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

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**FORM S-8**  
**REGISTRATION STATEMENT**  
*UNDER*  
*THE SECURITIES ACT OF 1933*

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**PQ Group Holdings Inc.**

(Exact Name of Registrant as Specified in Its Charter)

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**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**81-3406833**  
(I.R.S. Employer  
Identification No.)

**300 Lindenwood Drive  
Malvern, Pennsylvania**  
(Address, Including Zip Code, of Principal Executive Offices)

**PQ Corporation Savings Plan (Amended and Restated Effective January 1, 2016)**  
(Full Title of the Plan)

**Belgacem Chariag**  
**President and Chief Executive Officer**  
**PQ Group Holdings Inc.**  
**300 Lindenwood Drive**  
**Malvern, Pennsylvania**  
**(610) 651-4400**

(Name, Address and Telephone Number, Including Area Code, of Agent For Service)

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*with copies to:*

**Craig E. Marcus**  
**Ropes & Gray LLP**  
**Prudential Tower**  
**800 Boylston Street**  
**Boston, Massachusetts**  
**(617) 951-7000**  
**(617) 951-7050**

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, anon-accelerated filer, a 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

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 7(a)(2)(B) of the Securities Act.

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**CALCULATION OF REGISTRATION FEE**

Title of securities to be registered	Amount to be registered <sup>(1)(2)</sup>	Proposed maximum offering price per share <sup>(3)</sup>	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock, \$0.01 par value	2,000,000	\$17.325	\$34,650,000	\$4,200

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers an indeterminable number of additional shares of Common Stock that may become issuable pursuant to terms designed to prevent dilution resulting from stock splits, stock dividends or similar events.
- (2) Pursuant to Rule 416(c) under the Securities Act, this Registration Statement also covers an indeterminate amount of interest to be offered or sold pursuant to the employee benefit plan described herein.
- (3) This calculation is made solely for the purpose of determining the registration fee pursuant to the provisions of Rule 457(c) and (h) under the Securities Act. The fee is calculated on the basis of the average of the high and low sale prices per share of the Common Stock on the New York Stock Exchange as of a date (September 27, 2018) within five business days prior to filing this Registration Statement.

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**PART I**

**INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS**

Information required by Part I to be contained in the Section 10(a) prospectus is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act, and the Note to Part I of Form S-8.

**PART II**

**INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

**Item 3. Incorporation of Documents by Reference**

The following documents filed by the Registrant with the Securities and Exchange Commission (the "Commission") are incorporated herein by reference:

- (1) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2017;
- (2) The Registrant's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018 and June 30, 2018;
- (3) The Registrant's Current Reports on Form 8-K filed February 9, 2018, March 22, 2018, May 8, 2018 and August 9, 2018 (solely with respect to the information contained in Items 5.02 and 9.01 therein); and
- (4) The description of the Registrant's Common Stock, \$0.01 par value per share, contained in the Registrant's Registration Statement on Form 8-A, filed with the Commission pursuant to Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), on September 29, 2017, and any other amendments or reports filed for the purpose of updating such description (File No. 001-38221).

All reports and other documents filed by the Registrant after the date hereof pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be part hereof from the date of filing of such reports and documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

**Item 4. Description of Securities**

Not applicable.

**Item 5. Interest of Named Experts and Counsel**

Not applicable.

**Item 6. Indemnification of Directors and Officers**

Section 145 of the General Corporation Law of the State of Delaware provides as follows:

"A corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against

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expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

A corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper."

As permitted by the Delaware General Corporation Law, the Registrant's certificate of incorporation includes a provision to eliminate the personal liability of its directors for monetary damages for breach of their fiduciary duties as directors, subject to certain exceptions. In addition, the Registrant's bylaws provide that the Registrant is required to indemnify its officers and directors under certain circumstances, including those circumstances in which indemnification would otherwise be discretionary, and the Registrant is required to advance expenses to its officers and directors as incurred in connection with proceedings against such officers and directors for which they may be indemnified.

The Registrant has entered into indemnification agreements with its directors and officers. These agreements provide broader indemnity rights than those provided under the Delaware General Corporation Law and under the Registrant's certificate of incorporation and bylaws. The indemnification agreements are not intended to deny or otherwise limit third-party or derivative suits against the Registrant or its directors or officers, but to the extent a director or officer were entitled to indemnity or contribution under the indemnification agreement, the financial burden of a third-party suit would be borne by the Registrant, and the Registrant would not benefit from derivative recoveries against the director or officer. Such recoveries would accrue to the Registrant's benefit but would be offset by its obligations to the director or officer under the indemnification agreement.

The Registrant maintains directors' and officers' liability insurance for the benefit of its directors and officers.

#### **Item 7. Exemption from Registration Claimed**

Not applicable.

## Item 8. Exhibits

<u>Exhibit Number</u>	<u>Exhibit Description</u>
4.1	Second Restated Certificate of Incorporation of PQ Group Holdings Inc. (previously filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 and incorporated herein by reference)
4.2	Amended and Restated Bylaws of PQ Group Holdings Inc. (previously filed as Exhibit 3.2 to the Registration Statement on FormS-1 (File No. 333-218650) and incorporated herein by reference)
4.3	PQ Corporation Savings Plan (As Amended and Restated Effective January 1, 2016)
4.4	First Amendment to the PQ Corporation Savings Plan (As Amended and Restated Effective January 1, 2016)
4.5	Second Amendment to the PQ Corporation Savings Plan (As Amended and Restated Effective January 1, 2016)
4.6	Third Amendment to the PQ Corporation Savings Plan (As Amended and Restated Effective January 1, 2016)
5.1	Internal Revenue Service determination letter
23.1	Consent of PricewaterhouseCoopers LLP related to the financial statements of PQ Group Holdings Inc. and its subsidiaries as of December 31, 2017 and 2016 and for the three years ended December 31, 2017
23.2	Consent of PricewaterhouseCoopers LLP related to the financial statements of Zeolyst International as of December 31, 2017 and 2016 and for the three years ended December 31, 2017
24.1	Power of Attorney (included on the signature page in Part II)

## Item 9. Undertakings

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of a prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

*provided, however*, that paragraphs (a)(1)(i) and (a)(1)(ii) above shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

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(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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## EXHIBIT INDEX

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## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Malvern, Commonwealth of Pennsylvania, on October 1, 2018.

### PQ Group Holdings Inc.

By: /s/ BELGACEM CHARIAG  
Belgacem Chariag  
Chief Executive Officer, President and Director

## POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Belgacem Chariag, Michael Crews and Joseph S. Koscinski, and each of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and revocation, for him or her and in his or her name, place and stead, in any and all capacities, to execute any or all amendments including any post-effective amendments and supplements to this Registration Statement on Form S-8 of PQ Group Holdings Inc., and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Belgacem Chariag</u> Belgacem Chariag	Chief Executive Officer, President and Director (Principal Executive Officer)	October 1, 2018
<u>/s/ Michael Crews</u> Michael Crews	Executive Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	October 1, 2018
<u>/s/ James F. Gentilcore</u> James F. Gentilcore	Executive Chairman of the Board of Directors	October 1, 2018
<u>/s/ Greg Brenneman</u> Greg Brenneman	Director	October 1, 2018
<u>/s/ Timothy Walsh</u> Timothy Walsh	Director	October 1, 2018
<u>/s/ Mark McFadden</u> Mark McFadden	Director	October 1, 2018
<u>/s/ Robert Toth</u> Robert Toth	Director	October 1, 2018



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<u>/s/ Robert Coxon</u> Robert Coxon	Director	October 1, 2018
<u>/s/ Andrew Currie</u> Andrew Currie	Director	October 1, 2018
<u>/s/ Jonny Ginns</u> Jonny Ginns	Director	October 1, 2018
<u>/s/ Kyle Vann</u> Kyle Vann	Director	October 1, 2018
<u>/s/ Martin S. Craighead</u> Martin S. Craighead	Director	October 1, 2018
<u>/s/ Kimberly Ross</u> Kimberly Ross	Director	October 1, 2018

Pursuant to the requirements of the Securities Act of 1933, the trustees (or other persons who administer the employee benefit plan) have duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Malvern, Commonwealth of Pennsylvania, on October 1, 2018.

**PQ Corporation Savings Plan**

By: PQ Corporation, in its capacity as plan administrator

By: /s/ William J. Sichko, Jr.

Name: William J. Sichko, Jr.

Title: Chief Administrative Officer

**PQ CORPORATION SAVINGS PLAN**

**(Amended and Restated Effective January 1, 2016)**

**PQ CORPORATION SAVINGS PLAN**

**(AMENDED AND RESTATED EFFECTIVE JANUARY 1, 2016)**

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SCHEDULE A  
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SCHEDULE D

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**PQ CORPORATION SAVINGS PLAN**

**(Amended and Restated Effective January 1, 2016)**

**INTRODUCTION**

WHEREAS, PQ Corporation (the "Company") adopted the PQ Corporation Savings Plan (the "Plan"), effective February 1, 1982, for certain of its Employees and the Employees of any Participating Companies;

WHEREAS, the Plan has been amended from time to time, and was most recently amended and restated in its entirety, effective January 1, 2011;

WHEREAS, the Company desires at this time to amend and restate the Plan in conjunction with the filing of an application for determination letter with the Internal Revenue Services to ensure compliance with the requirements of the Employee Retirement Income Security Act of 1974, as amended, and with the Internal Revenue Code of 1986, as amended; and

WHEREAS, the Plan as amended and restated herein is intended to apply only to employees whose employment terminates on or after January 1, 2016, and the rights of employees whose employment terminated before that date continue to be determined under the terms and conditions of the Plan as in effect at the time of such termination, unless expressly provided otherwise herein.

NOW, THEREFORE, effective January 1, 2016 (except as otherwise set forth herein), the Plan is continued, amended, and restated as hereinafter set forth.

**ARTICLE I**  
**DEFINITIONS**

The following words and phrases shall be defined as stated below unless a different meaning is clearly required by the context. Except where otherwise clearly indicated, the masculine shall include the feminine and the singular shall include the plural, and vice-versa. Any term used herein without an initial capital letter that is used in a provision of the Code with which this Plan must comply to meet the requirements of Code Section 401(a) shall be interpreted as having the meaning used in such provision of the Code, if necessary for the Plan to comply with such provision.

“Account” means the entries maintained in the records of the Trustee which represent the Participant’s interest in the Fund. The term “Account” shall refer, as the context indicates, to any or all of the following:

“Employer Matching Account” — the Account to which are credited Matching Contributions allocated to a Participant, adjustments for withdrawals and distributions, and the earnings, losses and expenses attributable thereto.

“Personal Retirement Account” — the Account to which are credited Personal Retirement Contributions allocated to a Participant, adjustments for withdrawals and distributions, and the earnings, losses and expenses attributable thereto.

“Employee Rollover Account” — the Account to which are credited a Participant’s Rollover Contributions, adjustments for withdrawals and distributions, and the earnings, losses and expenses attributable thereto.

“Employee Pre-Tax Basic Account” — the Account to which are credited a Participant’s Pre-Tax Basic Contributions, adjustments for withdrawals and distributions, and the earnings, losses and expenses attributable thereto.

“Employee After-Tax Supplemental Account” — the Account to which are credited a Participant’s After-Tax Supplemental Contributions, adjustments for withdrawals and distributions, and the earnings, losses and expenses attributable thereto.

“Employer Non-Matching Account” — for each Participant who was participating in, and had an account balance under, the Profit Sharing Plan as of September 28, 2007, the Account to which is credited such Participant’s vested account balance under the Profit Sharing Plan as of such date, adjusted thereafter for withdrawals and distributions, and earnings and expenses attributable thereto.



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“Actual Deferral Percentage” means, for any Eligible Employee for a given Plan Year, the ratio of:

(a) the sum of:

(1) such Eligible Employee’s Pre-Tax Basic Contributions for the Plan Year, plus

(2) in the case of any Highly Compensated Eligible Employee, his elective deferrals for the year under any other qualified requirement plan, maintained by the Participating Company or any Affiliated Company; to

(b) the Eligible Employee’s Compensation for the Plan Year.

“Affiliated Company” means, with respect to any Participating Company, (a) any corporation that is a member of a controlled group of corporations, as determined under Code Section 414(b), which includes such Participating Company; (b) any member of an affiliated service group, as determined under Code Section 414(m), of which such Participating Company is a member; (c) any trade or business (whether or not incorporated) that is under common control with such Participating Company, as determined under Code Section 414(c); and (d) any other organization or entity which is required to be aggregated with the Participating Company under Code Section 414(o) and regulations issued thereunder. “50% Affiliated Company” means an Affiliated Company, but determined with “more than 50%” substituted for the phrase “at least 80%” in Code Section 1563(a), when applying Code Sections 414(b) and (c).

“After-Tax Supplemental Contributions” means a Participant’s contributions as provided in Subsection 3.1(b), including Pre-Tax Basic Contributions which have been recharacterized by the Committee pursuant to Article III.

“Age” means, for any individual, his age on his last birthday, except that an individual attains Age 70½ on the corresponding date in the sixth calendar month following the month in which his 70th birthday falls (or the last day of such sixth month if there is no such corresponding date therein) and an individual attains Age 59 ½ on the corresponding date in the sixth calendar month following the month in which his 59th birthday falls (or the last day of such sixth month if there is no such corresponding date therein).

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“Alternate Payee” means any Spouse, former Spouse, child or other dependent of a Participant who is recognized by a domestic relations order (within the meaning of Code Section 414(p)(1)(B)) as having a right to receive all, or a portion of the benefits payable under the Plan with respect to such Participant.

“Average Actual Deferral Percentage” means, for a specified group of Eligible Employees for a Plan Year, the average of the Actual Deferral Percentages for such Eligible Employees for the Plan Year.

“Average Contribution Percentage” means, for a specified group of Eligible Employees for a Plan Year, the average of the Contribution Percentages for such Eligible Employees for the Plan Year.

“Benefit Commencement Date” means, for any Participant or beneficiary, the date as of which the first benefit payment, including a single sum, from the Participant’s Account is due, other than pursuant to a withdrawal under Article VIII.

“Board of Directors” means the board of directors (or other governing body) of the Company.

