fact;

(c) Subject to the provisions of Section 6.05, to make findings of fact and determinations as to the rights of any person applying for benefits and to afford any such person dissatisfied with any such findings or determinations the right to a hearing thereof;

(d) To obtain from the Employer and from the Participants, and provide to the Trustee such information as shall be necessary for proper administration of the Plan;

(e) To authorize disbursements from the Participant Investment Funds and to obtain from the Trustee such information concerning such disbursements as shall be necessary for the proper administration of the Plan;

(f) To supervise generally the administration of the Plan in accordance with ERISA, including, without limitation, compliance with reporting and disclosure requirements and the final review of claims and appeals by Participants and their Beneficiaries;

(g) To appoint or employ other persons or fiduciaries to carry out various specific responsibilities concerning the administration of the Plan and any other agents he deems advisable,

including without limitation legal counsel, auditors, and accountants, and to enter agreements for the performance of services on behalf of the Plan; and

(h) To allocate and delegate among or to any one or more person or persons (including corporate persons) named by the Plan Administrator in accordance with the provisions hereinafter, any of his powers, duties, and fiduciary responsibilities, such allocation or delegation to be effected as follows:

(i) Fiduciary responsibilities may be allocated or delegated by the Plan Administrator by naming in writing the named fiduciary to whom the responsibility is allocated or delegated, with a description of the responsibility and an outline of the duties involved;

(ii) Such of his other powers, authority, and duties as he deems proper and desirable for the efficient administration of the Plan may be delegated to any officer or other administrative employee of the Employer.

6.04 **Powers and Duties of the Investment Committee.** In addition to any implied powers and duties which may be necessary to carry out the provisions of the Plan and any explicit powers and duties set forth elsewhere in the Plan, the Investment Committee shall have the following specific discretionary powers and duties:

(a) To appoint or employ, and to enter agreements with:

(i) the Trustee;

(ii) an investment manager or managers with power to direct the investment, reinvestment, and other management of the acquisition and disposition by the Trustee of all or a portion of any of the Participant Investment Funds described in Section 4.02 (other than the Company Stock Fund), if the Investment Committee determines in its sole discretion that an investment manager or managers is necessary or desirable for management of all or any portion of any such Participant Investment Fund; provided, however, that each such investment manager shall acknowledge in writing that such investment manager is a fiduciary with respect to the Plan, and:

(A) shall be registered as an investment advisor under the Investment Advisors Act of 1940; or

(B) shall be a bank, as defined in the Investment Advisors Act of 1940; or

(C) shall be an insurance company qualified to perform services with power to manage, acquire, or dispose of assets of the Plan under the laws of more than one State; or

(D) if not registered as an investment advisor under the Act by reason of paragraph (1) of section 203A(a) of the Investment Advisors Act of 1940, shall be registered as an investment advisor under the law of the State (referred to in such paragraph (1)) in which it maintains its principal office and place of business, and, at the time the investment advisor last filed the registration form most recently filed by the investment advisor with such State in order to maintain the investment advisor's registration under the laws of such State, shall also have filed a copy of such form with the Secretary of Labor.

(iii) an investment advisor who does not meet the qualifications for an investment manager set forth in Paragraph (ii) above, provided that such investment advisor may offer investment advisory services and recommendations to the Trustee but shall have no power to cause the Trustee to act on such advice.

(b) To direct the Trustee to invest and reinvest all or any portion or portions of any of the Participant Investment Funds described in Section 4.02 held under the Trust Agreement as specified by the Investment Committee, in interests in collective investment funds, group trusts, or other entities or in other investments directed by the Investment Committee, and to exercise ownership rights with respect to such interests or investments, all as specified by the Investment Committee;

(c) To perform any and all duties allocated to it by the Board or required of it by the provisions of this Plan, the Code, or ERISA;

(d) To allocate and delegate among or to any one or more of its members or officers, any subcommittees of the Investment Committee, and any other person or persons (including corporate persons) named by it in accordance with the provisions hereinafter, any of its powers, duties, and fiduciary responsibilities (other than trustee responsibilities), such allocation or delegation to be effected as follows:

(i) Fiduciary responsibilities may be allocated or delegated by the Investment Committee by naming in writing, including by recording in the minutes of the Investment Committee's meetings the named fiduciary to whom the responsibility is allocated or delegated, with a description of the responsibility and an outline of the duties involved;

(ii) Except where a member of the Investment Committee, the fiduciary so named shall indicate acceptance of the responsibility by executing the written instrument naming such fiduciary, whereupon such executed instrument shall be incorporated by this reference in the Plan;

(iii) For the purpose of this Section 6.04(d), a trustee responsibility is a responsibility to manage or control the assets of the Plan other than the power to appoint an investment manager in accordance with Section 6.04(a)(ii). The power to allocate or delegate responsibility to manage the Participant Investment Funds (other than the Company Stock Fund) described in Paragraph 4.02 may only be made in accordance with such Section 6.04(a)(ii); and

(iv) Such of its other powers, authority, and duties as it deems proper and desirable may be delegated to any one of its members or officers or to any officer or other administrative



employee of the Employer, provided that such delegation shall be noted in the minutes of the proceedings of the Investment Committee or other writing;

(e) To take all actions necessary to transfer Plan assets and liabilities to another qualified plan subject to, and in accordance with the provisions of applicable laws and Section 7.03, where such transfer is required in connection with any transaction or event or series of events or transactions which may from time to time be approved by the Board or approved pursuant to a delegation of authority by the Board;

(f) To take all actions necessary to amend the Plan to assume liabilities, and to direct the Trustee to accept assets, of another qualified plan subject to, and in accordance with the provisions of applicable law and Section 7.03, required in connection with any transaction or event or series of similar transactions or of similar events which may from time to time be approved by the Board or approved pursuant to a delegation of authority from the Board; and

(g) To take such further action as the Investment Committee deems appropriate, in regard to establishing and reviewing programs, guidelines, policies, and objectives for investment of Plan assets, and reviewing investment performance in terms of such programs, guidelines, policies, and objectives.

6.05 **Benefit Claims Procedure.** The claim and appeal procedure herein provided is intended to meet the requirements of ERISA and the regulations thereunder. By virtue of such requirements, the procedure provided in this Section 6.05 shall be the sole and exclusive procedure for claiming benefits or appealing any denial of a claim for benefits under the Plan. This procedure shall, in respect of all claims arising under the Plan, supersede and preempt any and all procedures for settlement of disputes or resolution of grievances under any other agreements or plans.

(a) **Claim.** In the event of a claim by a Participant or a Participant's Beneficiary for or in respect of any benefit under the Plan or the method of payment thereof, such Participant or Beneficiary shall present the reason for his claim in writing to the Plan Administrator. The Plan Administrator shall, within ninety (90) days after the receipt of such written claim, send written notification to the Participant or Beneficiary as to its disposition, unless special circumstances require an extension of time for processing the claim. If such an extension of time for processing is required, written notice of the extension shall be furnished to the claimant prior to the termination of the initial ninety (90) day period. In no event shall such extension exceed a period of ninety (90) days from the end of such initial period. The extension notice shall indicate the special circumstances requiring an extension of time and the date by which the Plan Administrator expects to render the final decision.

(b) **Denial.** In the event the claim is wholly or partially denied, the Plan Administrator's written notification shall: (a) state the specific reason or reasons for the denial, (b) contain specific references to pertinent Plan provisions on which the denial is based, (c) provide a description of any additional material or information necessary for the Participant or Beneficiary to perfect the claim and an explanation of why such material or information is necessary, and (d) set forth the procedure by which the Participant or Beneficiary may appeal the denial of his claim. If no notice of denial is provided within the time period set forth above, the claim shall be deemed to be denied and the Participant or Beneficiary may proceed to appeal in accordance with Paragraph (c) below.

(c) **Appeal.** In the event a Participant or Beneficiary wishes to appeal the denial of his claim, he may request a review of such denial by making written application to the Claims Committee within sixty (60) days after receipt of such written claim denial (or the date on which such claim is deemed denied if notice is not received within the applicable time periods pursuant to Paragraph (b) above). Such Participant or Beneficiary (or his duly authorized representative) may, upon written request to the Claims Committee, review any records of the Plan Administrator or other persons to whom fiduciary responsibilities have been allocated or delegated hereunder which the Claims

Committee determines are pertinent to such claim, and submit in writing issues and comments in support of his position.

The Claims Committee shall notify the Participant or Beneficiary of the Claims Committee's final decision within 60 days after receipt of the written appeal unless an extension of time is necessary due to special circumstances. If an extension is required, the Claims Committee shall notify the Participant, Beneficiary or authorized representative of the extension within the initial review period and shall explain the special circumstances requiring the extension within such initial 60-day period.

The final decision shall be in writing and shall include specific reasons for the decision, written in a manner calculated to be understood by the claimant, and specific references to the pertinent Plan provisions on which the decision is based. In addition the notice shall provide that the claimant is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the claimant's claim for benefits, and shall contain a statement of the claimant's right to bring an action under Section 502(a) of ERISA. If the claim has not been granted and the notice is not furnished within the period of time specified above, the claim shall be deemed denied. The decision on appeal shall be binding on all parties.

(d) **Qualified Domestic Relations Order**. Since separate procedures have been adopted with respect to domestic relations orders, the service of a domestic relations order on the Plan shall not be treated as a claim for benefits as contemplated by this Section 6.05 and the foregoing procedure shall not be followed in determining whether such an order constitutes a Qualified Domestic Relations Order.

6.06 **Fiduciaries.** Persons and entities named or referred to in the Plan, including without limitation, members of the Investment Committee, members of the Claims Committee, and the Plan Administrator may from time to time act in respect of the Plan and/or the Trust Fund in a fiduciary capacity as to the operation and administration of the Plan and/or the Trust Fund, as well as in a non-fiduciary capacity on behalf of an Employer as a sponsor of the Plan and/or settlor of the Trust Fund. Except as expressly provided in the Plan, no reference in the Plan to any particular act, duty, or responsibility by any person or entity is intended to ascribe a fiduciary or non-fiduciary role thereto.

For purposes of ERISA Section 402(a), “named fiduciaries” for the Plan shall include: the Finance Committee of the Board, insofar as it appoints the persons to serve on the Investment Committee and has oversight responsibility for review of certain actions taken by the Investment Committee; the Plan Administrator with respect to the control and management of the operation and administration of the Plan and compliance with the reporting and disclosure requirements of ERISA and the Code; the Investment Committee with respect to control and management of the Trust Fund; and the Claims Committee with respect to adjudication of claim appeals. In addition, the Trustee shall be the named fiduciary or named fiduciaries with respect to the management, control, custody, and investment of the Trust Fund or specified portions thereof, except to the extent: (a) an investment manager has been appointed to manage and/or acquire and dispose of investments as contemplated by Paragraph 6.05(h)(2), in which case such investment manager shall be the named fiduciary with respect to the management, acquisition, and disposition of such investments; or (b) the Trustee has been directed by the Investment Committee to invest or reinvest, and exercise ownership rights with respect to, interests in collective investment funds, trusts, or other entities or other investments as contemplated by Paragraph 6.05(i), in which case the Investment Committee shall be the named fiduciary with respect to the management, acquisition, and disposition of such interests and investments.