“Break in Service” means, for any Employee or former Employee, any Plan Year in which he is not credited with more than 500 Hours of Service. Notwithstanding the foregoing, if an Employee is absent from work by reason of pregnancy, childbirth, or placement in connection with adoption, or for purposes of the care of such Employee’s child immediately after birth or placement in connection with adoption, such Employee shall be credited, solely for purposes of this definition, with the Hours of Service with which such Employee would have been credited but for the absence; or, if such hours cannot be determined, with eight (8) Hours of Service per normal workday. The total number of hours to be treated as Hours of Service under this Subsection shall not exceed 501. The hours described in this Subsection shall be credited either for the Plan Year in which the absence from work begins, if the Employee would be prevented from incurring a Break in Service in such Plan Year because the period of absence is treated as Hours of Service under this Subsection, or, in any other case, for the Plan Year next following the one in which the absence from work begins.

“Change of Control” means the first occurrence of any one of the following:

(a) a change in the ownership or control of the Company effected through a transaction or series of transactions (including by way of merger, consolidation, business combination or similar transaction involving the Company or any of its subsidiaries) whereby any “person” or related “group” of “persons” (as such terms are used in Sections 13(d) and 14(d)(2) of the Securities Exchange Act of 1934) (other than the Company, any of its subsidiaries, an employee benefit plan maintained by the Company or any of its subsidiaries, or a “person” that, prior to such transaction, directly or indirectly controls, is controlled by, or is under common control with, the Company) directly or indirectly acquires beneficial ownership (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934), of more than 50% of the total combined voting power of the Company’s outstanding shares of common stock, in either case immediately after such transaction or series of transactions; or

(b) the sale, lease, transfer, conveyance or other disposition (other than by way of a transaction that would not be deemed a Change of Control pursuant to clause (a) above), in one or a series of related transactions, of all or substantially all of the assets of the Company and its subsidiaries taken as a whole, to any “person” (as defined above).

For purposes of this definition, words and phrases found herein shall be defined, interpreted and applied by the Committee in a manner generally consistent with the definitions, interpretations and applications of this same definition, as and when it may be found in other compensation, incentive and benefits arrangements or programs of the Company.

“Code” means the Internal Revenue Code of 1986, as amended, and any regulations issued thereunder.

“Committee” or “Benefit Plans Committee” means the individuals appointed by the Board of Directors or by the Company to supervise the administration of the Plan, as provided in Article X.

“Company” means PQ Corporation, a Pennsylvania corporation, and its successors.

“Compensation” means, for any Eligible Employee, for any applicable period:

(a) For the purposes of calculating an Eligible Employee’s Pre-Tax Basic Contributions, After-Tax Supplemental Contributions, and Matching Contributions under Article III, and subject to the limitations set forth in Subsection (e) of this definition, the sum of: (1) the base pay received by the Eligible Employee from Participating Companies (as determined under Part I of Schedule C) during such period plus, to the extent not otherwise included in such base pay, (2) Pre-Tax Basic Contributions for such period and salary deferrals for such period under the PQ Corporation Selec Reim 125 Plan or any other plan described in Code Section 125.

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(b) For the purpose of calculating an Eligible Employee's Personal Retirement Contributions under Article III, and subject to the limitations set forth in Subsection (e) of this definition, the sum of: (1) the earnings received by the Eligible Employee from a Participating Company (as determined under Part II of Schedule C) with respect to such period plus, to the extent not otherwise included in such earnings, (2) Pre-Tax Basic Contributions for such period and salary deferrals for such period under the PQ Corporation Selec Reim 125 Plan or any other plan described in Code Section 125.

(c) For all other purposes, subject to the limitations set forth in Subsection (e) of this definition, the Employee's wages for such period for Federal tax withholding purposes, as defined in Code Section 3401(a), but determined without regard to any rules that limit the remuneration included in wages based on the nature or location of the employment or the services performed, plus Pre-Tax Basic Contributions and other amounts excluded from gross income under the following Code Sections:

- (1) Section 125 (relating to cafeteria plans),
- (2) Section 132(f)(4) (relating to qualified transportation fringe benefits),
- (3) Section 402(e)(3) (relating to Section 401(k) cash or deferred plans),
- (4) Section 402(h)(1)(B) (relating to simplified employee pensions), or
- (5) Section 403(6) (relating to tax-deferred annuities).

(d) For the purposes of the definitions of "Actual Deferral Percentage" and "Contribution Percentage" in this Article (except as otherwise provided in such definitions), the Committee may elect not to include the amounts in Paragraphs (1) through (5) of Subsection (c) of this definition, and the Committee may elect to consider only compensation as defined above for that portion of the Plan Year during which the Employee was an Eligible Employee, provided that this election is applied uniformly to all Eligible Employees for the Plan Year.

(e) With respect to any Plan Year, only compensation not in excess of the amount to which the \$200,000 limit of Code Section 401(a)(17) has been indexed shall be taken into account for purposes of Paragraphs (a), (b), (c) and (d) of this definition, except that, for Plan Years beginning prior to January 1, 2008, this Paragraph (e) shall not apply for purposes of Sections 3.10 and 13.2(c).

(f) Amounts under Code Section 125 include any amounts not available to a Participant in cash in lieu of health coverage because the Participant is unable to certify that he or she has other health coverage. All amount will be treated as an amount under Code Section 125 only if the Company does not otherwise request or collect information regarding the Participant's other health coverage as part of the enrollment process for the health plan.

(g) Compensation shall also include amounts received as differential pay (as defined in Code Section 3401(h)(2)), if any, paid to individuals in Qualified Military Service.

“Contribution Percentage” means, for any Eligible Employee for a given Plan Year, the ratio of:

(a) the sum of:

(1) such Eligible Employee's After-Tax Supplemental Contributions for the Plan Year (including Pre-Tax Basic Contributions recharacterized as After-Tax Supplemental Contributions under Section 3.9), plus

(2) such Eligible Employee's Matching Contributions for the Plan Year (excluding any Matching Contributions made pursuant to Section 3.9 and taken into account in determining the Eligible Employee's Actual Deferral Percentage for such Plan Year), plus

(3) in the case of any Highly Compensated Eligible Employee, any employee contributions and employer matching contributions, including any elective deferrals recharacterized as employee contributions, under any other qualified retirement plan maintained by the Participating Company or any Affiliated Company, plus

(4) at the election of the Committee, any portion of the Eligible Employee's Pre-Tax Basic Contributions for the Plan Year or elective deferrals under any other qualified retirement plan maintained by a Participating Company or any Affiliated Company that may be disregarded without causing this Plan or such other qualified retirement plan to fail to satisfy the requirements of Code Section 401(k)(3) and the regulations issued thereunder; to

(b) the Eligible Employee's Compensation for the Plan Year.

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“Covered Employee” means any Employee who: (1) is employed by a Participating Company, (2) is not covered by a collective bargaining agreement, unless such agreement specifically provides for participation hereunder, (3) is not classified by a Participating Company as an independent contractor, regardless of whether he is subsequently determined to be an employee for employment tax or any other purposes, (4) is not a foreign national on temporary assignment in the United States with a Participating Company, and (5) is not a nonresident alien who receives no compensation from sources within the United States (within the meaning of Code Section 861(a)(3)) unless the Participating Company specifically designates such an individual as being a Covered Employee. An Employee who is such solely by reason of being a leased employee shall not be a Covered Employee.

“Effective Date” means (except as otherwise set forth herein) January 1, 2016, the effective date of this amended and restated Plan.

“Eligible Employee” means an Employee who has become an Eligible Employee as set forth in Section 2.2 and who is a Covered Employee.

“Employee” means an individual who is a common law employee of a Participating Company or an Affiliated Company. An individual who is not a common law employee of a Participating Company or Affiliated Company shall be deemed to be employed by such Company if he is a leased employee with respect to whose services such Participating Company or Affiliated Company is the recipient within the meaning of Code Section 414(n) or 414(o), but to whom Code Section 414(n)(5) does not apply.

“Employment Commencement Date” means, for any Employee, the date on which he is first entitled to be credited with an “Hour of Service” described in Paragraph (a)(1) of the definition of Hour of Service in this Article.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended.

“Fund” means the fund established for this Plan, administered under the Trust Agreement out of which benefits payable under this Plan shall be paid.

“Highly Compensated Eligible Employee” means, with respect to any Plan Year, an Eligible Employee who is (or is treated as) a Highly Compensated Employee.

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“Highly Compensated Employee” means with respect to any Plan Year, an Employee who:

(a) is a five-percent owner, as defined in Code Section 416(i), either for the Plan Year or the immediately preceding Plan Year; or

(b) (1) received more than \$80,000 (as indexed) in Compensation from a Participating Company or an Affiliated Company in the immediately preceding Plan Year, and

(2) was among the top 20% of Employees of all Participating Companies and Affiliated Companies ranked by Compensation in the immediately preceding Plan Year (excluding Employees described in Code Section 414(q)(5) to the extent: (A) permitted under the Code and regulations thereunder, and (B) elected by the Committee, for purposes of identifying the number of Employees in the top 20%).

“Hour of Service” means, for any Employee, a credit awarded with respect to:

(a) except as provided in (b),

(1) each hour for which he is directly or indirectly paid or entitled to payment by a Participating Company or an Affiliated Company for the performance of employment duties; or

(2) each hour for which he is entitled, either by award or agreement, to back pay from a Participating Company or an Affiliated Company, irrespective of mitigation of damages; or

(3) each hour for which he is directly or indirectly paid or entitled to payment by a Participating Company or an Affiliated Company on account of a period of time during which no duties are performed due to vacation, holiday, illness, incapacity (including disability), jury duty, layoff, leave of absence, or military duty; or

(4) each hour that he would have been expected to work during a period during which he receives Policy Severance Pay (including any extensions thereof), if he had not incurred the Separation from Service that gave rise to such Policy Severance Pay; or

(5) each hour of otherwise regularly scheduled work missed by reason of Total Disability or the first twelve (12) months of any authorized interruption of service because of layoff, leave of absence, sickness or accident as determined by the Committee.

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(b) Anything to the contrary in Subsection (a) notwithstanding:

(1) No Hours of Service shall be credited to an Employee for any period merely because, during such period, payments are made or due him under a plan maintained solely for the purpose of complying with applicable workers' compensation, unemployment compensation, or disability insurance laws.

(2) No more than 501 Hours of Service shall be credited to an Employee under Paragraph (a)(3) of this definition on account of any single continuous period during which no duties are performed by him, except for any period with respect to which he is in receipt of Policy Severance Pay or short term disability benefits (whether insured or paid directly by a Participating Company), and except to the extent otherwise provided in the Plan.

(3) No Hours of Service shall be credited to an Employee with respect to payments solely to reimburse for medical or medically related expenses.

(4) No Hours of Service shall be credited twice.

(5) Hours of Service shall be credited at least as liberally as required by the rules set forth in Department of Labor Regulations Sections 2530.200b-2(b) and (c).

(6) In the case of an Employee who is such solely by reason of service as a leased employee within the meaning of Code Section 414(n) or 414(o), Hours of Service shall be credited as if such Employee were employed and paid with respect to such service (or with respect to any related absences or entitlements) by the Participating Company or Affiliated Company that is the recipient thereof.

“Investment Medium” means any fund, contract, obligation, or other mode of investment to which a Participant may direct the investment of the assets of his Account.

“Limitation Year” means the Plan Year.

“Matching Contributions” means the amounts contributed by the Company pursuant to Section 3.4.

“Non-Highly Compensated Eligible Employee” means, with respect to any Plan Year, an Eligible Employee who does not meet the definition of a Highly Compensated Eligible Employee for such Plan Year.



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“Non-Regular Employee” means: (a) any Employee who is designated by a Participating Company or Affiliated Company as a “project” employee, and (b) any part-time Employee who is regularly scheduled to work fewer than twenty (20) hours per week for all Participating Companies and Affiliated Companies.

“Normal Retirement Age” means, for any Participant, the date on which he attains Age 65.

“Normal Retirement Date” means, for any Participant, the first day of the month coincident with or next following his attainment of Normal Retirement Age.

“One-Year Period of Severance” means a twelve (12) consecutive month period beginning on the date of the Employee’s Severance from Service Date during which the former Employee is credited with no Hours of Service.

“Participant” means an individual for whom one or more Accounts are maintained under the Plan.

“Participating Company” means the Company and each other organization which is authorized by the Board of Directors to adopt this Plan by action of its board of directors or other governing body. The Participating Companies are set forth in Schedule A to this Plan.

“Payroll Period” means a weekly, bi-weekly, semi-monthly, or monthly pay period or such other standard pay period of a Participating Company applicable to the class of Employees of which the Eligible Employee is a member.

“Period of Service” means, with respect to any Employee, the period of time commencing on the Employee’s Employment Commencement Date and ending on the Employee’s Severance from Service Date and, if applicable, the period of time commencing on an Employee’s Reemployment Commencement Date and ending on the date of the Employee’s subsequent Severance from Service Date.

“Period of Severance” means the period of time commencing on the date of an Employee’s Severance from Service Date and ending on the date on which the Employee is again entitled to be credited with an Hour of Service.

“Personal Retirement Contributions” means the amounts contributed by the Company pursuant to Section 3.5.

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“Personal Retirement Participant” means an individual who has become a Personal Retirement Participant as provided in Article II and remained a Covered Employee at all times thereafter.

“Plan” means the PQ Corporation Savings Plan, a profit sharing plan, as set forth herein and as maybe amended from time to time.

“Plan Year” means the twelve (12) consecutive month period that begins on January 1 and ends on the next following December 31.

“Policy Severance Pay” means the severance pay that is paid or payable to a former Employee pursuant to any generally applicable severance pay plan or policy maintained by the Company or an Affiliated Company.

“Pre-Tax Basic Contributions” means, for any Participant, contributions on his behalf as provided in Subsection 3.1(a).

“Profit Sharing Plan” means the PQ Corporation Profit Sharing Plan, as amended from time to time.

“Qualified Domestic Relations Order” means a domestic relations order (within the meaning of Code Section 414(p)(1)(B)) which creates or recognizes the existence of an Alternate Payee’s rights to, or assigns to an Alternate Payee the right to receive all or a portion of the benefits payable with respect to a Participant under the Plan, and is determined by the Committee to satisfy the requirements of Code Section 414(p).