6.07 **Adequacy of Communications; Reliance on Reports and Certificates.** All notices, elections, applications, directions, or other communications given, made, filed, delivered, or transmitted by or for an Employee or Participant in pursuance of the provisions of this Plan shall not be deemed to have been duly given, made, filed, delivered, transmitted, or received unless the same shall be in writing on such form as is made available by the Plan Administrator or the Trustee for that purpose and until the same shall actually be received at the locations specified on such form.

Any person acting upon notices, directions, or other communications given, made, delivered, or transmitted by the Investment Committee may rely on any documents signed by the chairman or secretary of the Investment Committee or by any one or more of its members or Company officers or employees authorized by the Committee to certify its actions.

The Investment Committee, the Claims Committee or any of their members will be entitled to rely conclusively upon any information, including without limitation, all tables, valuations, certificates, opinions, and reports, which is furnished by the Trustee, any auditor, accountant, legal counsel, or other person who is employed or engaged for the purpose of assisting such Committees in the performance of their responsibilities hereunder and as to whom the members of the applicable Committee have no reason to doubt the competence, integrity, or responsibility.

6.08 **Indemnification.** The Company agrees to indemnify each member of the Investment Committee or the Claims Committee who is its employee or the employee of an Affiliated Company against any and all claims, loss, damage, expense, and liability from any act or failure to act unless the same is judicially determined to be the result of such member's gross negligence or willful misconduct, except as otherwise prohibited by applicable law.

6.09 **Member's Own Participation.** No member of the Investment Committee or the Claims Committee may act, vote, or otherwise influence a decision of the Committee relating solely to his own participation under the Plan.

6.10 **Elections.** Exhibit III attached hereto, entitled "Plan Elections", sets forth elections under the Plan made by the Company or its delegates or officers, including the Senior Vice-President Human Resources, the Plan Administrator or his delegates, or others (but not Participants, spouses, beneficiaries, alternate payees or other Participants or payees) in regard to elections made under the Plan or applicable law, whether or not specifically referenced in the Plan, and is designed to include only those elections required by applicable law to be specified in the Plan, but may include other elections as well.

## ARTICLE VII

### AMENDMENT, CORRECTION AND DISCONTINUANCE

7.01 **Right to Amend or Terminate.**

(a) The Company intends and expects to continue the Plan indefinitely. Nevertheless, (i) the Company reserves the right to terminate the Plan or amend or modify it from time to time and (ii) each Employer reserves the right to suspend, terminate, or completely discontinue contributions under the Plan with respect to itself and its Employees and their Beneficiaries. Action to terminate the Plan may be taken only by the Board, by its resolutions, duly adopted. The Investment Committee may act on behalf of the Company and without action by or approval of the Board, to add or discontinue Participant Investment Funds. Any other action referred to in this subsection and not determined by the Company's general counsel to be in contravention of law may be taken on behalf of the Company by the Chairman of the Board evidenced by a resolution, certificate, new or revised Plan text, or other writing; provided that, only the Board may approve a Plan amendment which (A) would materially increase aggregate accrued benefits under, materially change the benefit formula provided by, or materially increase the cost of the Plan, so long as persons designated by the Board as "Executive

Officers” for purposes of the U.S. Securities laws are Participants in the Plan; or (B) would freeze benefit accruals, materially reduce benefit accruals, or otherwise materially change the benefits under the Plan; or (C) would constitute the exercise of power or function herein assigned to the Finance Committee of the Board, the Investment Committee, the Plan Administrator, or the Claims Committee. The Chairman may delegate the authority described in the preceding sentence in writing.

(b) Notwithstanding Paragraph (a), no action to terminate, amend, or modify the Plan described therein shall adversely affect Participants who shall have retired under the Plan prior to such action, nor shall any amendment have the effect of decreasing the nonforfeitable percentage or the amount of a Participant's accounts except as permitted by Code Section 411(d)(6) and the regulations thereunder. No amendment shall be made to this Plan which eliminates a subsidy or an optional form of benefit available to a Participant except as permitted by Code Section 411(d)(6) and the regulations thereunder.

(c) Notwithstanding any of the foregoing provisions of this Section, any modification or amendment of the Plan may be made retroactively, if necessary or appropriate to qualify or maintain the Plan and/or the Trust Fund as a plan and/or trust meeting the requirements of the Code and ERISA, or any other provision of law, as now in effect or hereafter amended or adopted, and any regulation issued thereunder. If the Plan is terminated by the Company, all amounts credited to each of such Participant's accounts in respect of Before-Tax Contributions, Roth 401(k) Contributions, After-Tax Contributions, Catch-up Contributions, Company Core Contributions, and Company Matching Contributions shall be distributed by the Trustee to any such Participant so affected by such discontinuance or to his or her designated Beneficiary as soon as practicable (to the extent permitted under applicable law), with distributions to be made in accordance with the directions of the Plan Administrator.

(d) Upon the Plan's termination or partial termination, the rights of all affected Participants to benefits accrued to the date of such termination or partial termination, to the extent not yet vested, shall be nonforfeitable.

7.02 **Corpus and Income Not to be Diverted.** Notwithstanding any power of discontinuance or amendment reserved in the Plan or Trust Agreement, it shall be impossible at any time for any part of the corpus and income of the Trust Fund held for the benefit of Participants and their Beneficiaries to be used for, or diverted to, purposes other than for the exclusive benefit of such Participants or their Beneficiaries and defraying reasonable expenses of administering the Plan. Notwithstanding the foregoing:

(a) All contributions made to the Plan are conditioned upon their deductibility in full under Code Section 404, or any statute of similar import. If all or any portion of a contribution is determined to be not deductible, the amount so determined to be non-deductible shall be returned to the Employer, if the Employer so directs the Trustee, within one (1) year of the determination of the disallowance of the deduction.

(b) A contribution made by a mistake of fact shall be returned to the Employer within one (1) year after the payment of the contribution, if the Employer so directs the Trustee.



7.03 **Merger or Consolidation of Plan.**

(a) The Plan shall not be terminated automatically by the Company's acquisition by or merger into any other company, but the Plan shall be continued after such merger if the successor company agrees to continue the Plan. All rights to amend, modify, suspend, or terminate the Plan shall be transferred to the successor company, effective as of the date of the merger, without the need for a specific Plan amendment.

(b) The Plan shall not merge or consolidate with, or transfer its assets or liabilities to, any other plan unless each Participant would (if the Plan then terminated) be entitled to receive a benefit after the merger, consolidation, or transfer which is equal to or greater than the benefit he would have been entitled to receive immediately before the merger, consolidation, or transfer (if the Plan had been terminated).

7.04 **Correction.** Any operational or qualification defect or failure of this Plan of any kind whatsoever may be corrected pursuant to any program of voluntary correction sponsored by the Internal Revenue Service or the Department of Labor, or any other agency of the Federal government or pursuant to applicable law, regulations or rulings, to the extent determined by, and at the sole discretion of, the Chairman of the Board.

**ARTICLE VIII**

**GENERAL PROVISIONS**

8.01 **Nonalienation of Benefits.** Except as may be otherwise required by law, no benefit payable under the Plan or any interest of any Participant arising out of or created by this Plan, either before or after retirement, shall be subject, either voluntarily or involuntarily, to anticipation, assignment, pledge, execution, attachment, garnishment, or alienation. Any attempt to assign or alienate a benefit payable under the Plan shall be void. Also, except as may otherwise be required by law, no such benefit or interest will in any manner be liable for or subject to the debts, liabilities, contract, engagements, or torts of any Participant. This Section 8.01 also shall apply to the creation, assignment, or recognition of a right to any benefit payable with respect to a Participant pursuant to a domestic relations order, unless such order is determined by the Plan Administrator to be a Qualified Domestic Relations Order. In the case of a Qualified Domestic Relations Order, distributions shall be made in accordance with and shall be governed by procedures adopted by the Plan Administrator. Notwithstanding any other provisions of the Plan, to the extent permitted under the provisions

of Code Sections 401(a)(13)(C) and (D), or under other applicable law, a Participant or Beneficiary may have his benefits reduced in the event of his willful breach of fiduciary duty to the Plan or his criminal act against the Plan.

8.02 **Payments to Minors, Incompetents, and Related Situations.** If a Participant or Beneficiary entitled to receive any benefits hereunder is a minor, is adjudged to be legally incapable of giving valid receipt and discharge for such benefits, or is unable to care for his affairs because of illness, accident, mental disability, or similar circumstances, such benefits shall be paid to such person as the Plan Administrator shall designate or to the duly appointed guardian. Such payment shall be deemed a complete discharge of any liability for such benefits under the Plan.

8.03 **Unclaimed Accounts - Trust Funds.** No interest shall accrue to or for the account of Participants or their Beneficiaries during any period that any distribution hereunder shall remain unclaimed. If any distribution made by the Trustee from any of the Participant Investment Funds remains unclaimed for a period of six (6) months, the Trustee shall notify the Plan Administrator, who will promptly attempt to locate the person entitled to receive such distribution.

8.04 **No Guarantee of Employment.** The Plan shall not be deemed to be in consideration of, or an inducement for, the employment of any person by the Company or any Affiliated Company. Nothing contained in the Plan shall be deemed to give any employee the right to be retained in the service of the Company or any Affiliated Company or to interfere with the right of the Company or any Affiliated Company to discharge or to terminate the service of any employee at any time without regard to the effect such discharge or termination may have on any rights under the Plan.

8.05 **Governing Law.** The Plan, the Trust Agreement, and all amendments thereto shall be construed, whenever possible, to be in conformity with the requirements of the Code and ERISA, and according to the laws of the Commonwealth of Pennsylvania (including its statute of limitations provisions, but excluding its choice of law provisions) to the extent not preempted by applicable federal law.

8.06 **Gender, Number, and Headings.**

(a) As used herein, the pronouns “he”, “him”, or “his”, referring to an Employee, Participant, Beneficiary, or any other person, shall also be deemed to refer to and include the feminine gender.

(b) Whenever any words are used herein in the singular or plural, they shall be construed as if they were also used in the plural or singular, respectively, in all cases where applicable.

(c) Headings of Articles and Sections of the Plan are inserted for convenience of reference only and as such they constitute no part of the Plan and are not to be considered in the meaning or construction thereof.

(d) Any reference to the Code or ERISA or a section thereunder or a regulation thereunder shall also refer to any successor statute, successor section, or successor regulation.

8.07 **Severability.** Each provision of the Plan shall be independent of each other provision of the Plan and if any provision of the Plan proves to be, or is held by any court, tribunal, board, or authority of competent jurisdiction to be, void or invalid as to any Participant or group of Participants, such provision shall be disregarded and deemed to be null and void and not part of the Plan; but such invalidation of any such provision shall not otherwise impair or affect this Plan or any of the other provisions or terms hereof.

8.08 **Obligations of the Employer.** No Employer shall have any liability with respect to payments of benefits under the Plan and each Participant and Beneficiary shall look solely to the Trust Fund for any payments or benefits under the Plan. Upon total or partial termination of the Plan, no Employer shall have any further liability either to provide benefits to those employees affected by such total or partial termination (whether or not such benefits are then in pay status) or to make any further contributions to or under the Plan in respect of such employees.

8.09 **Effective Date.** The amended and restated Plan as herein set forth is effective as of November 1, 2017, except for provisions which indicate a later effective date.

8.10 **Uniformed Services Employment and Reemployment Rights Act.** Notwithstanding any provision of this Plan to the contrary, contributions, benefits and service credit with respect to qualified military service will be provided in accordance with Code Section 414(u).

8.11 **Use of Electronic Media; Adjustment of Certain Time Periods.** Notwithstanding any provision herein which requires notices, consents, elections, or other actions under the Plan to be effectuated through a writing, such notices, consents, elections, or other actions may be effectuated through the use of electronic media, if so provided in procedures established by the Plan Administrator consistent with Department of Labor or Internal Revenue Service pronouncements or other applicable law. Moreover, any time periods set forth herein for providing notices, making elections, granting consents, or taking other actions which are based upon time limits established under applicable law shall be deemed to be automatically amended, without the necessity of a formal amendment, to reflect any subsequent modification of those deadlines through Department of Labor or Internal Revenue Service pronouncements or other changes in applicable law.

**IN WITNESS WHEREOF**, this Air Products and Chemicals, Inc. Retirement Savings Plan, as amended and restated effective November 1, 2017, has been duly executed on behalf of Air Products and Chemicals, Inc. on this \_\_\_\_ day of October 2017.

**AIR PRODUCTS AND CHEMICALS, INC.**

By: \_\_\_\_\_  
Senior Vice President- Human Resources

ATTEST:

\_\_\_\_\_  
Assistant Secretary

**APPENDIX A**

**PARTICIPANT INVESTMENT FUNDS**  
**Effective as of January 1, 2016**

A-1

## **Tier 1 – Life Cycle Investment Options**

- § *SSgA Target Retirement Income Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2015 Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2020 Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2025 Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2030 Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2035 Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2040 Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2045 Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2050 Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2055 Securities Lending Series Fund Class II*
- § *SSgA Target Retirement 2060 Securities Lending Series Fund Class II*

## **Tier 2 – Core Investment Options- Passively Managed**

- § Spartan® 500 Index Fund (Ticker Symbol: FXAIX)
- § Spartan ®Extended Market Index Fund (Ticker Symbol: FSEVX)
- § Vanguard Total Bond Market Index Fund (Ticker Symbol: VBTIX)
- § Vanguard Total International Stock Index Fund (Ticker Symbol: VTSNX)

## **Tier 3- Core Investment Options- Actively Managed**

- § Dodge & Cox Balanced Fund (Ticker Symbol: DODBX)
- § Fidelity® International Discovery Commingled Pool
- § JPMCB Large Cap Growth Fund
- § Principal MidCap Blend Fund Institutional Class (Ticker Symbol: PCBIX)
- § Pyramis Small Capitalization Core Commingled Pool
- § Stable Value Fund
- § Vanguard Windsor II Fund – Admiral Shares (Ticker Symbol: VWNAX)
- § Western Asset Core Plus Bond – CIF R1

## **Tier 4 – Other Investment Options**

- § Air Products Company Stock Fund
- § Fidelity BrokerageLink®
- § Fidelity Money Market Trust Retirement Government Money Market Portfolio

The Qualified Default Investment Alternative is the Tier 1 – Life Cycle Investment Option. Contributions will be invested in a particular fund within that Tier based on the Participant's age in accordance with procedures determined by the Plan Administrator.





**EXHIBIT I**  
**ELIGIBLE NONUNION HOURLY LOCATIONS DESIGNATED**  
**BY SENIOR VICE PRESIDENT - HUMAN RESOURCES**  
**EFFECTIVE AS OF January 1, 2016:**

	<u>Designated Terminal For 125% of Base Salary.</u>
ADAMS, NE	YES
ASHLAND, KY	YES
BEATRICE, NE	YES
BETHLEHEM, PA	YES
BOUNTIFUL, UT	YES
BOZRAH, CT	YES
BROOKHAVEN, MS	YES
BURNS HARBOR, IN	NO
BUTLER, IN	YES
BUTLER, PA	YES
CAMDEN, SC	YES
CARTERSVILLE, GA	YES
CHANDLER, AZ	YES
CLAREMONT, MN	YES
CONVENT, LA	NO
CONVENT, LA (Drivers)	YES
CONYERS, GA	YES
CREIGHTON, PA	YES
DECATUR, AL	YES
DEER PARK, TX	NO
EAGAN, MN	YES
GLENMONT, NY	YES
GRAY, TN	YES
LANCASTER, PA	YES
LANCASTER, PA (Express Services)	NO
LAPORTE, TX	YES
LASALLE, IL	YES
LIBERAL, KS	YES
LONG BEACH, CA	YES
MALTA BEND, MO	YES
MANALAPAN, NJ	NO
MARION, IN	YES
MCINTOSH, AL	YES
MEDINA, NY	YES
MEMPHIS, TN	YES
MIDLOTHIAN, TX	YES
MILTON (CO2), WI	YES
MONROE, WI	YES
MOORELAND, OK	YES
NEVADA, IA	YES

NEW MARTINSVILLE, WV	YES
NIAGARA FALLS, NY	YES
OAK CREEK, WI	YES
ORLANDO, FL	YES
PACE, FL	YES
PARKERSBURG, WV	YES
PRYOR, OK	YES
PUYALLUP, WA	YES
REIDSVILLE, NC	YES
SHAKOPEE, MN	YES
SMITHVILLE, MO	YES
SPARROWS POINT, MD (Drivers)	YES
SUFFIELD, CT	YES
UNION CITY, IN	YES
YORK, NE	YES

## EXHIBIT II

### FORMS OF DISTRIBUTION AVAILABLE TO PARTICIPANTS WHO HAD AMOUNTS TRANSFERRED TO THE PLAN FROM THE IGS SAVINGS PLAN

(i) **Forms of Payments to Participants.** Participants who were previously participants in the IGS Savings Plan shall continue to have available under the Plan the forms of payment which were available under the IGS Savings Plan, in addition to the forms of benefit provided for in Article V of the Plan; provided, however, that distribution shall automatically be made in the form of a lump sum if the value of the aggregate amounts credited to the Participant's Plan accounts does not exceed the amount set forth in Paragraph 3.10(c) of the Plan. Such forms of payment shall be available with respect to the balance of the Participant's account which was transferred from the IGS Savings Plan to the Plan in connection with the merger of the IGS Savings Plan effective March 31, 2000.

Any distributions made pursuant to this Exhibit II or under Article V must satisfy the requirements of Code Section 401(a)(9) and the regulations thereunder, including the minimum distribution incidental benefit requirement. The former IGS Savings Plan Participant shall have the ability to recalculate annually the life expectancy of the Participant and the Participant's Spouse. Any recalculation of life expectancy shall be done in accordance with Code Section 401(a)(9) and the regulations thereunder.

(1) **Normal Form of Payment.** Unless the Participant elects otherwise the aggregate amount credited to the Participant's Plan accounts shall be made in a lump sum. The normal form of payment shall be automatic, unless the Participant files a written request with the Administrator prior to the date on which the aggregate amounts credited to the Participant's Plan accounts are automatically payable, electing an optional form of payment.

(2) **Optional Forms of Payment.**

(a) The Participant shall have the right to receive the aggregate amounts credited to his or her Participant Plan accounts in monthly, quarterly, semi-annual or annual payments from the Plan over any period not extending beyond the life expectancy of the Participant and his or her Beneficiary.

(b) A direct rollover will be available to the Participant and/or the Spouse under the terms of Section 5.03.

(ii) **Forms of Death Benefit Distributions.**

(1) **Spousal Death Benefit.** On the death of a Participant, the aggregate amounts credited to the Participant's Plan accounts will be paid to the Participant's Surviving Spouse, or if the Surviving Spouse has consented in a manner conforming to a Qualified Election, then to the Participant's Designated Beneficiary.

The Surviving Spouse may elect to have distribution of the aggregate amounts credited to the Participant's Plan Accounts commence within the 90-day period following the date of the Participant's death. The aggregate amount credited to the Participant's Plan Accounts shall be adjusted for gains or losses occurring after the Participant's death in accordance with the provisions of the Plan governing the adjustment of account balances for other types of distributions.

The Participant may waive the spousal death benefit described in this Section B(1) of this Exhibit II at any time provided that no such waiver shall be effective unless it is a Qualified Election.

(2) **Qualified Election.** Any election to waive the spousal death benefit of Section B(2) of this Exhibit II shall not be effective unless:

(a) the Participant's Spouse consents in writing to the election;

(b) the election designates a specific beneficiary, including any class of beneficiaries or any contingent beneficiaries, which may not be changed without spousal consent (or the Spouse expressly permits designations by the Participant without any further spousal consent);

(c) the Spouse's consent acknowledges the effect of the election.

If it is established to the satisfaction of the Administrator that there is no Spouse or that the Spouse cannot be located, a waiver will be deemed a Qualified Election. Any consent by a Spouse obtained under this provision (or establishment that the consent of a Spouse may not be obtained) shall be effective only with respect to such Spouse. A consent that permits designations by the Participant without any requirement of further consent by such Spouse has the right to limit consent to a specific beneficiary, and a specific form of benefit where applicable, and that the Spouse voluntarily elects to relinquish either or both of such rights. A revocation of a prior waiver may be made by a Participant without the consent of the Spouse at any time before the commencement of benefits. The number of revocations shall not be limited.

(iii) **Other Distribution Provisions.**

(1) **Participant Dies After Distribution Has Begun.** In the event a Participant dies after the distribution of the aggregate amounts credited to the Participant's Plan accounts pursuant to Code Section 401(a)(9) has begun, the distribution of the such aggregate amounts will continue to be distributed at least as rapidly as under the method of distribution being used prior to the Participant's death.

(2) **Participant Dies Before Distribution Has Begun.** In the event a Participant dies before the distribution of the aggregate amounts credited to the Participant's Plan accounts pursuant to Code Section 401(a)(9) has begun, the distribution of the such aggregate amounts will be completed by December 31 of the

calendar year containing the fifth anniversary of the Participant's death except to the extent that an election is made to receive distributions in accordance with (a) or (b) below.

(a) If any portion of the aggregate amounts credited to the Participant's Plan accounts is payable to a Designated Beneficiary, distributions may be made over the life or over a period certain not greater than the life expectancy of the Designated Beneficiary commencing on or before December 31 of the calendar year immediately following the calendar year in which the Participant died;

(b) If the Designated Beneficiary is the Participant's Surviving Spouse, the date distributions are required to begin in accordance with (a) above shall not be earlier than the later of (1) December 31 of the calendar year immediately following the calendar year in which the Participant died or (2) December 31 of the calendar year in which the Participant would have attained age 70½.