“Qualified Military Service” means any service (either voluntary or involuntary) by an individual in the Uniformed Services if such individual is entitled to reemployment rights with a Participating Company with respect to such service.

“Reemployment Commencement Date” means the first day following a One-Year Period of Severance on which an Employee is entitled to be credited with an Hour of Service described in Paragraph (a)(1) of the definition of “Hour of Service” in this Article.

“Required Beginning Date” means :

(a) For any Participant who is a 5-percent owner (within the meaning of Code Section 416) of a Participating Company, April 1 of the calendar year next following the calendar year in which he attains Age 70 ½; and

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(b) For any Participant who is not a 5-percent owner (within the meaning of Code Section 416) of a Participating Company, April 1 of the calendar year following the later of: (i) the calendar year in which he attains Age 70 1/2, or (ii) the calendar year in which he has a Separation from Service.

“Retirement Plan” means the PQ Corporation Retirement Plan, as amended from time to time.

“Returning Veteran” means a former Employee who, on or after December 12, 1994, returns from Qualified Military Service to employment by a Participating Company within the period of time during which his reemployment rights are protected by law.

“Rollover Contributions” means, for any Participant, his rollover contributions as provided in Section 7.1.

“Separation from Service” means, for any Employee, his death, retirement, resignation, discharge or any absence that causes him to cease to be an Employee.

“Severance from Service Date” means the date, as recorded on the records of a Participating Company or an Affiliated Company, on which an Employee of such company quits, retires, is discharged, or dies, or, if earlier, the first anniversary of the first day of a period during which the Employee remains absent from service with all Participating Companies and Affiliated Companies (with or without pay) for any other reason, except that, solely for purposes of determining whether a One-Year Period of Severance has occurred, if the Employee is absent from work beyond the first anniversary of the first day on which he/she is absent by reason of pregnancy, childbirth, or placement in connection with adoption, or for purposes of the care of such Employee’s child immediately after birth or placement in connection with adoption, such Employee’s Severance from Service Date shall be the second anniversary of the first day of such absence. Notwithstanding anything in this definition to the contrary, a Participant’s Severance from Service Date shall not occur prior to the end of the period during which he receives Policy Severance Pay.

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“Spouse” means the person to whom a Participant is married on any date of reference; provided, however, that such capitalized term shall mean only those relationships that the Committee in its sole judgment determines to be:

(i) with respect to periods prior to October 1, 2013, a valid and authorized marriage that is recognized under State law in the State in which the Participant resides and that is existing between two, and no more, individuals of the opposite sex; and

(ii) with respect to periods on and after October 1, 2013, a valid and authorized marriage that is recognized under the State law in which the ceremony was performed, without regard to the State in which the Participant resides, and that is existing between two, and no more, individuals of either the opposite sex or the same sex.

For these purposes, State law means any domestic or foreign jurisdiction having the legal authority to sanction marriages.

“Target Retirement Fund” or “TRF Fund” means the age-appropriate investment fund(s) established by Vanguard (or other investment provider) for particular target retirement dates in five (5) year intervals. A list naming the Vanguard or other age-appropriate investment fund(s) shall be attached hereto as Schedule D and shall be updated from time to time to reflect changes, if any.

“Total Disability” means:

(a) a disability for which a Participant is qualified to receive benefits under a Participating Company’s long term disability plan, and has been in receipt of such benefits for at least six (6) months, or would be qualified to receive such benefits, but for an agreement with the insurer of the long term disability plan to receive a lump sum benefit in lieu of periodic disability benefits; or

(b) a disability for which he is determined to be eligible for disability benefits under the Federal Social Security Act.

“Trust Agreement” means any agreement and declaration of trust executed under this Plan.

“Trustee” means the corporate trustee or one or more individuals collectively appointed and acting under the Trust Agreement.

“Uniformed Services” means the Armed Forces, the Army National Guard and Air National Guard (when engaged in active duty for training, inactive duty training, or full-time National Guard duty), the commissioned corps of the Public Health Service, and any other category of persons designated by the President of the United States in time of war or emergency.

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“Valuation Date” means each business day.

“Year of Eligibility Service” means, for any Non-Regular Employee, a credit used to determine his eligibility to participate under Section 2.2, and to share in Personal Retirement Contributions under Section 2.7, as further described in Section 2.3.

“Year of Service” means, for any Employee, a credit used to determine his vested status under the Plan, as further described in Sections 6.2 and 6.6.

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**ARTICLE II**  
**TRANSITION AND ELIGIBILITY TO PARTICIPATE**

2.1 Rights Affected. Except as provided to the contrary herein, the provisions of this amended and restated Plan shall apply only to Employees who complete an Hour of Service on or after the Effective Date. The rights of any other individual shall be governed by the Plan as in effect upon his Separation from Service, except to the extent expressly provided in any amendment adopted subsequently thereto.

2.2 Eligibility to Participate – Pre-Tax Basic Contributions.

(a) Each Covered Employee as of the Effective Date who was eligible to participate in the Plan immediately prior to the Effective Date shall be an Eligible Employee as of the Effective Date.

(b) Each Covered Employee who is not a Non-Regular Employee and who was not eligible to participate immediately prior to the Effective Date shall become an Eligible Employee on the first day of the first Payroll Period beginning in the month next following the month in which he first completes one (1) Hour of Service in any capacity other than as a Non-Regular Employee.

(c) Each Covered Employee who is a Non-Regular Employee and who was not eligible to participate immediately prior to the Effective Date shall become an Eligible Employee on the first day of the first Payroll Period beginning in the month next following the month in which he first completes one (1) Year of Eligibility Service.

(d) If an individual described in Subsection (b) or (c) of this Section is not a Covered Employee on the day on which he would become an Eligible Employee as described in that Subsection, he shall become an Eligible Employee as of the first day of the first subsequent Payroll Period on which he is a Covered Employee.

(e) An Eligible Employee who ceases to be a Covered Employee, by Separation from Service or otherwise, and who later becomes a Covered Employee, shall become an Eligible Employee as of the first day of the next Payroll Period after which he first again completes an Hour of Service as a Covered Employee.

2.3 Year of Eligibility Service

(a) Each Employee shall be credited with a Year of Eligibility Service as of the close of the twelve (12) consecutive month period that begins on his Employment Commencement Date if he is credited with 1,000 or more Hours of Service during such period.

(b) Each Employee who is not credited with 1,000 Hours of Service during such period shall be credited with a Year of Eligibility Service as of the close of the first Plan Year in which he is credited with 1,000 or more Hours of Service.

2.4 Election to Make Pre-Tax Basic Contributions. Each Eligible Employee may elect to make Pre-Tax Basic Contributions by filing a notice of such election with the Committee in the form and manner provided for that purpose. Such notice shall authorize the Participating Company to reduce such Eligible Employee's cash remuneration by an amount determined in accordance with Section 3.1 and to make Pre-Tax Basic Contributions on such Eligible Employee's behalf in the amount of such reduction. Such election shall be effective on the first day of the first Payroll Period beginning in the month next following receipt of his election by the Committee.

2.5 Election to Make After-Tax Supplemental Contributions. Each Eligible Employee may elect to make After-Tax Supplemental Contributions by filing a notice of such election with the Committee in the form and manner provided for that purpose, which notice shall authorize the Participating Company to deduct from the Participant's cash remuneration After-Tax Supplemental Contributions in an amount specified in accordance with Subsection 3.1(b). Such election shall be effective on the first day of the first Payroll Period beginning in the month next following receipt of his election by the Committee.

2.6 Participation in Matching Contributions. An Active Participant shall share in Matching Contributions under Section 3.4 for any Plan Year if Pre-Tax Basic Contributions are made on his behalf in such Plan Year.

2.7 Eligibility to Participate – Personal Retirement Contributions.

(a) Each Covered Employee whose Employment Commencement Date is on or after July 1, 2004 shall become a Personal Retirement Participant on:

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(1) in the case of a Covered Employee who is not a Non-Regular Employee, the date on which he first completes an Hour of Service as a Covered Employee in any capacity other than as a Non-Regular Employee; and

(2) in the case of a Covered Employee who is a Non-Regular Employee, the January 1 or July 1 next following the date on which he completes one (1) Year of Eligibility Service.

(b) A Covered Employee whose Employment Commencement Date was prior to July 1, 2004 shall not become a Personal Retirement Participant under any circumstances, except that a Covered Employee whose Employment Commencement Date was prior to July 1, 2004 and who participated in, and was earning benefits under, the Retirement Plan as of December 31, 2006 shall become a Personal Retirement Participant on January 1, 2007.

2.8 Participation in Personal Retirement Contributions. A Personal Retirement Participant shall share in Personal Retirement Contributions under Section 3.5 for any Plan Year during which he is a Covered Employee on the last day of the Plan Year; provided, however, that no Personal Retirement Contributions shall be made on behalf of any Participant for the Plan Year in which occurs the Participant's Employment Commencement Date or Reemployment Commencement Date unless the Participant has also completed at least 1,000 Hours of Service during such Plan Year. Notwithstanding the foregoing, a Personal Retirement Participant shall share in Personal Retirement Contributions under Section 3.5 for any Plan Year in which he receives Compensation if, during such Plan Year, he: (a) retires on or after his Normal Retirement Date, (b) dies, (c) suffers a Total Disability, or (d) has a Separation from Service after attaining Age 55 and completing ten (10) or more years of service with a Participating Company or an Affiliated Company. For the purposes of this Section, a Participant shall be deemed to have met the requirement that he be a Covered Employee on the last day of the Plan Year if, on such date, he is absent on leave that is protected under the Family and Medical Leave Act of 1993 or if he is absent due to Qualified Military Service.

2.9 Data. Each Employee shall furnish to the Committee such data as the Committee may consider necessary for the determination of the Employee's rights and benefits under the Plan and shall otherwise cooperate fully with the Committee in the administration of the Plan.



**ARTICLE III**  
**CONTRIBUTIONS TO THE PLAN**

**3.1 Pre-Tax Basic and After-Tax Supplemental Contributions**

(a) When an Eligible Employee files an election under Section 2.4 to have Pre-Tax Basic Contributions made on his behalf, he shall elect the percentage by which his Compensation for a Payroll Period shall be reduced on account of such Pre-Tax Basic Contributions. Subject to Section 3.8: (A) for Eligible Employees who are not Highly Compensated Employees for the Plan Year, this percentage may be any whole number from one percent (1%) through fifty percent (50%), and (B) for Eligible Employees who are Highly Compensated Employees for the Plan Year, this number may be any whole number from one percent (1%) through fifteen percent (15%). The Participating Company shall contribute an amount equal to such percentage of the Eligible Employee's Compensation to the Fund for credit to the Eligible Employee's Employee Pre-Tax Basic Account. Such contribution shall be made no later than twelve (12) months after the close of the Plan Year (but not later than permitted by Section 3.6).

(b) Subject to Section 3.8, a Participant may also elect that an amount not less than one percent (1%) nor more than ten percent (10%) of his Compensation for a Payroll Period be withheld from his cash remuneration and contributed to the Fund as After-Tax Supplemental Contributions. A Participant's After-Tax Supplemental Contributions shall be credited to his Employee After-Tax Supplemental Account.

(c) Except to the extent permitted under Subsection (d) of this Section and Code Section 414(v), Pre-Tax Basic Contributions made on behalf of an Eligible Employee under this Plan together with elective deferrals under any other plan or arrangement maintained by any Participating Company or Affiliated Company shall not exceed the limit imposed by Code Sections 401(a)(31) and 402(g) for any calendar year. To the extent necessary to satisfy this limitation for any year:

(1) elections under Subsection (a) of this Section shall be prospectively restricted; and,

(2) after application of Paragraph (1), the excess Pre-Tax Basic Contributions and excess elective deferrals under any other plan or arrangement maintained by any Participating Company or Affiliated Company (with earnings thereon calculated through the end of the Plan Year for which the excess Pre-Tax Basic Contributions were made, but

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reduced by any amounts previously distributed or recharacterized as After-Tax Supplemental Contributions under Section 3.9 for the year) shall be paid to the Participant on or before the April 15 first following the calendar year in which such contributions were made. If the Pre-Tax Basic Contributions plus elective deferrals described above do not exceed such limitation, but Pre-Tax Basic Contributions, plus the elective deferrals, as defined in Code Section 402(g)(3), under any other plan for any Participant exceed such limitation for any calendar year, upon the written request of the Participant made on or before the March 1 first following such calendar year, the excess, including any earnings attributable thereto, designated by the Participant to be distributed from the Plan shall be paid to the Participant on or before the April 15 first following such calendar year.

(d) With respect to any Plan Year in which an Employee is eligible to make Pre-Tax Basic Contributions under the Plan and will have attained Age 50 before the close of the Employee's taxable year, he shall be eligible to make catch-up contributions in accordance with, and subject to the limitations of, Code Section 414(v). Such catch-up contributions shall not be taken into account for purposes of the provisions of the Plan implementing the required limitations of Code Sections 402(g) and 415 or calculating Matching Contributions under Section 3.4 of the Plan. The Plan shall not be treated as failing to satisfy the provisions of the Plan implementing the requirements of Code Section 401(k)(3), 401(k)(11), 401(k)(12), 410(b), or 416, as applicable, by reason of the making of such catch-up contributions.

(e) A Participant who receives a distribution from his Account on or after January 1, 2009 on account of the performance of Qualified Military Service for a period of more than thirty (30) days shall not be permitted to make Pre-Tax Basic or After-Tax Supplemental Contributions to the Plan for a period of six (6) months beginning on the date of distribution.

3.2 Change of Percentage Rate. A Participant may without penalty change the percentage of Compensation designated by him as his contribution rate under Subsection (a) and/or Subsection (b) of Section 3.1 to any percentage permitted by such Subsection, and such percentage shall remain in effect until so changed. Any such change shall become effective as of the first day of the first Payroll Period that is administratively practicable following receipt of the change by the Committee.