If the Participant has not made an election pursuant to this Section C(2) of this Exhibit II by the time of his or her death, the Participant's Designated Beneficiary must elect the method of distributions no later than the earlier of: (1) December 31 of the calendar year in which distributions would be required to begin under this section, or (2) December 31 of the calendar year which contains the fifth anniversary of the date of death of the Participant. If the Participant has no Designated Beneficiary, or if the Designated Beneficiary does not elect a method of distribution, then distributions of the aggregate amounts credited to the Participant's Plan accounts must be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

For purposes of this Section C(2) of this Exhibit II, if the Surviving Spouse dies after the Participant, but before the payments to such Spouse begin, the provisions of this Section C(2) of this Exhibit II with the exception of paragraph (b) therein, shall be applied as if the Surviving Spouse were the Participant. For the purposes of Sections C(1) and C(2) of this Exhibit II, distribution of the aggregate amounts credited to the

Participant's Plan accounts is considered to begin on the last Business Day of March of the calendar year, which follows the calendar year in which the Participant would have attained age 70½ (or, if the preceding sentence is applicable, the date distribution is required to begin to the Surviving Spouse).

(3) **Payment to Minor.** For purposes of this Exhibit II, if an amount is payable to either a minor or an individual who has been declared incompetent, the benefits shall be paid to the legally appointed guardian for the benefit of said minor or incompetent individual, unless the court which appointed the guardian has ordered otherwise.

(4) **Definitions.** For purposes of this Exhibit II, the following definitions shall apply:

(a) **Designated Beneficiary** - The individual who is designated as the beneficiary under the Plan in accordance with Code Section 401(a)(9) and the regulations thereunder.

(b) **Spouse or Surviving Spouse** - The Spouse or Surviving Spouse of the Participant, provided that a former Spouse will be treated as the Spouse or Surviving Spouse and a current Spouse will not be treated as the Spouse or Surviving Spouse to the extent provided under a Qualified Domestic Relations Order as described in Code Section 414(p).

**EXHIBIT III**  
**PLAN ELECTIONS**

The following elections have been made in accordance with various sections of the Plan and are applicable only with respect to the Plan Years specifically indicated below, except as otherwise required by applicable law:

Year Election Applies	Applicable Plan Section	Election
1997	3.07(b)(i),(ii), and (iii) (pages 30-33)	Current year data used to perform ADP, ACP, and multiple use testing.

This Exhibit III may be revised from time to time by the Senior Vice President - Human Resources without amendment to the Plan, provided his/her signature appears below along with the Signature Date.



**SCHEDULE I  
PARTICIPATING EMPLOYERS  
AS OF 1 JANUARY 2016**

<b>Name of Affiliated Company</b>	<b>Participating Employer Since Date</b>	<b>Revocation Date</b>
ProCal	2 March 2015	N/A
Air Products Energy Enterprising, Inc.	Continuing	N/A
Air Products Helium, Inc.	Continuing	N/A
Air Products Manufacturing Co., Inc.	Continuing	N/A
Air Products LLC	1 June 2007	N/A
Air Products Performance Manufacturing, Inc. (formerly known as "Tomah Products, Inc." and "Tomah Reserve, Inc.")	1 April 2006	N/A
Versum Materials US, LLC	1 August 2016	1 October 2016

**AIR PRODUCTS AND CHEMICALS, INC.**

**DEFERRED COMPENSATION PLAN**

**Amended and Restated**

**Effective January 1, 2018**

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**AIR PRODUCTS AND CHEMICALS, INC.**  
**DEFERRED COMPENSATION PLAN**

**Amended and Restated**  
**Effective January 1, 2018**

Air Products and Chemicals, Inc. (the "Company") established, effective October 1, 1983, a nonqualified savings plan named the Supplementary Savings Plan (the "Plan") for employees whose participation in the Air Products and Chemicals, Inc. Retirement Savings Plan (formerly the "Retirement Savings and Stock Ownership Plan," hereinafter referred to as "the Savings Plan") and effective August 1, 2014 certain employees in the Air Products and Chemicals, Inc. Pension Plan for Salaried Employees whose participation is limited due to certain provisions of the Internal Revenue Code (the "Code"), which Plan was thereafter amended and restated effective as of January 1, 1987, October 1, 1989, April 1, 1998, January 1, 2005, January 1, 2008 and January 1, 2009 and August 1, 2014. This Plan, now renamed the "Air Products and Chemicals, Inc. Deferred Compensation Plan," is intended to be an unfunded, nonqualified deferred compensation plan. Plan participants shall have the status of unsecured creditors of the Employer with respect to the payment of Plan benefits. The Plan is intended to be unfunded for tax purposes and for purposes of Title I of the Employee Retirement Income Security Act of 1974 ("ERISA").

Article I

DEFINITIONS

Whenever used herein, the masculine pronoun shall be deemed to include the feminine, and the singular to include the plural, unless the context clearly indicates otherwise, and the following definitions shall govern the Plan:

1.1 "Account(s)" means the book entry account(s) established under the Plan for each Participant to which are credited the Participant's Annual Salary Deferrals, Bonus Deferrals, Special Bonus Deferrals, Company Core Credits, Company Matching Credits, Company Stock Credits and Earnings with respect thereto. Account balances shall be reduced by any distributions made to the Participant or the Participant's Beneficiary(ies) therefrom and any charges that may be imposed on such Account(s) pursuant to the terms of the Plan. Separate Subaccounts may be established to assist in the administration of the Plan. Where Subaccounts have been established, Account shall refer to all of the Participants' Subaccounts, collectively, as the context may require.

1.2 "Annual Incentive Plan" means the Air Products and Chemicals, Inc. 2001 Annual Incentive Plan, as amended from time to time. Any bonus or other payouts from the Annual Incentive Plan shall be deemed Performance Based Compensation to the extent compliant with Code Section 409A. All terms referencing the Annual Incentive Plan shall be defined as set forth therein.

1.3 "Annual Salary" shall mean the total annual salary of an Employee which would be payable by the Company or an Employer if the Employee made no Deferral Election under the Plan or any similar deferral election under the Savings Plan or other deferred compensation or cafeteria plan, excluding:

(a) Except as expressly provided herein, discretionary bonuses or awards, including, without limitation, Annual Incentive Plan awards, stock options, or other stock awards, scholastic aid, or payments and awards for suggestions and patentable inventions, other merit awards, expense allowances, and noncash compensation (including imputed income).

(b) Company Core Credits and Company Matching Credits under this Plan and Company Core Contributions and Company Matching Contributions under the Savings Plan; accruals or distributions under the Savings Plan and this Plan; and payments, accruals, and distributions under any severance or incentive plan or other retirement, pension, or profit-sharing plan of the Company or an Employer;

(c) Overtime payments, shift premium payments, commissions, mileage, and payments in lieu of vacation by the Company or an Employer; and

(d) All supplemental compensation from the Company or an Employer for domestic and overseas assignments, including without limitation, premium pay, cost of living and relocation allowances, mortgage interest allowances and forgiveness, tax-equalization payments, and other emoluments of such service.

1.4 “Annual Salary Deferral” means the percentage of a Participant’s Annual Salary which the Participant elects to defer pursuant to Section 3.1.

1.5 “Benchmark Fund” shall mean one or more of the mutual funds or contracts selected by the Plan Administrator pursuant to Article V.

1.6 “Beneficiary” means one, some, or all (as the context shall require) of those persons, trusts or other entities designated by a Participant to receive the undistributed value of his or her Account following the Participant’s death. The following provisions shall apply if there is no living designated Beneficiary at the time of the Participant’s death: In the absence of a living designated Beneficiary at the time of the Participant’s death, the spouse of a married Participant shall be treated as the designated Beneficiary of the married Participant. If the Participant is not married and has a registered domestic partner at the time of death, the registered domestic partner of such Participant shall be treated as the designated Beneficiary. If the Participant has no living spouse or registered domestic partner at the time of death, then death benefits shall be paid to the then living children of the Participant in equal shares, and if there are no surviving children, death benefits shall be paid to the Participant’s estate.

1.7 “Board” means the board of directors of the Company or any Committee thereof acting on behalf of the Board pursuant to its charter or other delegation of power from the Board, or the Chairman of the Board acting pursuant to a delegation of authority from the Board.

1.8 “Bonus” means the bonus paid pursuant to the Annual Incentive Plan. A Bonus shall be Performance Based Compensation if compliant with the definition of “performance based compensation” under Code Section 409A.

1.9 “Bonus Deferral” means the percentage or dollar amount of a Participant’s Bonus which the Participant elects to defer pursuant to Section 3.2.

1.10 “Change in Control” shall mean the first to occur of any one of the events described below:

(a) Change in Ownership. The date any one person, or more than one person acting as a group (as determined under 1.409A-3(i)(5)(v)(B)), acquires ownership of stock of the Company that, together with stock held by such person or group, constitutes more than 50% of the total fair market value or total voting power of the stock of the Company. However, if any one person, or more than one person acting as a group, is considered to own more than 50% of the total fair market value or total voting power of the stock of the Company, the acquisition of additional stock by the same person or persons is not considered to cause a change in the ownership of the Company. An increase in the percentage of stock owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires its stock in exchange for property will be treated as an acquisition of stock for purposes of this section.

(b) Change in Effective Control. The date any one person, or more than one person acting as a group (as determined under 1.409A-3(i)(5)(v)(B)), acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of the Company possessing 30% or more of the total voting power of the stock of the Company.

(c) Change in Board. The date a majority of members of the Company’s Board of Directors is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Company’s Board of Directors before the date of the appointment or election.

1.11 “Claims Committee” means the committee appointed by the Senior Vice President, General Counsel and Chief Administrative Officer to review and determine appeals of claims arising under the Plan.

1.12 “Code” means the Internal Revenue Code of 1986, as amended.

1.13 “Common Stock” shall mean Common Stock of the Company.

1.14 “Company” means Air Products and Chemicals, Inc. and any successor organization thereto.

1.15 “Company Core Credits” means the amount, if any, of credits awarded to a Participant pursuant to Section 3.4. Each Company Core Credit shall have a value of one dollar.

1.16 “Company Matching Credits” means the amount, if any, of Credits awarded to a Participant pursuant to Section 3.5. Each Company Matching Credit shall have a value of one dollar.



1.17 “Deferral” means that percentage or dollar amount of a Participant’s Annual Salary, Bonus or Special Bonus deferred pursuant to this Plan.

1.18 “Deferred Cash Account” means a Participant’s subaccount to which dollar denominated amounts attributable to Deferrals, Company Core Credits and Company Matching Credits and related Earnings are credited.

1.19 “Deferred Company Stock Account” means a Participant’s subaccount to which units of Company Stock are credited. Effective January 1, 2018, there shall be no additional credits to the Deferred Company Stock Account.

1.20 “Disability” means a determination by the Claims Committee with the assistance of a duly licensed physician selected by the Claims Committee that, because of disability, the Employee is no longer able, properly and satisfactorily, to perform his or her regular duties as an Employee. Notwithstanding the foregoing, should regulations or other guidance under Code Section 409A interpret this definition as not meeting the minimum requirements of Code Section 409A, then without further action or amendment, a Participant shall be considered disabled if the Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than six (6) months.

1.21 “Distribution Date” means the date(s) on which distribution of a Participant’s Plan benefits is made or commenced pursuant to Article VI. A Participant may have more than one Distribution Date.

1.22 “Earnings” or “Earnings Rate” means the notational investment return or loss determined in accordance with Section 5.2 which shall be credited to the Participants’ Accounts.

1.23 “Effective Date” of October 1, 1983. The Plan has been amended and restated effective January 1, 2018.

1.24 “Election” means the form or forms on which a Participant (i) elects to make Deferrals pursuant to Article III, (ii) elects a Distribution Date or In-Service Distribution Date pursuant to Section 6.2 or Section 6.4, or (iii) elects the method by which his or her Plan benefits will be distributed pursuant to Section 6.3. The Election shall be in such form or forms as may be prescribed by the Plan Administrator.

1.25 “Eligible Individual” means an employee of the Employer who is a member of the select group of management and highly compensated employees as more particularly described in Article II and who has been designated by the Plan Administrator as eligible to participate in the Plan.

1.26 “Employee” shall mean any United States employee of the Company or an Employer.

1.27 “Employer” means the Company and each Participating Employer.

1.28 “Entry Date” means the first day of any Plan Year and, as to an Eligible Individual who first becomes eligible to participate in the Plan during a Plan Year, the date which is thirty (30) days from the date on which such Eligible Individual is first notified by the Plan Administrator of his or her eligibility to participate in the Plan.

1.29 “In-Service Distribution Date” means the date or dates on which distribution of a Participant’s Account balance (or portion thereof) is made or commenced pursuant to Section 6.4. A Participant may make an Election of a specific date or age as an In-Service Distribution Date and may select different In-Service Distribution Dates for different portions of his or her Account.

1.30 “Open Enrollment Period” means such period as the Plan Administrator may specify which is prior to the first day of each Plan Year (during which services are to be rendered), or, with respect to an Eligible Individual who first becomes eligible to participate in the Plan during a Plan Year, within thirty (30) days of becoming an Eligible Participant. Notwithstanding the foregoing, the Open Enrollment Period for deferral of a Bonus or Special Bonus that qualifies as Performance Based Compensation may be different than that for other Deferrals and may end no later than six (6) months prior to the end of the performance period for which such services are to be rendered.

1.31 “Participant” means an Eligible Individual or former employee of the Company or Employer who (i) is making Deferrals under the Plan, (ii) is receiving Company Matching Credits or Company Core Credits under the Plan, or (iii) otherwise has an Account under the Plan.

1.32 “Participating Employer” shall mean each affiliate whose United States employees are participants in the Savings Plan or the Annual Incentive Plan and has adopted this Plan with the consent of the Company. Each Participating Employer is listed at Exhibit B.

1.33 “Performance Based Compensation” means compensation based on services performed by the Participant over a period of at least twelve (12) months, where the payment or amount of such compensation is contingent upon the satisfaction of organizational or individual performance criteria that are not substantially certain to be met at the time a deferral of the compensation is permitted (or such other definition as may be required under Code Section 409A).

1.34 “Plan” means the Air Products and Chemicals, Inc. Deferred Compensation Plan, as it may be amended from time to time.

1.35 “Plan Administrator” means the Vice President of Human Resources, or such other person or entity to whom he or she delegates such responsibilities.

1.36 “Plan Year” means the twelve-month period beginning on January 1<sup>st</sup> of each calendar year and ending on December 31<sup>st</sup>.

1.37 “Savings Plan” shall mean the Air Products and Chemicals, Inc. Retirement Savings Plan, as amended from time to time. All terms referencing the Savings Plan shall be defined as set forth thereunder.

1.38 “Separation from Service” occurs when there is an expectation that the employee has terminated employment and is expected permanently to render services at a level that is at least 60% less than the average level of services rendered over the preceding 36 months. A Separation from Service shall be deemed to occur in the case of a leave of absence exceeding six months (or 29 months if due to Disability) where there is no legal or contractual right for the Employee to return to work.

1.39 “Service” means the Participant’s employment or service with an Employer or an affiliate on a substantially full-time basis. A Participant’s Service shall include periods of employment or service with any Employer or affiliate regardless of whether such entity has adopted this Plan. A Participant’s Service shall not be deemed to have terminated merely because of a change in the capacity under which the Participant renders Service, provided there is no interruption or termination of Participant’s Service. A Participant’s Service shall terminate upon an actual termination of Service, whether by death, Disability, or otherwise. Subject to the foregoing, the Plan Administrator, in its discretion, shall determine whether Participant’s Service has terminated and the effect of such termination. A Participant shall not be deemed to have terminated Service for purposes of receiving a distribution under the Plan if the Participant continues to provide any services for the Employer or an affiliate.

1.40 “Special Bonus” shall mean a discretionary bonus award granted outside of the Annual Incentive Plan which is designated as eligible (or required) to be deferred by the Vice President – Human Resources. A Special Bonus shall be deemed Performance Based Compensation if compliant with the definition of “performance based compensation under Code Section 409A.

1.41 “Specified Employee” means any Participant who would be considered a “Specified Employee” as that term is defined in Section 409A(a)(2)(B)(i) of the Code.

1.42 “Tax Limitations” shall mean Code sections 401(a), 415, 402(g), or 401(a)(17) to the extent such Code sections limit the benefits that may be provided to certain Participants under the Savings Plan and the Savings Plan provisions and administrative procedures adopted by the Plan Administrator to ensure compliance of the Savings Plan with such Code sections.

## ARTICLE II

### ELIGIBILITY

2.1 Eligibility. Eligibility for participation in the Plan shall be limited to a select group of management or highly compensated employees of the Employer. Eligible Individuals shall be notified by the Plan Administrator as to their eligibility to participate in the Plan.

2.2 Commencement of Participation. An Eligible Individual may begin participation in the Plan upon any Entry Date, subject to the execution and submission of an Election pursuant to Article III. In addition, participation of an Eligible Individual who has not otherwise commenced participation in the Plan, shall commence when Company Core Credits or Company Matching Credits are made to the Account of such Eligible Individual pursuant to the provisions of Article III.

2.3 Cessation of Participation. Active participation in the Plan shall end when a Participant's Service terminates for any reason or at such time as a Participant is notified by the Plan Administrator, pursuant to Section 2.4, below, that he or she is no longer eligible to participate in the Plan. Upon termination of Service or eligibility, a Participant shall remain an inactive Participant in the Plan until all of the vested amounts to which he or she is entitled under this Plan have been paid in full.

2.4 Cessation of Eligibility. The Plan Administrator may at any time, in its sole discretion, notify any Participant that he or she is not eligible to participate in the Plan, or is not eligible for Company Core Credit or Company Matching Credit in any Plan Year.

2.5 Eligibility During Leave of Absence. If a Participant is authorized by the Participant's Employer for any reason to take a paid leave of absence, the Participant shall continue to be considered employed by the Employer and Deferrals shall continue to be withheld during such paid leave of absence in accordance with Article III. If a Participant is authorized by the Participant's Employer for any reason to take an unpaid leave of absence, the Participant shall continue to be considered employed by the Employer and the Participant shall be excused from making Deferrals until the earlier of the date the leave of absence expires or the Participant returns to a paid employment status. Upon such expiration or return during the same Plan Year, Deferrals shall resume for the remaining portion of the Plan Year in which the expiration or return occurs, based on the Election, if any, made for that Plan Year. If no election was made for that same Plan Year, no Deferrals shall be withheld for the remainder of that Plan Year. If the Participant returns to paid employment status in a subsequent Plan Year, the Participant shall be entitled to make a new Election within the first thirty (30) days of return.

## ARTICLE III

### DEFERRALS AND CREDITS

#### 3.1 Annual Salary Deferrals.

3.1.1 Effective January 1, 2018, an Eligible Individual may elect to reduce his or her Annual Salary by a percentage or dollar amount set forth in a written and signed Election filed with the Plan Administrator, subject to the provisions of this Article III. The Annual Salary Deferrals shall not be paid to the Participant, but shall be withheld from the Participant's Annual Salary according to the Participant's Election and an amount equal to the Annual Salary Deferrals shall be credited to the Participant's applicable Deferral Subaccount. The minimum percentage deferral shall be one percent (1%) of Annual Salary, which minimum may be changed at any time by the Plan Administrator. The maximum percentage deferral shall be fifty percent (50%) of Annual Salary, which maximum may be changed at any time by the Plan Administrator.

3.1.2 The Election must be filed with the Plan Administrator during the Open Enrollment Period for the Plan Year to which such Election applies. A Participant shall make a new Annual Salary Deferral Election for each Plan Year during the Open Enrollment Period for such Plan Year.

3.1.3 Except to the extent expressly permitted under Code Section 409A, a Participant's Election for a Plan Year shall be irrevocable.

3.1.4 Each Election to make Annual Salary Deferrals shall apply only to Annual Salary earned after the effective date of such Election.

3.1.5 The Plan Administrator may, if necessary, reduce a Participant's Annual Salary Deferrals to ensure that required employee contributions to the Employer's welfare plans and the employee's portion of employment and other applicable taxes are properly withheld from the Participant's Annual Salary.

### 3.2 Annual Incentive Plan Bonus Deferrals.

3.2.1 Each Eligible Individual may elect to reduce his or her Bonus by a percentage set forth in a written and signed Election filed with the Plan Administrator, subject to the provisions of this Article III. The Bonus Deferral shall not be paid to the Participant, but shall be withheld from the Participant's Bonus according to the Participant's Election and an amount equal to the Bonus Deferral shall be credited to the Participant's applicable Deferral Subaccount. The minimum percentage deferral shall be one percent (1%) of the Bonus which minimum may be changed at any time by the Plan Administrator. The maximum percentage deferral shall be seventy-five percent (75%) of Bonus which maximum may be changed at any time by the Plan Administrator.

3.2.2 The Deferral Election must be filed with the Plan Administrator during the Open Enrollment Period to which the Election applies. A Participant shall make a new Bonus Deferral Election for each Plan Year during the Open Enrollment Period for such Plan Year. If, however, the Bonus qualifies as Performance Based Compensation, the Plan Administrator shall determine a separate Open Enrollment Period for such Deferrals.

3.2.3 Except to the extent expressly permitted under Code Section 409A, a Participant's Bonus Deferral Election for a Plan Year shall be irrevocable.

### 3.3 Special Bonus Deferrals.

3.3.1 Each Eligible Individual may elect to reduce his or her Special Bonus by a percentage set forth in a written and signed Election filed with the Plan Administrator, subject to the provisions of this Article III. The Special Bonus Deferral shall not be paid to the Participant, but shall be withheld from the Participant's Special Bonus according to the Participant's Election and an amount equal to the Special Bonus Deferral shall be credited to the Participant's applicable Deferral Subaccount. The minimum percentage deferral shall be one percent (1%) of Special Bonus which minimum may be changed at any time by the Plan Administrator. The maximum percentage deferral shall be seventy-five percent (75%) of Bonus which maximum may be changed at any time by the Plan Administrator.