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3.3 Discontinuance of Pre-Tax Basic and/or After-Tax Supplemental Contributions A Participant may discontinue his Pre-Tax Basic Contributions and/or After-Tax Supplemental Contributions at any time. Such discontinuance shall become effective as of the first day of the first Payroll Period that is administratively practicable following receipt of the discontinuance by the Committee. A Participant who discontinues his Pre-Tax Basic Contributions and/or After-Tax Supplemental Contributions may resume his Pre-Tax Basic Contributions and/or After-Tax Supplemental Contributions, as the case may be, as of the first day of the first Payroll Period that is administratively practicable following receipt by the Committee of the request to resume contributions.

3.4 Matching Contributions.

(a) With respect to each Payroll Period, and subject to Sections 3.8 and 3.10, each Participating Company shall contribute to the Fund, with respect to each Participant who is an Employee of such Participating Company, an amount equal to fifty percent (50%) of the Participant's Pre-Tax Basic Contributions for such Payroll Period, provided, however, that Matching Contributions for each Payroll Period shall not exceed three percent (3%) of the Participant's Compensation for such Payroll Period.

(b) Subject to Sections 3.8 and 3.10, in addition to the Matching Contributions under Subsection (a), each Participating Company shall contribute to the Fund for each Participant who is an Employee of such Participating Company, for each Plan Year beginning on or after January 1, 2003, an amount equal to the excess of:

(1) fifty percent (50%) of the Participant's Pre-Tax Basic Contributions for the Plan Year, not to exceed three percent (3%) of the Participant's Compensation for such Plan Year; over

(2) the Matching Contributions made by the Participating Company for the Plan Year under Subsection (a).

(c) The contributions under this Section for any Plan Year shall not cause the total contributions by the Participating Company to exceed the maximum allowable current deduction under the applicable provisions of the Code. Matching Contributions made with respect to a particular Participant shall be credited to the Employer Matching Account of such Participant.

3.5 Personal Retirement Contributions.

(a) (i) For Plan Years beginning before January 1, 2007, subject to Section 3.10, each Participating Company shall contribute to the Fund for each Plan Year, with respect to each Participant who is an Employee of such Participating Company and who is eligible to participate in Personal Retirement Contributions under Section 2.7, an amount equal to three percent (3%) of his Compensation for that portion of the Plan Year during which he was a Personal Retirement Participant.

(ii) For Plan Years beginning on and after January 1, 2007, and subject to Section 3.10, each Participating Company shall contribute to the Fund for each Plan Year, with respect to each Participant who is an Employee of such Participating Company and who is eligible to participate in Personal Retirement Contributions under Section 2.7, an amount determined in accordance with the following schedule:

Age / Years of Service (as of 12/31/06)	% of Compensation
Under Age 50	4%
Age 50 or more with less than 15 Years of Service	4%
Under Age 50 with 25 or more Years of Service	6%
Age 50 or more with 15 or more Years of Service	6%
Age 50 or more with 15 or more Years of Service <u>and</u> sum of Age and Years of Service totals 75 or more	8%

(b) The contributions under this Section for any Plan Year shall not cause the total contributions by the Participating Company to exceed the maximum allowable current deduction under the applicable provisions of the Code. Personal Retirement Contributions made with respect to a particular Participant shall be credited to the Personal Retirement Account of such Participant.

3.6 Timing and Deductibility of Contributions. Matching Contributions and Personal Retirement Contributions for any Plan Year shall be made 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. All Participating Company contributions are expressly

conditioned upon their deductibility for Federal income tax purposes. Amounts contributed as Pre-Tax Basic Contributions, Rollover Contributions, or After-Tax Supplemental Contributions will be remitted to the Trustee as soon as practicable, but no later than the fifteenth (15th) business day of the month following the month in which such contributions were received or withheld from the Participant's Compensation.

3.7 Fund. The contributions deposited by the Participating Company in the Fund in accordance with this Article shall constitute a fund held for the benefit of Participants and their eligible beneficiaries under and in accordance with this Plan. No part of the principal or income of the Fund shall be used for, or diverted to, purposes other than for the exclusive benefit of such Participants and their eligible beneficiaries (including necessary administrative costs); provided, that in the case of a contribution made by the Participating Company as a mistake of fact, or for which a tax deduction is disallowed, in whole or in part, by the Internal Revenue Service, the Participating Company shall be entitled to a refund of said contributions. Any such refund of contributions described in this Section must be made within one (1) year after payment of a contribution made as a mistake of fact, or within one (1) year after disallowance of the tax deduction, to the extent of such disallowance.

3.8 Limitation on Pre-Tax Basic Contributions, After-Tax Supplemental Contributions and Matching Contributions

(a) The Average Actual Deferral Percentage for all Highly Compensated Eligible Employees for such Plan Year shall not exceed the greater of:

(1) one hundred twenty-five percent (125%) of the Average Actual Deferral Percentage for all Non-Highly Compensated Eligible Employees for such Plan Year; or

(2) the lesser of:

(A) two hundred percent (200%) of the Average Actual Deferral Percentage for all Non-Highly Compensated Eligible Employees for such Plan Year; or

(B) two percentage points (2%) plus the Average Actual Deferral Percentage for all Non-Highly Compensated Eligible Employees for such Plan Year.

(b) The Average Contribution Percentage for such Plan Year for the Highly Compensated Eligible Employees shall not exceed the greater of:

(1) one hundred twenty-five (125%) of the Average Contribution Percentage for all Non-Highly Compensated Eligible Employees for such Plan Year; or

(2) the lesser of:

(A) two hundred percent (200%) of the Average Contribution Percentage for all Non-Highly Compensated Eligible Employees for such Plan Year, or

(B) two percentage points (2%) plus the Average Contribution Percentage for all Non-Highly Compensated Eligible Employees for such Plan Year.

(c) A Participating Company may elect either:

(1) to disregard those Eligible Employees who are not Highly Compensated Eligible Employees and who, on or before the last possible "entry date" of such Plan Year, had either not attained Age 21 or not completed one (1) Year of Eligibility Service; or

(2) to apply such limitations separately with respect to: (A) those Eligible Employees who, on or before the last possible entry date of such Plan Year had both attained Age 21 and completed one (1) Year of Eligibility Service, and (B) all other Eligible Employees; provided, however, that such separate testing shall be permissible only if the group of Eligible Employees described in clause (B) of this subparagraph separately satisfies the requirements of Code Section 410(b). For purposes of this Subsection, "entry date" means the first date on which a Covered Employee may become an Eligible Employee, upon meeting the requirements set forth in Section 2.2.

(d) If the Plan and any other plan(s) maintained by a Participating Company or an Affiliated Company are treated as a single plan for purposes of Code Section 401(a)(4) or 410(b), the limitations in Subsections (a) and (b) of this Section shall be applied by treating the Plan and such other plan(s) as a single plan.

(e) The application of this Section shall satisfy Code Sections 401(k) and 401(m) and regulations thereunder and such other requirements as may be prescribed by the Secretary of the Treasury.

(f) The tests set forth in Subsection (a) of this Section must be satisfied separately with respect to: (1) Eligible Employees who are not covered by a collective bargaining agreement, and (2) Eligible Employees who are covered by a collective bargaining agreement. The tests set forth in Subsection (b) must be satisfied only with respect to Eligible Employees who are not covered by a collective bargaining agreement.

3.9 Prevention of Violation of Limitation on Pre-Tax Basic Contributions, After-Tax Supplemental Contributions and Matching Contributions The Committee shall monitor the level of Participants' Pre-Tax Basic Contributions, After-Tax Supplemental Contributions and Matching Contributions and elective deferrals, employee contributions, and employer matching contributions under any other qualified retirement plan maintained by a Participating Company or any Affiliated Company to insure against exceeding the limits of Section 3.8. To the extent practicable, the Plan Administrator may prospectively limit: (i) some or all of the Highly Compensated Eligible Employees' Pre-Tax Basic Contributions to reduce the Average Actual Deferral Percentage of the Highly Compensated Eligible Employees to the extent necessary to satisfy Subsection 3.8(a), and/or (ii) some or all of the Highly Compensated Eligible Employees' Matching Contributions and After-Tax Supplemental Contributions to reduce the Average Contribution Percentage of the Highly Compensated Eligible Employees to the extent necessary to satisfy Subsection 3.8(b). If the Committee determines after the end of the Plan Year that the limits of Section 3.8 may be or have been exceeded, it shall take the appropriate following action for such Plan Year:

(a) (1) The Pre-Tax Basic Contributions for Highly Compensated Eligible Employees shall be reduced in accordance with Paragraph (2) of this Subsection (a).

(2) (A) Highly Compensated Eligible Employees Pre-Tax Basic Contributions shall be reduced as follows:

(i) The Committee shall calculate the amount by which the Pre-Tax Basic Contributions of each Highly Compensated Eligible Employee would have to be reduced in order to obtain the highest Average Actual Deferral Percentage that would permit one of the tests in Subsection 3.8(a) to be satisfied.

(ii) The amount described in Clause (2)(A)(i) shall be determined in order of Actual Deferral Percentages, beginning with the Highly Compensated Eligible Employee whose Actual Deferral Percentage is the highest.

(B) The aggregate amount determined under Subparagraph (2)(A) shall be allocated among the Highly Compensated Eligible Employees as follows:

(i) The Pre-Tax Basic Contributions for the Highly Compensated Eligible Employee(s) with the highest dollar amount of Pre-Tax Basic Contributions shall be reduced until either: (I) the total reduction(s) equal the required aggregate reduction determined under Subparagraph (2)(A), or (II) the reduced amount of Pre-Tax Basic Contributions for the affected Highly Compensated Eligible Employee(s) equals those of the Highly Compensated Eligible Employee(s) with the next highest dollar amount of Pre-Tax Basic Contributions. If necessary, this process shall be repeated until the aggregate dollar amount of reductions equals the required aggregate reduction determined under Subparagraph (2)(A).

(ii) The amount of Pre-Tax Basic Contributions to be reduced for any Highly Compensated Eligible Employee shall be decreased by any amounts previously distributed to him under Section 3.1 for the year.

(C) Not later than the end of the Plan Year following the close of the Plan Year for which the Pre-Tax Basic Contributions were made, the amount of the required reduction to any Highly Compensated Eligible Employee's Pre-Tax Basic Contributions with earnings attributable thereto (as determined in accordance with applicable Treasury Regulations, through the end of the Plan Year for which the Pre-Tax Basic Contributions were made), at the Committee's direction, shall be:

(i) paid to the Highly Compensated Eligible Employee, with earnings attributable thereto (as determined in accordance with applicable Treasury Regulations); or

(ii) to the extent permitted under governmental regulations, recharacterized as After-Tax Supplemental Contributions (except that such amounts recharacterized with respect to Plan Years ending after October 24, 1988 shall continue to be treated as Pre-Tax Basic Contributions for purposes of Article VIII); provided, however, that for any Participant who is also a participant in any other qualified retirement plan maintained by the Participating Company or any Affiliated Company under which the Participant makes elective deferrals for such year, the Committee shall coordinate corrective actions under this Plan and such other plan for the year.

(b) (1) The Matching Contributions and After-Tax Supplemental Contributions for Highly Compensated Eligible Employees shall be reduced in accordance with Paragraph (2) of this Subsection (b).



(2) (A) Highly Compensated Eligible Employees' Matching Contributions and After-Tax Supplemental Contributions shall be reduced as follows:

(i) The Committee shall calculate the amount by which the combined Matching Contributions and After-Tax Supplemental Contributions for each Highly Compensated Eligible Employee would have to be reduced in order to obtain the highest Average Contribution Percentage that would permit one of the tests in Subsection 3.8(b) to be satisfied.

(ii) The amount described in Clause (2)(A)(i) shall be determined in order of Actual Contribution Percentages, beginning with the Highly Compensated Eligible Employee whose Actual Contribution Percentage is the highest.

(B) The aggregate amount determined under Subparagraph (2)(A) shall be allocated among the Highly Compensated Eligible Employees as follows. The combined Matching Contributions and After-Tax Supplemental Contributions for the Highly Compensated Eligible Employee(s) with the highest dollar amount of combined Matching Contributions and After-Tax Supplemental Contributions shall be reduced until either: (i) the total reduction(s) equal the required aggregate reduction determined under Subparagraph (2)(A), or (ii) the reduced amount of combined Matching Contributions and After-Tax Supplemental Contributions for the affected Highly Compensated Eligible Employee(s) equals those of the Highly Compensated Eligible Employee(s) with the next highest dollar amount of combined Matching Contributions and After-Tax Supplemental Contributions. If necessary, this process shall be repeated until the aggregate dollar amount of reductions equals the required aggregate reduction determined under Subparagraph (2)(A).

(C) Not later than the end of the Plan Year following the close of the Plan Year for which such contributions were made, the amount of the required reduction to any Highly Compensated Eligible Employee's combined Matching Contributions and After-Tax Supplemental Contributions, with earnings attributable thereto (as determined in accordance with applicable Treasury Regulations, through the end of the Plan Year for which the Matching Contributions and After-Tax Supplemental Contributions were made), at the Committee's direction, shall be:

(i) paid to the Highly Compensated Eligible Employee, to the extent attributable to After-Tax Supplemental Contributions; or

(ii) treated as a forfeiture of the Highly Compensated Eligible Employee's Matching Contributions for the Plan Year to the extent such contributions are forfeitable (which forfeiture shall be used to reduce future Matching Contributions), or paid to the Highly Compensated Eligible Employee to the extent such contributions are nonforfeitable; provided, however, that, for any Participant who is also a participant in any other qualified retirement plan maintained by the Participating Company or any Affiliated Company under which the Participant makes employee contributions or is credited with employer matching contributions for the year, the Committee shall coordinate corrective actions under this Plan and such other plan for the year.

(c) If the Plan and any other plan maintained by a Participating Company or an Affiliated Company are treated as a single plan as described in Subsection 3.8(d), the Committee shall coordinate corrective actions under the Plan and such other plan for the year.