3.3.2 The Deferral Election must be filed with the Plan Administrator during the Open Enrollment Period to which the Election applies. A Participant shall make a new special Bonus Deferral Election for each Plan Year during the Open Enrollment Period for such Plan Year. If, however, the Special Bonus qualifies as Performance Based Compensation, the Plan Administrator shall determine a separate Open Enrollment Period for such Special Bonus Deferrals.

3.3.3 Except to the extent expressly permitted under Code Section 409A, a Participant's Special Bonus Deferral Election for a Plan Year shall be irrevocable.

#### 3.4 Company Core Credits.

3.4.1 A Participant's Subaccount shall be credited with Company Core Credits, in such amounts and at such times as the Company may, in its sole discretion, determine and communicate to the Participant.

3.4.2 Except as noted below, the Company Core Credits shall be based on the differential between: (i) the Company Core Contributions that would be made to the Savings Plan based on Annual Salary calculated without regard to the Tax Limitations; and (ii) the Company Core Contributions actually made to the Savings Plan.

3.4.3 With respect to Participants who do not participate in the Supplementary Pension Plan of Air Products and Chemicals, Inc., the Company Core Credits shall be based on the differential between: (i) the Company Core Contributions that would be made to the Savings Plan based on Annual Salary and Bonus calculated without regard to the Tax Limitations; and (ii) the Company Core Contributions actually made to the Savings Plan.

3.4.4 Company Core Credits shall be allocated as of the last day of each pay period provided that the Participant is employed by the Employer on such date. Company Core Credits attributable to the Participant's Bonus shall be allocated as soon as administratively practicable after the date on which the Bonus is paid to the Participant.

3.4.5 Notwithstanding the above, the Company shall be under no obligation to continue to make Company Core Credits and may discontinue or change the amount or method of calculating the amount of such Company Core Credits at any time.

#### 3.5 Company Matching Credits.

3.5.1 A Participant's Subaccount shall be credited with Company Matching Credits, in such amounts and at such times as the Company may, in its sole discretion, determine and communicate to the Participant.

3.5.2 The Company Matching Credit may be based on the differential between (i) the Company Matching Contribution that would be made under the Savings Plan if calculated without regard to the Tax Limitations, and (ii) the Company Matching Contributions actually made to the Savings Plan for the pay period.

3.5.3 Company Matching Credits shall be allocated as of the last day of the pay period provided that the Participant is employed by the Employer on such date.

3.5.4 Notwithstanding the above, the Company shall be under no obligation to continue to make Company Matching Credits and may discontinue or change the amount or method of calculating the amount of such Company Matching Credits at any time.

3.6 Reporting of Deferrals and Credits. The Participant's Deferrals, Company Core Credits and Company Matching Credits shall be reported on the Participant's IRS Form W-2 as required by applicable law.

3.7 No Withdrawal. Except as provided in Article VI below, amounts credited to a Participant's Account may not be withdrawn by a Participant and shall be paid only in accordance with the provisions of this Plan.

#### ARTICLE IV

##### VESTING

###### 4.1 Vesting of Participants' Accounts.

4.1.1 With respect to each Participant employed by the Company on or after January 1, 2018, all amounts credited to his or her Accounts under the Plan shall be 100% vested.

4.2 FICA Taxes. When a Participant becomes vested in a portion of his or her Account applicable FICA and other employment taxes shall be withheld from the Participant's salary as required by law. A Participant's Deferrals, Company Matching Credits and/or Company Core Credits may be reduced if necessary to satisfy this tax withholding obligation. At the election of the Company, distribution may also be made from the Participant's Account to pay the employee portion of such taxes if other funds are not available to pay such taxes.

#### ARTICLE V

##### ACCOUNTS AND EARNINGS RATE

5.1 Accounts. Separate Subaccounts shall be established and maintained for each Participant. A Participant's applicable Subaccounts shall be credited with the Participant's Annual Salary Deferrals, Bonus Deferrals, Special Bonus Deferrals, Company Matching Credits, Company Core Credits and Company Stock Credits, if any, made for such Participant. Participants' Accounts shall be credited (debited) with the applicable Earnings, as set forth in this Article V. Participants' Accounts shall be reduced by distributions therefrom and any charges which may be imposed on the Accounts pursuant to the terms of the Plan.

###### 5.2 Determination of Earnings Rate.

5.2.1 The Plan Administrator shall designate the particular funds or contracts which shall constitute the Benchmark Funds, and may, in its sole discretion, change or add to the Benchmark Funds; provided, however, that the Plan Administrator shall notify Participants of any change in Benchmark Funds prior to the effective date thereof. Notwithstanding the preceding sentence, if a change in Benchmark Funds is required by a change in law, such notification to Participants will be made as soon as practicable following such change in Benchmark Funds. In the absence of a specific designation by the Plan Administrator, the

Benchmark Funds are the funds available for participant directed investments under the Savings Plan and any supplemental investment alternatives identified in Exhibit A.

5.2.2 Upon enrollment in the Plan, each Participant may select among the Benchmark Funds and specify the manner in which each of his or her Subaccounts (other than the Company Stock Credit Subaccount) shall be allocated. The Plan Administrator shall establish and communicate the rules, procedures and deadlines for making and changing Benchmark Fund selections. The Plan Administrator may limit the number of Benchmark Funds that a Participant can select for purposes of determining the Earnings Rate. A Participant may change the Benchmark Funds selected for his/her Subaccounts. The Plan Administrator, in its sole discretion, may allow more frequent investment changes, including daily changes. The Company shall have no obligation to acquire investments corresponding to the Participant's Benchmark Fund selections. The Participant's election of any such Benchmark Fund and the crediting or debiting of the Earnings Rate to the Participant's Subaccounts shall not be considered or construed in any manner as an actual investment of his or her Subaccounts in any such Benchmark Fund. In the event that the Company, in its own discretion, decides to invest funds in any or all of the Benchmark Funds, no Participant shall have any rights in or to such investments themselves. Without limiting the foregoing, a Participant's Account shall at all times be a bookkeeping entry only and shall not represent any investment made on his or her behalf by the Company.

5.2.3 The Account Earnings Rate is based on the fair market value of the Benchmark Funds. The Earnings Rate may be negative if the applicable Benchmark Funds sustain a loss. Each Participant shall be solely responsible for selecting among the Benchmark Funds used in determining the Participant's Earnings Rate. In no event shall the Plan Administrator, the Employer or any other person be liable for any decline in the Participant's Account balance due to the Participant's selection of the specific Benchmark Funds used in determining the Participant's Earnings Rate.

### 5.3 Deferred Company Stock Account.

5.3.1 Effective January 1, 2018, there shall be no credits or additions to the Deferred Company Stock Account.

5.3.2 With respect to amounts currently allocated to the Deferred Company Stock Account, following the declaration of a cash dividend on the Common Stock, each Participant who has a Deferred Company Stock Account shall be credited with an amount equal to the cash dividends ("Dividend Equivalents") which would have been paid if the company stock units credited to such Account on the record date for such dividend had been issued and outstanding shares of Common Stock. Such Dividend Equivalents shall be credited to such Participant's Deferred Cash Account effective the payment date for such dividend occurred. The Board may, at its discretion, credit interest with respect to such Common Stock.

5.3.3 Following the declaration of a dividend payable in Common Stock, a Participant's Deferred Company Stock Account shall be credited with additional company stock units equivalent to the number of shares of Common Stock which would have been delivered if the company stock units credited to such Account on the record date for such dividend had been issued and outstanding shares of Common Stock. Such additional Company Stock units shall be credited to each Deferred Company Stock Account effective the payment date for such dividend occurred.



5.3.4 In the event of any change in the outstanding shares of Common Stock by reason of any stock dividend or split, recapitalization, merger, consolidation, combination or exchange of shares, a rights offering to purchase Common Stock at a price substantially below fair market value, or other similar corporate change, an equitable adjustment shall be made so as to preserve, without increasing or decreasing, the value of a Participant's Deferred Company Stock Account. Equitable adjustments will be made so as to treat Participants in a similar manner as they would have been treated had their Deferred Company Stock Account held actual shares of stock. Such adjustments shall be made as determined by the Plan Administrator and shall be conclusive and binding for all purposes of the Plan.

## ARTICLE VI

### BENEFIT DISTRIBUTIONS AND ACCOUNT WITHDRAWALS

6.1 **Benefit Amount.** The value of the Participant's Plan benefit shall be equal to the vested value of the Participant's Subaccount(s) on the last day of the calendar quarter prior to the Distribution Date, or such other valuation date as the Plan Administrator may specify, adjusted for Deferrals, Company Matching Credits, Company Core Credits, Earnings and/or withdrawals which have been subsequently credited thereto or made therefrom prior to the Distribution Date. If the Plan Administrator has specified more frequent valuations than quarterly valuations, the value shall be determined as of the most recent valuation date. The nonvested portion of a Participant's Subaccount(s) shall be forfeited to the Company upon termination of Service and shall not be distributed to the Participant.

6.2 **Timing of Distributions.** In accordance with the Participant's Distribution Election made during the Open Enrollment Period, benefits shall be paid (or, payments shall commence) as soon as practicable after the earlier of the following dates.

6.2.1 The last day of the quarter in which a Participant's Service with the Employer terminates; or

6.2.2 The In-Service Distribution Date designated by the Participant; or

6.2.3 The date Committee is notified that a Participant has died or the date the Plan Administrator has determined that a Participant has incurred a Disability.

6.2.4 If a Participant (i) is a Specified Employee, and (ii) is entitled to a distribution of his or her Account due to termination of Service (other than due to death or Disability), the distribution of the Participant's Account shall not be made or commence until six (6) months following the termination of Service.

### 6.3 Method of Distribution.

6.3.1 Distribution Methods. In accordance with the Participant's Distribution Election made during the Open Enrollment Period, benefits shall be paid, (or payments shall commence) in one of the following methods:

6.3.1.1 A single lump sum payment; or

6.3.1.2 In annual installment payments of substantially equal amounts over a period not to exceed ten (10) years.

The Participant's method of distribution selected in his or her Election shall remain in effect for all future similar Deferrals, unless changed by the Participant during a subsequent Open Enrollment Period. The Participant's method of distribution may be changed only during an Open Enrollment Period.

6.3.2 Reemployed After Installments Begin. If a former Participant is reemployed after having begun to receive installment distributions from the Plan, then such former Participant, upon once again becoming an Eligible Individual, may begin a new period of participation in the Plan (upon selection by the Plan Administrator), provided, however, that the installment distributions previously commenced will continue to be paid to the Participant over the specified term.

### 6.4 Election of In-Service Distribution Date.

6.4.1 Initial Election. A Participant may specify an In-Service Distribution Date for a portion of his or her vested Account, subject to the following:

6.4.1.1 A Participant may elect an In-Service Distribution Date for all of the vested amounts credited to the Participant's Account or for a specific dollar amount. The In-Service Distribution Date must be at least one (1) year after the end of the Plan Year to which the Deferral relates. For example, a Deferral of Annual Salary earned in 2020 may have an In-Service Distribution Date on or after January 1, 2022. The Plan Administrator may specify a maximum deferral period for any In-Service Distribution.