3.10 Maximum Allocation. The provisions of this Section shall be construed to comply with Code Section 415.

(a) Notwithstanding anything in this Plan to the contrary, in no event shall the Annual Additions credited to a Participant's Account for a Limitation Year exceed the lesser of \$40,000 (as adjusted in accordance with Code Section 415(d)), or 100% of such Participant's Compensation for the Limitation Year. For this purpose, a Participant's Annual Additions shall equal the sum of:

(1) any Matching Contributions, Pre-Tax Basic Contributions, Personal Retirement Contributions and other employer contributions; any forfeitures, and any After-Tax Supplemental Contributions or employee contributions allocated for any Limitation Year to any Participant (prior to any distribution of such amounts pursuant to Subsection 3.1(c) or Section 3.9) under this and any other defined contribution plan maintained by the Participating Company or any 50% Affiliated Company; and

(2) all amounts allocated to any Participant after March 31, 1984 to an individual medical account (within the meaning of Code Section 415(1)(2)) which is part of a pension or annuity plan maintained by a Participating Company or any 50% Affiliated Company; and

(3) all amounts derived from contributions paid or accrued after December 31, 1985, in taxable years ending after such date which are attributable to post-retirement medical benefits allocated to a separate account of a Participant who is a key employee, as defined in Code Section 419A(d)(3), under a welfare benefit fund maintained by a Participating Company or any 50% Affiliated Company.

The 100% Compensation limitation shall not apply to any contribution for medical benefits (within the meaning of Code Section 401(h) or 419A(f)(2)) after the Participant's Separation from Service which is otherwise treated as an Annual Addition under Code Section 415(1)(1) or 419A(d)(2).

(b) For purposes of this Section 3.10, a Participant's Compensation for a Plan Year shall include amounts paid after a Participant's severance from employment as regular compensation for services during the Participant's regular working hours, compensation for services outside the Participant's regular working hours (such as overtime or shift differential), commissions, bonuses, or other similar payments if, absent a severance from employment, such payments would have been made to the Participant while the Participant continued in employment and if they are made by the end of the Plan Year in which the Participant's severance from employment occurred.

In addition, for purposes of this Section 3.10, a Participant's Compensation for a Plan Year shall exclude:

- (1) amounts earned during such Plan Year but paid during the first few weeks of the following Plan Year;
- (2) amounts paid after the end of a Plan Year in which a Participant's severance from employment occurs for unused accrued bona fide sick, vacation or other leave that the Participant would have been able to use if employment had continued;
- (3) amounts paid after a Participant's severance from employment under a nonqualified unfunded deferred compensation plan that are includible in gross income, without regard to whether such amounts would have been paid to the Participant at the same time if employment had continued; and
- (4) amounts received after a Participant's severance from employment as a result of Total Disability.

(c) In the event the limitations provided for herein are exceeded, correction shall be made in accordance with applicable procedure set forth under the Employee Plans Compliance Resolution System (EPCRS) or such other correction program offered by the Internal Revenue Service.

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**ARTICLE IV**  
**PARTICIPANTS' ACCOUNTS**

4.1 Accounts. All contributions and earnings thereon may be invested in one commingled Fund for the benefit of all Participants. However, in order that the interest of each Participant may be accurately determined and computed, separate Accounts shall be maintained for each Participant and each Participant's Accounts shall be made up of subaccounts reflecting his investment elections pursuant to Section 11.5. These Accounts shall represent the Participant's individual interest in the Fund. All contributions shall be credited to Participants' Accounts as set forth in Article III.

4.2 Valuation. The value of each Investment Medium in the Fund shall be computed by the Trustee as of the close of business on each Valuation Date on the basis of the fair market value of the assets of the Fund.

4.3 Apportionment of Gain or Loss. The value of each Investment Medium in the Fund, as computed pursuant to Section 4.2, shall be compared with the value of such Investment Medium in the Fund as of the preceding Valuation Date. Any difference in the value, not including contributions or distributions made since the preceding Valuation Date, shall be the net increase or decrease of such Investment Medium in the Fund, and such amount shall be ratably apportioned by the Trustee on its books, among the Participants' Accounts which are invested in such Investment Medium at the current Valuation Date.

4.4 Accounting for Allocations. The Committee shall establish or provide for the establishment of accounting procedures for the purpose of making the allocations, valuations and adjustments to Participants' Accounts provided for in this Article. From time to time such procedures may be modified for the purpose of achieving equitable and non-discriminatory allocations among the Accounts of Participants in accordance with the general concepts of the Plan and the provisions of this Article.

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**ARTICLE V**  
**DISTRIBUTION**

5.1 General. The interest of each Participant in the Fund shall be distributed in the manner, in the amount, and at the time provided in this Article, except as provided in Article VIII and except in the event of the termination of the Plan. The provisions of this Article shall be construed in accordance with Code Section 401(a)(9) and regulations thereunder, including the incidental death benefit requirements of Code Section 401(a)(9)(G).

5.2 Separation from Service. A Participant who has a Separation from Service for reasons other than death or Total Disability shall have his nonforfeitable interest in his Account paid to him or applied for his benefit in accordance with the provisions of this Article. An Employee who has performed Qualified Military Service for a period of more than thirty (30) days shall be treated as having a "Separation from Service" and shall be entitled to receive a distribution of his nonforfeitable interest in his Account (excluding his Personal Retirement Account).

5.3 Death. If a Participant dies before his entire nonforfeitable interest in his Account has been paid to him, his remaining nonforfeitable interest shall be paid to, or applied for the benefit of, his beneficiary in accordance with the provisions of this Article.

5.4 Total Disability. If a Participant who is an Employee suffers a Total Disability and has a Separation from Service due to his Total Disability, his Account shall be paid to him or applied for his benefit in accordance with the provisions of this Article following the determination of his Total Disability and his Separation from Service.

5.5 Valuation for Distribution. For the purposes of paying the amounts to be distributed to a Participant or his beneficiaries under the provisions of this Article, the value of the Fund and the amount of the Participant's nonforfeitable interest shall be determined in accordance with the provisions of Article IV as of the Valuation Date immediately preceding the date of any payment under this Article. Notwithstanding the above, the Participant's Account shall be reduced by the amount necessary to repay any outstanding loan from the Plan and interest thereon to the date the Committee declares such loan satisfied, unless such loan is repaid as provided in Subsection 9.4(e).

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5.6 Timing of Distribution. Any Participant who has a Separation from Service for any reason other than death shall be entitled to receive his nonforfeitable interest in his Account, pursuant to the following rules:

(a) The Participant's Benefit Commencement Date shall be the earliest practicable date following the Valuation Date coincident with or next following his Separation from Service under either of the following circumstances:

- (1) If Participant had attained Normal Retirement Age as of his Separation from Service; or
- (2) If the Participant's nonforfeitable interest in his Account (without regard to his Employee Rollover Account) is \$5,000 or less.

(b) If Subsection (a) does not apply, the Participant's Benefit Commencement Date shall be the earliest practicable date following the Valuation Date coincident with or next following his Separation from Service, except that, if the Participant does not consent to such distribution, distribution of his benefits shall commence on any later date elected by the Participant, that is not later than his Normal Retirement Date, at which time his nonforfeitable interest shall be automatically paid to him. A Participant's selection to receive payment prior to his Normal Retirement Date may be made no earlier than ninety (90) days prior to the Benefit Commencement Date elected by the Participant.

The Committee shall inform each Participant who is subject to this Subsection (b) of his right to defer distribution. Such notice shall be furnished not less than thirty (30) days nor more than ninety (90) days prior to the date of any distribution that occurs prior to his Normal Retirement Date, except that such notice may be furnished less than thirty (30) days prior to the date of distribution if: (A) the Committee informs the Participant that the Participant has the right to a period of at least thirty (30) days after receiving such notice to consider the decision whether to elect a distribution and, if applicable, the mode in which he desires such distribution to be made, and (B) the Participant, after receiving such notice, affirmatively elects a distribution.

(c) Notwithstanding the foregoing, the Participant's Benefit Commencement Date shall be no later than the 60th day following the close of the Plan Year in which the Participant attains his Normal Retirement Age or has a Separation from Service, whichever occurs later. In no event, however, shall the Benefit Commencement Date of a Participant who has a Required Beginning Date be later than such date. In the event the Participant defaults on an outstanding loan such that the unpaid balance becomes due and payable pursuant to Article IX and the Participant fails to repay the loan in accordance with Subsection 9.4(e), that portion of the Participant's Account pledged as security for the loan shall be applied to repay the loan and shall be deemed distributed to the Participant within sixty (60) days of the default, in which case, the Participant may defer commencement of the balance of his Account as described above.

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(d) If a Participant dies before his entire nonforfeitable interest in his Account has been paid to him, his remaining nonforfeitable interest shall be distributed to his beneficiary commencing as soon as practicable following the Participant's death.

(e) If a Participant (other than a 5-percent owner within the meaning of Code Section 416) was, prior to January 1, 1997, in receipt of periodic distributions from the Plan which were required under Code Section 401(a)(9) as in effect at such time, such Participant may elect, in a form prescribed by the Committee, that such periodic distributions be discontinued, and that his remaining interest in the Plan be distributed under the terms of the Plan upon his Separation from Service.

5.7 Form of Distribution. Benefits payable under this Plan shall be distributed in a single lump sum payment.

5.8 Beneficiary Designation.

(a) Except as provided in this Section, a Participant may designate the beneficiary or beneficiaries who shall receive, on or after his death, his nonforfeitable interest in the Fund. Such designation shall be made by executing and filing with the Committee a written instrument in such form as may be prescribed by the Committee for that purpose. Except as provided in this Section, the Participant may also revoke or change, at any time and from time to time, any beneficiary designations previously made. Such revocations and/or changes shall be made by executing and filing with the Committee a written instrument in such form as may be prescribed by the Committee for that purpose. If a Participant names a trust as beneficiary, a change in the identity of the trustees or in the instrument governing such trust shall not be deemed a change in beneficiary.

(b) No designation, revocation, or change of beneficiaries shall be valid and effective unless and until filed with the Committee.

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(c) A Participant who does not establish to the satisfaction of the Committee that he has no Spouse may not designate someone other than his Spouse to be his beneficiary unless:

(1) (A) such Spouse (or the Spouse's legal guardian if the Spouse is legally incompetent) executes a written instrument whereby such Spouse consents not to receive such benefit and consents either:

(i) to the specific beneficiary or beneficiaries designated by the Participant; or

(ii) to the Participant's right to designate any beneficiary without further consent by the Spouse;

(B) such instrument acknowledges the effect of the election to which the Spouse's consent is being given; and

(C) such instrument is witnessed by a Plan representative or notary public;

(2) the Participant:

(A) establishes to the satisfaction of the Committee that his Spouse cannot be located; or

(B) furnishes a court order to the Committee establishing that the Participant is legally separated or has been abandoned (within the meaning of local law), unless a qualified domestic relations order pertaining to such Participant provides that the Spouse's consent must be obtained; or

(3) the Spouse has previously given consent in accordance with this Subsection and consented to the Participant's right to designate any beneficiary without further consent by the Spouse.

The consent of a Spouse in accordance with this Subsection (c) shall not be effective with respect to other Spouses of the Participant prior to the Participant's Benefit Commencement Date, and an election to which Paragraph (2) of this Subsection (c) applies shall become void if the circumstances causing the consent of the Spouse not to be required no longer exist prior to the Participant's Benefit Commencement Date.

(d) If a Participant has no beneficiary under Subsection (a) of this Section, if the Participant's beneficiary(ies) predecease the Participant, or if the beneficiary(ies) cannot be located by the Committee, the interest of the deceased Participant shall be paid to the Participant's estate.



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5.9 Rollover of Account to Other Plan

(a) A Participant who is entitled to receive a distribution from the Plan pursuant to this Article or Article VIII, a Participant's Spouse or former Spouse who is entitled to receive a distribution from the Plan pursuant to a qualified domestic relations order, or a Participant's surviving Spouse who is entitled to receive a distribution under Section 5.3, may direct the Committee to have the Trustee transfer all or a portion (not less than \$500) of the amount to be distributed directly to:

- (1) an individual retirement account described in Code Section 408(a),
- (2) an individual retirement annuity described in Code Section 408(b) (other than an endowment contract),
- (3) a qualified trust maintained under a plan described in Code Section 401(a),
- (4) an annuity plan described in Code Section 403(a),
- (5) an annuity contract described in Code Section 403(b),
- (6) an eligible plan under Code Section 457(b) which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and which agrees to separately account for amounts transferred into such plan from this Plan; or
- (7) to the extent such an individual is eligible under Code Section 408A (as determined by the individual and not the Committee), a Roth IRA.

A Participant's nonspouse beneficiary who is entitled to receive a distribution under Section 5.3 shall be permitted to direct the Committee to have the Trustee transfer all or a portion (not less than \$500) of the amount to be distributed directly to an individual retirement account described in Code Section 408(a) or an individual retirement annuity described in Code Section 408(b) to the extent: (i) such individual retirement account or individual retirement annuity is treated as an inherited individual retirement account or individual retirement annuity (within the meaning of Code Section 408(d)(3)(C)); and (ii) Code Section 401(a)(9)(B) (other than clause (iv) thereof) applies to such individual retirement account or annuity.

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(b) The Participant, Spouse, former Spouse, surviving Spouse, or nonspouse beneficiary must specify the name of the plan to which the Participant, Spouse, former Spouse, surviving Spouse, or nonspouse beneficiary wishes to have the amount transferred, plus such other information as may be requested by the Committee, on a form and in a manner prescribed by the Committee.

(c) Subsection (a) shall not apply to the following distributions:

(1) any distribution which is one of a series of substantially equal payments (not less frequently than annually) over either: (1) a period of 10 years or more, or (2) a period equal to the life expectancy of the Participant or the joint life expectancy of the Participant and his beneficiary,

(2) that portion of any distribution after the Participant's Required Beginning Date that is required to be distributed to the Participant by the minimum distribution rules of Code Section 401(a)(9),

(3) to the extent required by the Code and/or applicable Treasury Regulations, and effective only as of the latest date permissible by the Code and/or such Treasury Regulations, any withdrawal of Pre-Tax Basic Contributions pursuant to Section 8.2, or

(4) such other distributions as may be exempted by applicable statute or regulation from the requirements of Code Section 401(a)(31).