6.4.2 Revocation or Amendment of Election. A Participant who has elected an In-Service Distribution Date may revoke and/or amend the In-Service Distribution Date Election by filing a revocation or an amended Election at least twelve (12) months in advance of the In-Service Distribution Date specified in the Election being revoked or amended. The amended In-Service Distribution Date must be in a Plan Year five (5) years after the In-Service Distribution Date specified in the prior Election. If a Participant revokes an In-Service Distribution Date Election and does not provide another In-Service Distribution Date, the Participant shall be deemed to have elected to have the Plan benefit distributed at termination of Service. An In-Service Distribution Date Election may be amended only once. In no event may a Participant amend an Election to accelerate an In-Service Distribution Date.

6.4.3 Termination Before the Planned Distribution Date. Notwithstanding any prior Election, if the Participant terminates employment with the Employer before his In-Service Distribution Date,

distribution of the Participant's Account shall be made or commenced as soon as administratively feasible after the first day of the month following the end of the quarter in which the Service termination occurs.

6.4.4 Absence of In-Service Distribution Election. If a Participant does not elect an In-Service Distribution Date in his or her initial Election, or if the Participant revokes an In-Service Distribution Date Election, the Participant will be deemed to have elected to have the amounts credited to the relevant Subaccount distributed upon his or her termination of Service.

6.5 Distribution Upon Death of Participant. If a Participant dies before his or her Plan benefit payments have commenced, then such Participant's Account balance shall be paid to his or her designated Beneficiary in a single lump sum cash distribution as soon as administratively feasible after the Plan Administrator is notified of the Participant's death and receives evidence satisfactory to it thereof. If a Participant dies after his or her Plan benefit distribution has commenced in installments, his or her remaining benefits shall be paid to the deceased Participant's Beneficiary in a single lump sum cash distribution as soon as administratively feasible after the Plan Administrator is notified of the Participant's death and receives evidence satisfactory to it thereof.

6.6 Distribution Upon Disability of Participant. If a Participant suffers a Disability before his or her Benefit payments have commenced, then such Participant's Plan benefits shall be paid in the optional form of distribution previously selected by the Participant for distributions due to Disability as soon as administratively feasible after the Plan Administrator is notified of the Participant's Disability and receives evidence satisfactory to it thereof.

6.7 Financial Hardship Withdrawal. A Participant may withdraw up to fifty percent (50%) of the amount credited to his or her Deferral Subaccount(s) (Company Core Credits and Company Matching Credits are not eligible for this hardship withdrawal) as may be required to meet a sudden unforeseeable financial emergency of the Participant. Such hardship distribution shall be subject to the following provisions:

6.7.1 The hardship withdrawal must be necessary to satisfy the unforeseeable emergency and no more may be withdrawn than is required to relieve the financial need (including taxes associated with the payment of the hardship withdrawal) after taking into account insurance and other resources that are reasonably available to the Participant for this purpose.

6.7.2 The Participant must certify that the financial need cannot be relieved: (i) through reimbursement or compensation by insurance or otherwise; (ii) by reasonable liquidation of the Participant's assets, to the extent such liquidation would not itself cause an immediate and heavy financial need; or (iii) by borrowing from commercial sources on reasonable commercial terms.

6.7.3 An unforeseeable financial emergency is a severe financial hardship to Participant resulting from a sudden and unexpected illness or accident of Participant or of a dependent of Participant (as defined in Section 152(a) of the Code), loss of Participant's property due to casualty, or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of Participant. Neither the need to pay tuition expenses on behalf of the Participant or the Participant's spouse or children nor the desire to purchase a home shall be considered an unforeseeable emergency.

6.7.4 The Plan Administrator, in its sole discretion, shall determine if there is an unforeseeable financial emergency, if the Participant has other resources to satisfy such emergency and the amount of the hardship withdrawal that is required to alleviate the Participant's financial hardship.

6.7.5 Upon receiving a financial hardship withdrawal, the Participant's Deferrals will be discontinued for the remainder of the Plan Year in which a financial hardship withdrawal occurs (unless such discontinuance is prohibited under Code Section 409A). Such Participant will, however, be eligible for any Company Core Credits and Company Matching Credits which may be made to the Plan on his or her behalf.

6.8 Tax Withholding. Distribution and withdrawal payments under this Article VI shall be subject to all applicable withholding requirements for state and federal income taxes and to any other federal, state or local taxes that may be applicable to such payments.

## ARTICLE VII

### BENEFICIARIES

7.1 Designation of Beneficiary. The Participant shall have the right to designate on such form as may be prescribed by the Plan Administrator, one or more Beneficiaries to receive any Benefits due under the Plan which may remain unpaid on the date of the Participant's death. The Participant shall have the right at any time to revoke such designation and to substitute one or more other Beneficiaries in accordance with rules established by the Plan Administrator.

7.2 No Designated Beneficiary. If, upon the death of the Participant, there is no valid Beneficiary designation, the Beneficiary of a married Participant shall be the Participant's surviving spouse. If the Participant is not married and has a registered domestic partner at the time of death, the registered domestic partner of such Participant shall be the Beneficiary. If the Participant has no surviving spouse or registered domestic partner at the time of death, then the Participant's Beneficiary(ies) shall be the Participant's then living children in equal shares, and if there are no surviving children, then the Beneficiary shall be the Participant's estate.

## ARTICLE VIII

### OBLIGATION TO PAY BENEFITS

8.1 Source of Benefit Payments. All benefits payable to a Participant hereunder shall be paid by the Employer.

8.2 Investment Discretion. The Benchmark Funds established pursuant to Section 5.2 shall be for the sole purpose of determining the Earnings Rate to be used for determining the Interest credited to the Participant's Account. Neither the Company nor the Plan Administrator shall have any obligation to invest the Participants' Account in accordance with deemed investment directions or in any other investment.

8.3 No Secured Interest. The Participant (and the Participant's Beneficiary(ies)) shall be a general unsecured creditor of the Employer with respect to the payment of benefits under this Plan.

## ARTICLE IX

### PLAN ADMINISTRATION, AMENDMENT AND TERMINATION

9.1 Committee Powers and Responsibilities. The Plan Administrator shall have complete control of the administration of the Plan herein set forth with all powers necessary to enable it properly to carry out its duties in that respect. Not in limitation, but in amplification of the foregoing, the Plan Administrator shall have the power and authority to:

9.1.1 Construe the Plan and determine all questions that shall arise as to interpretations of the Plan's provisions including determination of which individuals are Eligible Individuals and the determination of the amounts credited to a Participant's Account, and the appropriate timing and method of Benefit payments;

9.1.2 Establish reasonable rules and procedures which shall be applied in a uniform and nondiscriminatory manner with respect to Elections, the establishment of Accounts and Subaccounts, and all other discretionary provisions of the Plan;

9.1.3 Establish the rules and procedures by which the Plan will operate that are consistent with the terms of the Plan documents;

9.1.4 Establish the rules and procedures by which the Plan shall determine and pay lump sum distributions, installment distributions and in-service distributions;

9.1.5 Compile and maintain all records it determines to be necessary, appropriate or convenient in connection with the administration of the Plan;

9.1.6 Adopt amendments to the Plan document which are deemed necessary or desirable to facilitate administration of the Plan and/or to bring these documents into compliance with all applicable laws and regulations, provided that the Plan Administrator shall not have the authority to adopt any Plan amendment that will result in substantially increased costs to the Company unless such amendment is contingent upon ratification by the Board before becoming effective;

9.1.7 Employ such persons or organizations to render service or perform services with respect to the administrative responsibilities of the Plan Administrator under the Plan as the Plan Administrator determines to be necessary and appropriate, including but not limited to attorneys, accountants, and benefit, financial and administrative consultants;

9.1.8 Select, review and retain or change the Benchmark Funds which are used for determining the Earnings Rate under the Plan and specify and revise the manner in which the Earnings Rate is determined and applied to Subaccounts;

9.1.9 Take such other action as the Plan Administrator determines may be necessary, appropriate or helpful to the management and investment of the Plan assets.

9.2 Claims Procedure. Benefits shall be provided from this Plan through procedures initiated by the Claims Committee, and the Participant need not file a claim. However, if a Participant or Beneficiary believes he or she is entitled to a benefit different from the one received, then the Participant or Beneficiary may file a claim for the benefit by writing a letter to the Claims Committee.

9.2.1 If any claim for Benefits under the Plan is wholly or partially denied, the claimant shall be given notice in writing of such denial within 90 days of the date the letter claiming benefits is received by the Claims Committee. If special circumstances require an extension of time, written notice of the extension shall be furnished to the claimant within the initial 90-day period.

9.2.2 Notice of the denial shall set forth the following information: (i) the specific reason or reasons for the denial; (ii) specific reference to pertinent Plan provisions on which denial is based; (iii) a description of any additional material or information necessary for the claimant to perfect the claim and an explanation of why such material or information is necessary; (iv) an explanation that a review by the Claims Committee of the decision denying the claim may be requested by the claimant or his or her authorized representative by filing with the Plan Administrator, within 60 days after such notice has been received, a written request for such review; and (v) if such request is so filed, the claimant or his or her authorized representative may submit issues and comments in writing within the same 60 day period. The claimant shall not be entitled to submit issues orally to the Plan Administrator.

9.2.3 The decision of the Claims Committee upon review shall be made promptly, and not later than 60 days after the Claims Committee receipt of the request for review, unless special circumstances require an extension of time for processing, in which case the claimant shall be so notified and a decision shall be rendered as soon as possible, but not later than 120 days after receipt of the request for review. If the claim is denied, wholly or in part, the claimant shall be promptly given a copy of the decision. The decision shall be in writing and shall include specific reasons for the denial, specific references to the pertinent Plan provisions on which the denial is based and shall be written in a manner calculated to be understood by the claimant. No further legal action may be initiated claiming benefits under this Plan until the claims procedure set forth in this Article IX is completed.

9.2.4 If after review by the Claims Committee, a Participant or Beneficiary still seeks payment under the Plan, then any dispute or claim relating to or arising out of this Plan shall be fully and finally resolved by binding arbitration conducted by the American Arbitration Association in accordance with the terms of any alternate dispute resolution agreement entered into between the Participant and the Employer.

9.3 Decisions of the Plan Administrator or the Claims Committee. Decisions of the Plan Administrator or Claims Committee made in good faith upon any matter within the scope of its authority shall be final, conclusive and binding upon all persons, including Participants and their legal representatives or Beneficiaries. Any discretion granted to the Plan Administrator or Claims Committee shall be exercised in accordance with rules and policies established by the Plan Administrator or Claims Committee as appropriate.

9.4 Plan Amendment. This Plan may be amended by the Company by action of the Board at any time in their sole discretion. Additionally, the Plan may be amended upon an action of the Plan Administrator subject to the provisions in Section 9.1. No such amendment shall reduce or in any manner adversely affect the rights of any Participant with respect to benefits that are payable or may become payable under the Plan based upon the vested balance of the Participant's Accounts as of the effective date of such amendment except to the extent such amendment is required in order for the Plan to comply with applicable law, including but not limited to Code Section 409A. No such amendment to comply with applicable law shall be considered to adversely affect the rights of any Participant. Except as permitted under Code Section 409A, no amendment to the Plan shall result in any acceleration in distribution of a Participant's Account.

9.5 Amendments Upon Changes in Law Affecting Taxation of Participants. This Section 9.5 shall become operative upon the enactment of any change in applicable statutory law or the promulgation by the Internal Revenue Service of a final regulation or other pronouncement having the force of law, which statutory law, as changed, or final regulation or pronouncement, as promulgated, would cause any Participant to include in his or her federal gross income amounts accrued by the Participant under the Plan on a date (an "Early Taxation Event") prior to the date on which such amounts are made available to him or her hereunder.

Notwithstanding any other provision of this Plan to the contrary, as of an Early Taxation Event, the feature or features of this Plan that would cause the Early Taxation Event shall be null and void, to the extent, and only to the extent, necessary to prevent the Participant from being required to include in his or her federal gross income amounts accrued by the Participant under the Plan prior to the date on which such amounts are made available to him or her hereunder. If only a portion of a Participant's Account is impacted by the change in the law, then only such portion shall be subject to this Section 9.5, with the remainder of the Account not so affected being subject to such rights and features as if the law were not changed. If the law only impacts Participants who have a certain status with respect to the Company, then only such Participants shall be subject to this Section 9.5.

Notwithstanding the preceding paragraph, if an Early Taxation Event is earlier than the date on which the statute, regulation or pronouncement giving rise to the Early Taxation Event is enacted or promulgated, as applicable (i.e., if the change in the law is retroactive), there shall be distributed to each Participant, as soon as practicable following such date of enactment or promulgation, the amounts that became taxable on the Early Taxation Event.

9.6 Plan Termination. The Company reserves the right to terminate the Plan in its entirety by an action of the Board at any time upon fifteen (15) days' notice to the Participants. The termination of the Plan shall automatically revoke all outstanding Deferral Elections. If the Plan is terminated, all vested benefits shall be paid in an immediate lump sum unless otherwise determined by the Board. Notwithstanding the preceding sentence, the termination of the Plan shall not result in the acceleration of distribution of benefits, and benefit

distributions shall be made in accordance with Participant's Distribution Elections, if immediate distributions are not permitted under Code Section 409A upon termination of the Plan.

## ARTICLE X

### MISCELLANEOUS

10.1 No Assignment. The right of any Participant, any Beneficiary or any other person to the payment of any benefits under this Plan shall not be assigned, transferred, pledged or encumbered.

10.2 No Secured Interest. The obligation of the Employer to Participants under this Plan shall not be funded or otherwise secured, and shall be paid out of the general assets of the Employer. Participants are general unsecured creditors of the Employer with respect to the obligations hereunder and shall have no legal or equitable interest in the assets of the Employer, including any assets as the Employer may set aside or reserve against its obligations under this Plan. The Plan is intended to be a plan that is not qualified within the meaning of Code Section 401(a) and that is unfunded and is maintained by an employer primarily for the purpose of providing deferred compensation for a select group of management or highly compensated employee within the meaning of ERISA Sections 301(a)(3) and 401(a)(1). The Plan shall be administered and interpreted to the extent possible in a manner consistent with that intent.

10.3 Successors. This Plan shall be binding upon and inure to the benefit of the Employer, its successors and assigns and the Participant and his or her heirs, executors, administrators and legal representatives.

10.4 No Employment Agreement. Nothing contained herein shall be construed as conferring upon any Participant the right to continue in the employ of the Employer as an employee. Nothing contained in the Plan shall be construed as amending the at-will employment status of any Participant.

10.5 Attorneys' Fees. If the Employer, the Participant, any Beneficiary, any beneficiary under an insurance policy purchased pursuant to the Plan, and/or a successor in interest to any of the foregoing, brings legal action to enforce any of the provisions of this Plan, the prevailing party in such legal action shall be reimbursed by the other party, the prevailing party's costs of such legal action including, without limitation, reasonable fees of attorneys, accountants and similar advisors and expert witnesses.

10.6 Notice. Any notice or filing required or permitted to be given to the Plan Administrator under this Plan shall be sufficient if in writing and hand-delivered, or sent by registered or certified mail, to the address below:

Air Products and Chemicals, Inc.  
7201 Hamilton Boulevard, MC A43L4  
Allentown, PA 18195-1501



10.7 Validity. In case any provision of this Plan shall be illegal or invalid for any reason, said illegality or invalidity shall not affect the remaining parts hereof, but this Plan shall be construed and enforced as if such illegal or invalid provision had never been inserted herein.

10.8 Incompetent. If the Plan Administrator determines in its discretion that a benefit under this Plan is to be paid to a minor, a person declared incompetent or to a person incapable of handling the disposition of that person's property, the Plan Administrator may direct payment of such benefit to the guardian, legal representative or person having the care and custody of such minor, incompetent or incapable person. The Plan Administrator may require proof of minority, incompetence, incapacity or guardianship as it may deem appropriate prior to distribution of the benefit. Any payment of a benefit shall be a payment for the account of the Participant and the Participant's Beneficiary, as the case may be, and shall be a complete discharge of any liability under the Plan for such payment amount.

10.9 Governing Law. This Plan shall be construed in accordance with and governed by the laws of the Commonwealth of Pennsylvania. In the event of a material change in Federal or State law applicable to this Plan, the Plan Administrator may in its discretion modify or terminate the Plan, including any prior Elections made by Participants under the Plan.

10.10 Entire Agreement. This Plan constitutes the entire understanding and agreement with respect to the subject matter contained herein, and there are no agreements, understandings, restrictions, representations or warranties among any Participant and the Employer other than those as set forth or provided for herein.

IN WITNESS WHEREOF, this Plan is adopted by the Company to be amended and restated effective as of December \_\_\_\_\_, 2017.

COMPANY:

AIR PRODUCTS AND CHEMICALS, INC.,

By: \_\_\_\_\_

Jennifer L. Grant  
Senior Vice President and Chief Human Resources Officer

EXHIBIT A

BENCHMARK FUNDS

The Benchmark Funds used in determining the Earnings Rate for purposes of Article V shall be the funds and other investment alternatives available for participant investment direction under the Savings Plan. The above notwithstanding, the Benchmark Funds may be changed at any time by the Plan Administrator.

EXHIBIT B

PARTICIPATING EMPLOYERS

The following affiliates of Air Products and Chemicals, Inc. shall be deemed Participating Employers for purposes of this Plan:

Versum Materials, US LLC

**AIR PRODUCTS AND CHEMICALS, INC., AND SUBSIDIARIES**  
**COMPUTATION OF RATIOS OF EARNINGS TO FIXED CHARGES**  
**(Unaudited)**

(Millions of dollars, except ratios)	Three Months Ended		Year Ended 30 September			
	31 December		2017	2016	2015	2014
<b>Earnings:</b>						
Income from continuing operations <sup>(1)</sup>	\$	162.7	\$ 1,155.2	\$ 1,122.0	\$ 965.9	\$ 691.0
Add (deduct):						
Provision for income taxes		291.8	260.9	432.6	300.2	258.1
Fixed charges, excluding capitalized interest		33.7	134.4	129.7	118.3	141.8
Capitalized interest amortized during the period		2.7	8.2	9.7	9.8	8.7
Undistributed earnings of equity investees <sup>(2)</sup>		34.0	(60.1)	(51.1)	(101.8)	(74.9)
Noncontrolling interest in pre-tax income of subsidiaries that have not incurred fixed charges		(.8)	(3.1)	(2.6)	(3.0)	(2.8)
<b>Earnings, as adjusted</b>	<b>\$</b>	<b>524.1</b>	<b>\$ 1,495.5</b>	<b>\$ 1,640.3</b>	<b>\$ 1,289.4</b>	<b>\$ 1,021.9</b>
<b>Fixed Charges:</b>						
Interest on indebtedness, including capital lease obligations	\$	28.8	\$ 114.9	\$ 109.0	\$ 95.3	\$ 121.2
Capitalized interest		2.8	19.0	32.9	49.1	33.0
Amortization of debt discount/premium and expense		1.0	5.7	6.5	8.2	3.9
Portion of rents under operating leases representative of the interest factor		3.9	13.8	14.2	14.8	16.7
<b>Fixed charges<sup>(3)</sup></b>	<b>\$</b>	<b>36.5</b>	<b>\$ 153.4</b>	<b>\$ 162.6</b>	<b>\$ 167.4</b>	<b>\$ 174.8</b>
<b>Ratio of Earnings to Fixed Charges<sup>(4)</sup></b>		<b>14.4</b>	<b>9.7</b>	<b>10.1</b>	<b>7.7</b>	<b>5.8</b>

<sup>(1)</sup> Income from continuing operations reflects the amount presented on our consolidated income statements and is after-tax and inclusive of income attributable to noncontrolling interests and equity affiliates' income. Fiscal year 2017 includes business restructuring and cost reduction actions of \$151.4 (\$109.3 attributable to Air Products, after-tax) and a goodwill and intangible asset impairment charge of \$162.1 (\$154.1 attributable to Air Products, after-tax). Fiscal year 2015 includes business restructuring and cost reduction actions of \$180.1 (\$132.9 after-tax). Fiscal year 2014 includes a goodwill and intangible asset impairment charge of \$310.1 (\$275.1 attributable to Air Products, after-tax).

<sup>(2)</sup> Fiscal year 2018 includes \$32.5 of expense resulting from the U.S. Tax Cuts and Jobs Act. Fiscal year 2017 does not adjust for the impact of an other-than-temporary impairment of our investment in an equity affiliate.

<sup>(3)</sup> We are party to certain debt guarantees of equity affiliates. Since we have not been required to satisfy the guarantees, nor is it probable that we will, interest expense related to the guaranteed debt is not included in fixed charges.

<sup>(4)</sup> The ratio of earnings to fixed charges is determined by dividing earnings, as adjusted, by fixed charges. Fixed charges consist of interest on all indebtedness (continued and discontinued operations) plus that portion of operating lease rentals representative of the interest factor (deemed to be 21% of operating lease rentals).

**PRINCIPAL EXECUTIVE OFFICER'S CERTIFICATION**

I, Seifi Ghasemi, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Air Products and Chemicals, Inc.;
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(s) 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(s) 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: 26 January 2018

/s/ Seifi Ghasemi

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Seifi Ghasemi  
Chairman, President and Chief Executive Officer

**PRINCIPAL FINANCIAL OFFICER'S CERTIFICATION**

I, M. Scott Crocco, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Air Products and Chemicals, Inc.;
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(s) 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(s) 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: 26 January 2018

/s/ M. Scott Crocco

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M. Scott Crocco  
Executive Vice President and Chief Financial Officer

CERTIFICATION 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 Air Products and Chemicals, Inc. (the "Company") on Form 10-Q for the period ending 31 December 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Seifi Ghasemi, Chairman, President, and Chief Executive Officer of the Company, and M. Scott Crocco, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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 results of operations of the Company.

Date: 26 January 2018

/s/ Seifi Ghasemi

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Seifi Ghasemi  
Chairman, President, and Chief Executive Officer

/s/ M. Scott Crocco

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M. Scott Crocco  
Executive Vice President and Chief Financial Officer