(d) A portion of a distribution shall not fail to be eligible for rollover under this Section 5.9 merely because the portion consists of After-Tax Supplemental Contributions, which are not includible in gross income. Such portion may be transferred to any eligible retirement plan listed in subsection (a) of this Section 5.9; provided, however, that such portion may only be transferred to a qualified trust maintained under a plan described under Code Section 401(a) or an annuity contract described in Code Section 403(b) if such trust or annuity contract agrees to separately account for amounts so transferred, including separately accounting for the portion of such distributions which is includible in gross income, and the portion of such distributions which is not so includible.

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5.10 Automatic Rollover. In the event of a distribution under Section 5.6(a)(2) that is greater than \$1,000, if the Participant does not elect to have such distribution paid directly to an eligible retirement plan specified by the Participant in a direct rollover or to receive the distribution directly as a lump sum, then the Committee shall direct that such distribution shall be paid in a direct rollover to an individual retirement plan designated by the Committee. The Participant will be responsible for all fees and expenses associated with such individual retirement plan.

**ARTICLE VI**  
**VESTING**

6.1 Nonforfeitable Amounts.

(a) A Participant shall have a 100% nonforfeitable interest at all times in his Employer Non-Matching, Employee Pre-Tax Basic, Rollover and Employee After-Tax Supplemental Accounts.

(b) (1) A Participant shall have a nonforfeitable interest in his Employer Matching Account determined in accordance with the following schedule:

<u>Years of Service</u>	<u>Nonforfeitable Interest</u>
less than 1 year	0%
After 1 year but less than 2	33-1/3%
After 2 years but less than 3	66-2/3%
After 3 or more years	100%

(2) Notwithstanding the foregoing, a Participant shall have a 100% nonforfeitable interest in his Employer Matching Account if, while an Employee, he attains his Normal Retirement Age, dies, or suffers a Total Disability. A Participant shall also have a 100% nonforfeitable interest in his Employer Matching Account if he dies during a period of Qualified Military Service.

(c) A Participant shall have a 100% nonforfeitable interest in his Personal Retirement Account when he has to his credit three (3) Years of Service (five (5) Years of Service for Plan Years beginning before January 1, 2007). A Participant who has fewer than three (3) Years of Service (or five (5) Years of Service prior to January 1, 2007) to his credit shall have no nonforfeitable interest in his Personal Retirement Account. Notwithstanding the foregoing, a Participant shall have a 100% nonforfeitable interest in his Personal Retirement Account if, while an Employee, he attains his Normal Retirement Age, dies, or suffers a Total Disability. A Participant shall also have a 100% nonforfeitable interest in his Personal Retirement Account if he dies during a period of Qualified Military Service.

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(d) Notwithstanding the foregoing, a Participant shall have a 100% nonforfeitable interest in his Account upon a Change of Control occurring on or after January 1, 2006.

6.2 Years of Service for Vesting in Matching Contributions For the purpose of determining vesting in a Participant's Employer Matching Account, the following rules shall apply:

(a) An Employee shall be credited with Years of Service equal to the number of whole years in all of the Employee's Periods of Service. To determine the number of whole years in all of an Employee's Periods of Service, non-contiguous periods shall be aggregated.

(b) Years of Service shall be calculated on the basis that thirty (30) days equals a completed month or one-twelfth (1/12) of a year and twelve completed months equal one (1) year.

(c) If a former Employee is reemployed by a Participating Company or an Affiliated Company before he incurs a One-Year Period of Severance and if such Employee's Period of Severance commenced with a quit, discharge or retirement, the Employee shall be credited with Years of Service for the Period of Severance.

(d) If an Employee severs from service by reason of a quit, discharge, or retirement during an absence from service for twelve (12) months or less for any reason other than a quit, discharge or retirement, and if he then performs an Hour of Service within twelve (12) months of the date on which he was first absent from service, he shall be credited with Years of Service for his Period of Severance.

(e) Notwithstanding any provision of the Plan to the contrary, an Employee shall not be credited with Years of Service for the same period twice.

6.3 Breaks in Service and Loss of Service (Matching Contributions). An Employee's Years of Service that have been credited pursuant to Section 6.2 shall be cancelled if he incurs a One-Year Period of Severance before his Normal Retirement Date and at a time when: (a) he has no nonforfeitable interest in any of his Accounts (other than his Employee After-Tax Supplemental or Employee Rollover Accounts), or (b) he has no Accounts under the Plan.

6.4 Restoration of Service (Matching Contributions). An Employee's Years of Service that have been credited pursuant to Section 6.2 and cancelled pursuant to Section 6.3 shall be restored to his credit if he thereafter completes an Hour of Service at a time when the number of his consecutive One-Year Periods of Severance is less than the greater of: (a) the number of Years of Service to his credit (determined under Section 6.2) when the first such One-Year Period of Severance occurred, or (b) five (5).

6.5 Forfeitures and Restoration of Forfeited Amounts upon Reemployment (Matching Contributions).

(a) If a Participant who has had a Separation from Service does not thereafter complete an Hour of Service before the end of the Plan Year in which occurs the earlier of:

(1) the date on which he receives or is deemed to receive a distribution of his entire nonforfeitable interest in his Account, which is less than 100%; or

(2) the date on which he incurs his fifth consecutive One-Year Period of Severance,

his Employer Matching Account shall be closed, and the forfeitable amount held therein shall be forfeited. For purposes of this Subsection (a), a Participant who has a Separation from Service at a time when his nonforfeitable interest in the Plan is zero shall be deemed to have received a distribution described in Paragraph (1) of this Subsection on the date of such Separation from Service.

(b) Amounts forfeited from a Participant's Employer Matching Account under Subsection (a) of this Section shall be used to reduce future Matching Contributions and/or Personal Retirement Contributions, as shall be determined from time to time by the Committee.

(c) If a Participant who has received (or is deemed to have received) a distribution described in Paragraph (a)(1) of this Section, whereby any part of his Employer Matching Account has been forfeited, again becomes a Covered Employee prior to incurring five (5) consecutive One-Year Periods of Severance, the amount so forfeited shall be restored to his new Employer Matching Account, if, and only he repays the full amount of such distribution (if any) prior to the earlier of: (1) the fifth anniversary of the date on which he subsequently becomes a Covered Employee, or (2) the first date the Participant incurs five (5) consecutive One-Year Periods of Severance following the date of the distribution; provided, however, that a Participant described in the preceding sentence who is deemed to receive a distribution of his entire nonforfeitable interest shall be deemed to repay such distribution on the date he again becomes a Covered Employee. Amounts restored under this Subsection shall be charged against the following amounts in the following order of priority: (A) forfeitures for the Plan Year, and (B) income or gains to the Plan. If the foregoing amounts are insufficient, the Participating Company by whom such Participant is reemployed shall make any additional contribution necessary to accomplish the restoration.

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(d) If a Participant has received a distribution under the Plan, other than a distribution of his entire nonforfeitable interest in his Account upon his Separation from Service, at a time when he has less than a 100% nonforfeitable interest in his entire Account and prior to the date on which he incurs his fifth consecutive One-Year Period of Severance, his nonforfeitable interest in his Employer Matching Account at all times prior to the date on which he incurs his fifth consecutive One-Year Period of Severance, shall be the difference between:

(1) the amount his nonforfeitable interest would have been if he had not received the distribution; and

(2) the amount to which the distribution would have increased or decreased if it had remained in the Fund. Immediately after the Participant has five (5) consecutive One-Year Periods of Severance, his nonforfeitable interest determined under this Subsection, if in excess of zero, shall be established as a separate account, and he shall at all times have a nonforfeitable interest therein. If the Participant is later reemployed as a Covered Employee, any allocations to him shall be credited to a new Employer Matching Account, and his nonforfeitable interest therein shall be determined under Section 6.1.

(e) If a Participant has had five (5) consecutive One-Year Periods of Severance and again becomes a Covered Employee, the amount forfeited under Subsection (a) of this Section shall not be restored to his new Employer Matching Account under any circumstances.

6.6 Years of Service for Vesting in Personal Retirement Contributions For the purpose of determining vesting in a Participant's Personal Retirement Account, an Employee shall be credited with a Year of Service for each Plan Year, including Plan Years ending before the Effective Date, for which he is credited with 1,000 or more Hours of Service.

6.7 Breaks in Service and Loss of Service (Personal Retirement Contributions). An Employee's Years of Service that have been credited pursuant to Section 6.6 shall be cancelled if he incurs a Break in Service before his Normal Retirement Date and at a time when: (a) he has no nonforfeitable interest in any of his Accounts (other than his Employee After-Tax Supplemental or Employee Rollover Accounts), or (b) he has no Accounts under the Plan.

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6.8 Restoration of Service (Personal Retirement Contributions). An Employee's Years of Service that have been credited pursuant to Section 6.6 and cancelled pursuant to Section 6.7 shall be restored to his credit if he thereafter completes an Hour of Service at a time when the number of his consecutive Breaks in Service is less than the greater of: (a) the number of Years of Service to his credit (determined under Section 6.6) when the first such Break in Service occurred, or (b) five (5).

6.9 Forfeitures and Restoration of Forfeited Amounts upon Reemployment (Personal Retirement Contributions).

(a) If a Participant who has had a Separation from Service does not thereafter complete an Hour of Service before the end of the Plan Year in which occurs the earlier of:

(1) the date on which he receives or is deemed to receive a distribution of his entire nonforfeitable interest in his Account, which is less than 100%; or

(2) the date on which he incurs his fifth consecutive Break in Service,

his Personal Retirement Account shall be closed, and the forfeitable amount held therein shall be forfeited. For purposes of this Subsection (a), a Participant who has a Separation from Service at a time when his nonforfeitable interest in the Plan is zero shall be deemed to have received a distribution described in Paragraph (1) of this Subsection on the date of such Separation from Service.

(b) Amounts forfeited from a Participant's Personal Retirement Account under Subsection (a) of this Section shall be used to reduce future Personal Retirement Contributions and/or Matching Contributions, as shall be determined from time to time by the Committee.



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(c) If a Participant who has received (or is deemed to have received) a distribution described in Paragraph (a)(1) of this Section, whereby any part of his Personal Retirement Account has been forfeited, again becomes a Covered Employee prior to incurring five (5) consecutive Breaks in Service, the amount so forfeited shall be automatically restored to his new Personal Retirement Account. Amounts restored under this Subsection shall be charged against the following amounts in the following order of priority: (1) forfeitures for the Plan Year, and (2) income or gains to the Plan if the foregoing amounts are insufficient, the Participating Company by whom such Participant is reemployed shall make any additional contribution necessary to accomplish the restoration.

(d) If a Participant has had five (5) consecutive Breaks in Service and again becomes a Covered Employee, the amount forfeited under Subsection (a) of this Section shall not be restored to his new Personal Retirement Account under any circumstances.

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**ARTICLE VII**  
**ROLLOVER CONTRIBUTIONS**

7.1 Rollover Contributions. Subject to the restrictions set forth in Subsection (e), the Plan will accept Rollover Contributions from the following types of plans:

- (a) a qualified plan described in Code Section 401(a) and 403(a), including, for direct rollovers, after-tax employee contributions;
- (b) an annuity contract described in Code Section 403(b), excluding after-tax employee contributions;
- (c) an eligible plan under Code Section 457(b) that is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state;
- (d) an individual retirement account or annuity described in Code Section 408(a) or 408(b) that is eligible to be rolled over and would otherwise be includible in gross income.

(e) The Trustee shall not accept a Rollover Contribution unless the following conditions are met:

(1) (A) the distribution being transferred must come directly from the fiduciary of the retirement plan or individual retirement account;

or

(B) it must come from the Employee within sixty (60) days after the Employee receives a distribution from such other qualified retirement plan or individual retirement account (unless otherwise waived pursuant to Code Section 402(c)(3)) and must comply with the provisions of Code Section 402(c), 403(a)(4), or 408(d)(3), whichever applies;

(2) distributions from a plan for a self-employed person shall not be transferred to this Plan, unless the transfer is directly to the Fund from the funding agent of the distributing plan; and

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(3) the interest being transferred shall not include assets from any plan to the extent that the Committee determines that the transfer of such interest: (A) would impose upon this Plan requirements as to form of distribution that would not otherwise apply hereunder, (B) would otherwise result in the elimination of Code Section 411(d)(6) protected benefits, or (C) would cause the Plan to be a direct or indirect transferee of a plan to which the joint and survivor annuity requirements of Code Sections 401(a)(11) and 417 apply.

7.2 Vesting and Distribution of Employee Rollover Account

(a) The distributions transferred by or for a Participant from another qualified retirement plan or from an individual retirement account shall be credited to the Employee's Employee Rollover Account in accordance with Subsection (b). An Employee shall be fully vested at all times in his Employee Rollover Account.

(b) An Employee's Employee Rollover Account shall be distributed as otherwise provided under the Plan.

**ARTICLE VIII**  
**WITHDRAWALS**

8.1 Withdrawals from Employee After-Tax Supplemental Accounts A Participant may withdraw, not more than twice during any Plan Year, up to the total value of the amount in his Employee After-Tax Supplemental Account.

8.2 Hardship Withdrawals.

(a) In addition to the withdrawals permitted under Section 8.1, a Participant may withdraw, under the rules set forth in Subsections (b) through (d) of this Section, the following amounts in the following order until each Account is exhausted; provided, however, that until a Participant's entire Employer Non-Matching Account has been withdrawn, no additional amount shall be withdrawn under this Section:

- (1) his Employer Non-Matching Account;
- (2) his Employee Rollover Account;
- (3) his Employee Pre-Tax Basic Account as of December 31, 1988; plus
- (4) the sum of his Pre-Tax Basic Contributions made after December 31, 1988; plus

(5) his After-Tax Supplemental Contributions that are attributable to Pre-Tax Basic Contributions recharacterized in accordance with Subsection 3.9(a), less amounts previously withdrawn therefrom, by submitting his written request to the Committee.

Amounts withdrawn under this Section 8.2 at any one time shall not be less than \$500 (excluding withdrawals from a Participant's Employer Non-Matching Account).

(b) A withdrawal under Subsection (a) of this Section shall be permitted only if the Participant represents that the withdrawal is necessary for one or more of the following purposes:

- (1) purchase of a primary home (excluding mortgage payments);
- (2) tuition and related educational fees for the next twelve (12) months for post-secondary education for a Participant or his Spouse, child or dependent;

(3) medical expenses described in Code Section 213(d) incurred or anticipated to be incurred by a Participant or his Spouse, child or dependent;

(4) funeral expenses, limited to a Participant's mother, father, Spouse, child or dependent;

(5) preservation of a Participant's primary home which is damaged or impaired (including the repair or replacement of the roof, windows or heating/air conditioning system), limited to once every five (5) years determined from the date of disbursement;

(6) replacement of income in the event of a loss of twenty-five percent (25%) or more of a Participant's regular (base) monthly family income, up to the equivalent of one year's lost income per cause, if such loss poses a financial hardship. For the purpose of determining the amount of such a loss, regular (base) monthly family income shall be deemed to include any short-term or long-term disability benefits, worker's compensation, Federal Social Security benefits, or any similar types of benefits currently being received by a family member; or

(7) payment to prevent eviction from, or foreclosure on the mortgage of, the Participant's primary residence.

(c) A withdrawal under this Section 8.2 shall be necessary if the amount of the withdrawal does not exceed the amount of the Participant's immediate and heavy financial need that cannot be satisfied from other resources reasonably available to the Participant. The amount of an immediate and heavy financial need shall include any amounts necessary to pay any Federal, state or local income taxes or penalties reasonably anticipated to result from the withdrawal. The determination as to whether a withdrawal is necessary shall be made on the basis of all relevant facts and circumstances, in accordance with applicable governmental regulations. The withdrawal shall generally be considered necessary if the Committee can reasonably rely on the Participant's representation (made in writing or such other form as may be prescribed by the Commissioner) that the financial need cannot be relieved:

(1) through reimbursement or compensation by insurance or otherwise;

(2) by reasonable liquidation of the Participant's assets (including those assets of his Spouse and minor children that are available to the Participant), to the extent such liquidation would not itself cause an immediate and heavy financial need;

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(3) by cessation of Pre-Tax Basic Contributions or After-Tax Supplemental Contributions; or

(4) by:

(A) other withdrawals under this Article or under any other employee benefit plan in which the Participant has an interest;

(B) nontaxable loans under Article IX or under any other employee benefit plan in which the Participant has an interest; or

(C) loans from commercial sources on reasonable commercial terms;

(D) except that, this Subsection (4) shall not apply to withdrawals under Section 8.2: (i) for the purchase of a primary residence, or (ii) solely from a Participant's Employer Non-Matching Account.

(d) A Participant's Pre-Tax Basic Contributions to the Plan will be suspended for a period of six (6) months following a withdrawal by the Participant under Section 8.2 due to the purposes stated in Subsections 8.2(b)(6) or (7), except that such a suspension shall not apply to the extent that such withdrawal is made from the Participant's Employer Non-Matching Account.

8.3 Withdrawals On and After Attainment of Age 59½. Upon his attainment of Age 59½, a Participant may withdraw, not more than once during any Plan Year, up to the total value in his Employee Rollover Account and his Employee Pre-Tax Basic Account, less amounts previously withdrawn therefrom, by submitting his written request to the Committee.

8.4 Amount and Payment of Withdrawals. The amount of any withdrawal will be determined on the basis of the value of the Participant's Account and the sum of his Pre-Tax Basic Contributions valued as of the Valuation Date coincident with or immediately preceding the date of the withdrawal. Any withdrawal requested under this Section shall be paid as soon as practicable following the Committee's determination that the requested withdrawal complies with the terms and conditions set forth in this Section.

8.5 Withdrawals Not Subject to Replacement. A Participant may not replace any portion of his Accounts withdrawn under this Plan.

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8.6 Pledged Amounts. No amount that has been pledged as security for a loan under Article IX may be withdrawn under this Article.

8.7 Investment Medium to be Charged with Withdrawal. A Participant may specify to which Investment Medium or Investment Media a withdrawal under this Article is to be charged. Unless so specified, distribution will be made out of the Participant's interest in the various Investment Media in proportion to the Participant's share in such Investment Media.

**ARTICLE IX**  
**LOANS TO PARTICIPANTS**

9.1 Loan Application. Each Participant who is an Employee of a Participating Company and any other Participant or beneficiary who is a party in interest as defined in ERISA may apply for a loan from the Plan. Notwithstanding the foregoing, no loan shall be made from a Participant's Personal Retirement Account or Employer Non-Matching Account. All loan applications shall be made to the Committee on forms which it prescribes, and the Committee shall rule upon such applications in a uniform and nondiscriminatory manner in accordance with the rules and guidelines established in this Article.

9.2 Loan Approval.

(a) No Participant shall be permitted to have more than two (2) loans outstanding at any time from this Plan, exclusive of any loans made for the purchase of a primary residence for the Participant.

(b) The Committee shall have the right to reject a loan application if the Participant has the present intention to take a personal leave of absence during the period of loan repayment or on the basis of a Participant's credit worthiness and financial need or such other factors as would be considered in a normal commercial setting by an entity in the business of making loans and as the Committee determines necessary to safeguard the Fund.

(c) The Committee shall not approve a loan to a Participant who is a party to a domestic relations order until the Committee has determined that either: (a) such order is a qualified domestic relations order as defined in Code Section 414(p) and has segregated or distributed, as the case may be, the Alternate Payee's portion of the Account, or (b) such order is not a qualified domestic relations order, and has so notified the Participant and Alternate Payee.

9.3 Amount of Loan.

(a) The minimum amount of any loan shall be \$1,000.

(b) The amount of any loan, when added to the amount of a Participant's outstanding loans under the Plan and all other plans qualified under Code Section 401(a) which are sponsored by the Participating Company or any Affiliated Company shall not exceed the lesser of:



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(1) \$50,000, reduced by the excess (if any) of:

(A) the Participant's highest outstanding balance of loans during the one-year period ending on the day before the date on which such loan is made to the Participant, over

(B) the outstanding balance of loans made to the Participant on the date such loan is made to the Participant; or

(2) fifty percent (50%) of the value of the Participant's nonforfeitable Account (excluding the Personal Retirement Account).

9.4 Terms of Loan.

(a) The interest rate on loans shall be: (1) determined by the Committee, (2) at least commensurate with rates charged for similar loans by entities in the business of making loans, and (3) adjusted from time to time as circumstances warrant. Each loan granted pursuant to this Article shall be secured by no more than fifty percent (50%) of the Participant's vested Account, determined as of the date the loan is made. In its sole discretion, the Committee may require such additional security as it deems necessary.

(b) Each loan shall be evidenced by the Participant's execution of a personal demand note on such form as shall be supplied by the Committee. Each such note shall specify that, to the extent repayment is not demanded sooner, repayment shall be included in installments over twelve (12), twenty-four (24), thirty-six (36), forty-eight (48), or sixty (60) months from the date on which the loan is distributed; however, if the purpose of the loan is to acquire any dwelling unit which is to be used within a reasonable period of time as the principal residence of the Participant, the period of repayment may be as long as, but shall not exceed, one hundred eighty (180) months. All loans from the Plan shall be non-renewable. Each note shall also specify the interest rate as determined by the Committee at the time the loan is approved.

(c) All loans shall be repaid in approximately equal installments (not less frequently than quarterly) through payroll deductions or in such other manner as the Committee may determine. A Participant may repay the outstanding balance of any loan in one lump sum at any time by notifying the Committee of his intent to do so and by forwarding to the Committee payment in full of the then outstanding balance, plus interest accrued to the date of payment. The amount of principal and interest repaid by a Participant shall be credited to a Participant's Account as each repayment is made.

(d) Notwithstanding the above, in the event a Participant who has an outstanding loan takes a personal leave of absence for a period of not more than one year either without pay from a Participating Company or at a rate of pay (after income and employment tax withholding) that is less than the amount of the installment payments required under the terms of the loan, the Committee shall waive payment on the loan during such leave of absence. In such case: (1) if the loan is for a period of less than sixty (60) months, the period of repayments shall be extended for the period necessary to permit repayment, or (2) otherwise, the loan shall be reamortized over its remaining term; provided, however, that the period of repayment for any loan shall not exceed a total of sixty (60) months and payments shall include interest that accrued during the leave of absence.

(e) If, and only if:

- (1) the Participant dies;
- (2) the Participant (other than a Participant who continues to be a party in interest) has a Separation from Service;
- (3) the Compensation of a Participant who is an Employee of a Participating Company is discontinued or decreased below the amount necessary to amortize the loan and such status continues for more than one year;
- (4) the loan is not repaid by the time the note matures including any extensions pursuant to Subsection (d);
- (5) the Participant attempts to revoke any payroll deduction authorization for repayment of the loan without the consent of the Committee;
- (6) the Participant fails to pay any installment of the loan when due; or
- (7) any other event occurs which the Committee, in its sole discretion, believes may jeopardize the repayment of the loan;

before a loan is repaid in full, the unpaid balance thereof, with interest due thereon, shall become immediately due and payable. The Participant (or his beneficiary, in the event of the Participant's death) may satisfy the loan by paying the outstanding balance of the loan, or, in the case of a default under Paragraph (e)(6), by paying the installment, by the end of the calendar quarter next following the calendar quarter in which the default occurred. If the loan and interest are not repaid within the time specified, the Committee shall satisfy the indebtedness from the amount of the Participant's vested interest in his Account as provided in Section 9.5 before making any payments otherwise due hereunder to the Participant or his beneficiary.

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9.5 Enforcement. The Committee shall give written notice to the Participant (or his beneficiary in the event of the Participant's death) of an event of default described in Subsection 9.4(e). If the loan and interest are not paid within the time period specified in the notice, the amount of the Participant's vested interest in his Account, excluding his Employee Pre-Tax Basic Account and amounts in the Participant's Employee After-Tax Supplemental Account that are attributable to Pre-Tax Basic Contributions recharacterized as After-Tax Supplemental Contributions in accordance with Section 3.9 and Matching Contributions allocated fewer than twenty-four (24) months prior to the date of reduction to his Account if he has not been a Participant for a period of at least sixty (60) months and has not had a Separation from Service, to the extent such Account is security for the loan, shall be reduced by the amount of the unpaid balance of the loan, with interest due thereon, and the Participant's indebtedness shall thereupon be discharged to the extent of the reduction.

In addition, if the value of the Participant's total vested interest in his Account (exclusive of his Employee Pre-Tax Basic Account and Matching Contributions allocated within twenty-four (24) months prior to the date of reduction if he has not been a Participant for a period of at least sixty (60) months and has not had a Separation from Service) pledged as security for the loan is insufficient to discharge fully the Participant's indebtedness, the Participant's Employee Pre-Tax Basic Account and amounts in the Participant's Employee After-Tax Supplemental Account that are attributable to Pre-Tax Basic Contributions recharacterized as After-Tax Supplemental Contributions in accordance with Subsection 3.9(a) shall be used to reduce the Participant's indebtedness at such time as the Participant is entitled to a distribution under Article V or a withdrawal under Article VIII from his Employee Pre-Tax Basic Account, and any remaining amounts in his Employer Matching Account shall be used to reduce the Participant's indebtedness at such time as the Participant has a Separation from Service, the Participant completes sixty (60) months of participation, or such amounts have been allocated to the Participant for more than twenty-four (24) months.

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Such action shall not operate as a waiver of the rights of the Company, the Committee, the Trustee, or the Plan under applicable law. The Committee also shall be entitled to take any and all other actions necessary and appropriate to foreclose upon any property other than the Participant's Account pledged as security for the loan or to otherwise enforce collection of the outstanding balance of the loan.

9.6 Additional Rules. The Committee may establish additional rules relating to Participant loans under the Plan, which rules shall be applied on a uniform and nondiscriminatory basis. Such rules may include the implementation of telephonic or other electronic procedures by which a Participant may apply for a loan, enter into a loan agreement, execute a personal demand note, or receive related disclosures, as described in this Article. If taken in accordance with such established procedures, such actions shall be deemed to be taken in a form prescribed by the Committee.

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**ARTICLE X**  
**ADMINISTRATION**

10.1 Committee. If the Company designates one or more individuals as the Committee, the powers and duties of the Committee under the Plan shall be exercised by the Committee; otherwise all such powers and duties shall be exercised by the Company. The Benefit Plans Committee shall be the named fiduciary which shall control and manage the operation of the Plan and shall administer the Plan. The Committee members may, but need not, be Employees, and they shall serve at the pleasure of the Company. They shall be entitled to reimbursement of expenses, but those members of the Committee who are also Employees of a Participating Company shall receive no compensation for their service on the Committee. Any reimbursement of expenses of the Committee members shall be paid directly by the Company. The Committee shall be responsible for the general administration of the Plan under the policy guidance of the Company.

10.2 Duties and Powers of Committee. In addition to the duties and powers described elsewhere hereunder, the Committee shall have the following specific duties and powers:

(a) to retain such consultants, accountants and attorneys as may be deemed necessary or desirable to render statements, reports, and advice with respect to the Plan and to assist the Committee in complying with all applicable rules and regulations affecting the Plan; any consultants, accountants and attorneys may be the same as those retained by the Company;

(b) to decide appeals under this Article;

(c) to enact uniform and nondiscriminatory rules and regulations to carry out the provisions of the Plan;

(d) to resolve questions or disputes relating to eligibility for benefits or the amount of benefits under the Plan;

(e) to construe and interpret and supply omissions with respect to the provisions of the Plan;

(f) to determine whether any domestic relations order received by the Plan is a qualified domestic relations order as provided in Code Section 414(p);

(g) to evaluate administrative procedures; and

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(h) to delegate such duties and powers as the Committee shall determine from time to time to any person or persons. To the extent of any such delegation, the delegate shall have the duties, powers, authority and discretion of the Committee. Any decisions and determinations made by the Committee pursuant to its duties and powers described in the Plan shall be conclusive and binding upon all parties. The Committee shall have sole discretion in carrying out its responsibilities. The expenses incurred by the Committee in connection with the operation of the Plan, including, but not limited to, the expenses incurred by reason of the engagement of professional assistants and consultants, shall be expenses of the Plan and shall be payable from the Fund at the direction of the Committee. The Participating Companies shall have the option, but not the obligation, to pay any such expenses, in whole or in part, and, by so doing, to relieve the Fund from the obligation of bearing such expenses. Payment of any such expenses by a Participating Company on one occasion shall not bind that Participating Company to pay any similar expenses on any subsequent occasion.

10.3 Functioning of Committee. The Committee and those persons or entities to whom the Committee has delegated responsibilities shall keep accurate records and minutes of meetings, interpretations, and decisions. The Committee shall act by majority vote of the members, and such action shall be evidenced by a written document.

10.4 Disputes.

(a) If the Committee denies, in whole or in part, a claim for benefits by a Participant or his beneficiary, the Committee shall furnish notice of the denial to the claimant in writing, setting forth:

(1) the specific reasons for the denial;

(2) reference to the specific Plan provisions on which the denial is based;

(3) 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; and

(4) a description of the Plan's review procedures and the time limits applicable to such procedures, including a statement of the claimant's right to bring a civil action under Section 502(a) of ERISA following an adverse benefit determination or review. Such notice shall be forwarded to the claimant within ninety (90) days of the Committee's receipt of the claim; provided, however, that in special circumstances the Committee may extend the response period for up to an additional ninety (90) days, in which event it shall notify the claimant in writing of the extension, and shall specify the reason or reasons for the extension.

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(b) Within sixty (60) days of receipt of a notice of claim denial, a claimant or his duly authorized representative may petition the Committee in writing for a full and fair review of the denial. The claimant or his duly authorized representative shall be provided, 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 have the opportunity to submit written comments, documents, records, and other information relating to the claim for benefits to the Committee. The Committee shall review the denial and shall communicate its decision and the reasons therefor to the claimant in writing within sixty (60) days of receipt of the petition, after taking into account all comments, documents, records, and other information submitted by the claimant relating to the claim, without regard to whether such information was submitted or considered on the initial determination; provided, however, that in special circumstances the Committee may extend the response period for up to an additional sixty (60) days, in which event it shall notify the claimant in writing prior to the commencement of the extension. The appeals procedure set forth in this Paragraph (b) shall be the exclusive means for contesting a decision denying benefits under the Plan.

10.5 Indemnification. Each member of the Committee, and any other person who is an Employee or director of a Participating Company or an Affiliated Company shall be indemnified and held harmless by the Company against and with respect to all damages, losses, obligations, liabilities, liens, deficiencies, costs and expenses, including without limitation, reasonable attorney's fees and other costs incident to any suit, action, investigation, claim or proceedings to which he may be a party by reason of his performance of administrative functions and duties under the Plan, except in relation to matters as to which he shall be held liable for an act of willful misconduct in the performance of his duties. The foregoing right to indemnification shall be in addition to such other rights as the Committee member or other person may enjoy as a matter of law or by reason of insurance coverage of any kind. Rights granted hereunder shall be in addition to and not in lieu of any rights to indemnification to which the Committee member or other person may be entitled pursuant to the by-laws of the Participating Company.

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**ARTICLE XI**  
**THE FUND**

11.1 Designation of Trustee. The Company, by appropriate resolution of its Board of Directors, if any, shall name and designate a Trustee and shall enter into a Trust Agreement. The Company shall have the power, by appropriate resolution of its Board of Directors, to amend the Trust Agreement, remove the Trustee, and designate a successor Trustee, as provided in the Trust Agreement. All of the assets of the Plan shall be held by the Trustee for use in accordance with the Plan.

11.2 Exclusive Benefit. Prior to the satisfaction of all liabilities under the Plan in the event of termination of the Plan, no part of the corpus or income of the Fund shall be used for or diverted to purposes other than for the exclusive benefit of Participants and their beneficiaries except as expressly provided in this Plan and in the Trust Agreement.

11.3 No Interest in Fund. No person shall have any interest in or right to any part of the assets or income of the Fund, except to the extent expressly provided in this Plan and in the Trust Agreement.

11.4 Trustee. The Trustee shall be the named fiduciary with respect to management and control of Plan assets held by it and, except as provided in Section 11.5, shall have exclusive and sole responsibility for the custody and investment thereof in accordance with the Trust Agreement.

11.5 Investments.

(a) Except as provided in Subsection (e) of this Section, the Trustee shall invest Pre-Tax Basic Contributions, After-Tax Supplemental Contributions, Rollover Contributions, Matching Contributions and Personal Retirement Contributions paid to it and income thereon in such Investment Media as each Participant may select in accordance with this Section. Such investments acquired in the manner prescribed by the Plan shall be held by or for the Trustee. Notwithstanding the preceding, Personal Retirement Contributions made on and after January 1, 2007 shall be automatically invested in the Vanguard Target Retirement Fund, as each is determined to be appropriate for the Participant's particular age, as established by reference to certain age bands that are dependent upon the year of birth.



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Participants shall be permitted to change the investment of such Personal Retirement Contributions in accordance with this Section; provided, however, that a Participant's election shall apply only to Personal Retirement Contributions (and earnings thereon) made prior to the Participant's election and shall not apply to future Personal Retirement Contributions made after such Participant's election, unless and until the Participant makes a new election with respect to such future Personal Retirement Contributions. A Participant's Employer Non-Matching Account and income thereon shall be invested in such Investment Media as each Participant may select in accordance with this Section.

(b) Except as provided in Subsection (e) of this Section, a Participant shall select one or more of the Investment Media in which his Accounts shall be invested, and the percentage thereof that shall be invested in each Investment Medium selected shall be in such increments as shall be established by the Committee from time to time. A Participant may amend such selection by prior notice to the Committee, effective as of such dates determined by the Committee, by giving prior notice to the Committee. With any such amendment, the Participant shall indicate whether his election applies to the election of: (A) future deposits, (B) previous deposits and earnings in the Fund, or (C) both. Such amendments will be subject to the other requirements of this Section.

If a Participant fails to select one or more Investment Media in which his Accounts (excluding his Personal Retirement Account) shall be invested, such Accounts shall be invested in the Target Retirement Fund appropriate for the Participant's age, as set forth in Section 11.5(a), unless and until such time as the Participant selects another investment choice.

(c) In accordance with rules prescribed by the Committee, a Participant may transfer, effective as of such dates determined by the Committee, such portion of the value of his interest in any Investment Medium to another Investment Medium.

(d) The amounts contributed by all Participants to each Investment Medium shall be commingled for investment purposes.

(e) The Trustee may hold assets of the Fund and make distributions therefrom in the form of cash without liability for interest, if for administrative purposes it becomes necessary or practical to do so.

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**ARTICLE XII**  
**AMENDMENT OR TERMINATION OF THE PLAN**

12.1 Power of Amendment and Termination

(a) It is the intention of each Participating Company that this Plan will be permanent. However, each Participating Company reserves the right to terminate its participation in this Plan at any time by action of its board of directors or other governing body. Furthermore, the Company reserves the power to amend or terminate the Plan at any time by action of the Board of Directors and the Committee may adopt any amendment to the Plan that is required under the Code or ERISA to maintain legal compliance or tax qualification or does not result in an increase in the cost of the Plan to the Company of \$200,000 or more.

(b) Each amendment to the Plan shall be binding on each Participating Company if such Participating Company:

(1) consents to such amendment at any time; or

(2) fails to object thereto within thirty (30) days after receiving notice thereof.

(c) Any amendment or termination of the Plan shall become effective as of the date designated by the Board of Directors. Except as expressly provided elsewhere in the Plan, prior to the satisfaction of all liabilities with respect to the benefits provided under this Plan, no amendment or termination shall cause any part of the monies contributed hereunder to revert to the Participating Companies or to be diverted to any purpose other than for the exclusive benefit of Participants and their beneficiaries. Upon termination or partial termination of the Plan, or upon complete discontinuance of contributions, the rights of all affected persons to benefits accrued to the date of such termination shall be nonforfeitable. Upon termination of the plan, without establishment or maintenance of another defined contribution plan (other than an employee stock ownership plan as defined in Code Section 4975(e)(7) or 409(a), a simplified employee pension plan as defined in Code Section 408(k), a SIMPLE IRA plan as defined in Code Section 408(p), a plan or contract that satisfies the requirements of Code Section 403(b), or a plan that is described in Code Section 457(b) or (f)), Accounts shall be distributed in accordance with applicable law.

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12.2 Merger. The Plan shall not be merged with or consolidated with, nor shall its assets be transferred to, any other qualified retirement plan unless each Participant would receive a benefit after such merger, consolidation, or transfer (assuming the Plan then terminated) which is of actuarial value equal to or greater than the benefit he would have received from his Account if the Plan had been terminated on the day before such merger, consolidation, or transfer.

**ARTICLE XIII**  
**TOP-HEAVY PROVISIONS**

13.1 General. The following provisions shall apply automatically to the Plan and shall supersede any contrary provisions for each Plan Year in which the Plan is a Top-Heavy Plan (as defined below). It is intended that this Article shall be construed in accordance with the provisions of Code Section 416.

13.2 Definitions. The following definitions shall supplement those set forth in Article I of the Plan:

(a) "Aggregation Group" means this plan and each other qualified retirement plan (including a frozen plan or a plan which has been terminated during the sixty (60)-month period ending on the Determination Date) of a Participating Company or an Affiliated Company:

(1) in which a Key Employee is a participant; or

(2) which enables any plan in which a Key Employee participates to meet the requirements of Code Section 401(a)(4) or 410; or

(3) without the inclusion of which, the plans in the Aggregation Group would be Top-Heavy Plans, but, with the inclusion of which, the plans in the Aggregation Group are not Top-Heavy Plans and, taken together, meet the requirements of Code Sections 401(a)(4) and 410.

(b) "Determination Date" means, for any Plan Year, the last day of the preceding Plan Year.

(c) "Key Employee" means, with respect to any Plan Year:

(1) any Employee or former Employee (including any deceased Employee) who at any time during the Plan Year that includes the Determination Date was:

(A) an officer of a Participating Company having Compensation greater than \$130,000 (as adjusted under Code Section 416(i)(1)); or

(B) a five-percent (5%) owner of a Participating Company; or

(C) a one-percent (1%) owner of a Participating Company having Compensation in excess of \$150,000; or

(2) a beneficiary of an individual described in Paragraph (1) of this Subsection.

For purposes of this Subsection, Compensation shall include elective deferrals under Code Sections 125, 402(a)(8), 402(h) and 403(b). Determinations under this Subsection shall be made in accordance with Code Section 416(i)(1) and the applicable regulations and other guidance of general applicability issued thereunder.

(d) “Key Employee Ratio” means, for any Determination Date, the ratio of the amount described in Paragraph (1) of this Subsection to the amount described in Paragraph (2) of this Subsection, after deducting from each such amount any portion thereof described in Paragraph (3) of this Subsection, where:

(1) the amount described in this Paragraph is the sum of:

(A) the present value of all accrued benefits of Key Employees under all qualified defined benefit plans included in the Aggregation Group;

(B) the balances in all of the accounts of Key Employees under all qualified defined contribution plans included in the Aggregation Group; and

(C) the amounts distributed from all plans in such Aggregation Group to or on behalf of any Key Employee during the period of five (5) Plan Years ending on the Determination Date, except any benefit paid on account of death to the extent it exceeds the accrued benefits or account balances immediately prior to death;

(2) the amount described in this Paragraph is the sum of:

(A) the present value of all accrued benefits of all participants under all qualified defined benefit plans included in the Aggregation Group;

(B) the balances in all of the accounts of all participants under all qualified defined contribution plans included in the Aggregation Group; and

(C) the amounts distributed from all plans in such Aggregation Group to or on behalf of any participant during the period of five (5) Plan Years ending on the Determination Date; and

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(3) the amount described in this Paragraph is the sum of:

(A) all rollover contributions (or fund to fund transfers) to the Plan by an Employee after December 31, 1983 from a plan sponsored by an employer which is not a Participating Company or an Affiliated Company;

(B) any amount that is included in Paragraphs (1) and (2) of this Subsection for a person who is a Non-Key Employee as to the Plan Year of reference but who was a Key Employee as to any earlier Plan Year; and

(C) for Plan Years beginning after December 31, 1984, any amount that is included in Paragraphs (1) and (2) of this Subsection for a person who has not performed any services for any Participating Company during the five (5)-year period ending on the Determination Date. The present value of accrued benefits under any defined benefit plan shall be determined on the basis of the 1984 Unisex Mortality Table and an interest rate of six percent (6%) and, effective January 1, 1987, under the method used for accrual purposes for all plans maintained by all Participating Companies and Affiliated Companies if a single method is used by all such plans, or, otherwise, the slowest accrual method permitted under Code Section 411 (b)(1)(C).

(4) The present values of accrued benefits and the amounts of the Accounts of Employees as of the Determination Date shall be determined as follows:

(A) The present values of accrued benefits and the amounts of Accounts of an Employee as of the Determination Date shall be increased by the distributions made with respect to the Employee under the Plan and any plan aggregated with the Plan under Code Section 416(g)(2) during the 1-year period ending on the Determination Date. The preceding sentence shall also apply to distributions under a terminated plan which, had it not been terminated, would have been aggregated with the Plan under Code Section 416(g)(2)(A)(i). In the case of a distribution made for a reason other than severance from employment, death, or disability, this provision shall be applied by substituting "5-year period" for "1-year period."

(B) The accrued benefits and Accounts of any individual who has not performed services for the Company during the 1-year period ending on the Determination Date shall not be taken into account.

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(e) “Non-Key Employee” means, for any Plan Year:

- (1) an Employee or former Employee who is not a Key Employee with respect to such Plan Year; or
- (2) a beneficiary of an individual described in Paragraph (1) of this Subsection.

(f) “Super Top-Heavy Plan” means, for any Plan Year, each plan in the Aggregation Group for such Plan Year if, as of the applicable Determination Date, the Key Employee Ratio exceeds ninety percent (90%).

(g) “Top-Heavy Compensation” means, for any Participant for any Plan Year, the average of his annual Compensation over the period of five (5) consecutive Plan Years (or, if shorter, the longest period of consecutive Plan Years during which the Participant was in the employ of any Participating Company) yielding the highest average, disregarding:

- (1) Compensation for Plan Years ending prior to January 1, 1984; and
- (2) Compensation for Plan Years after the close of the last Plan Year in which the Plan was a Top-Heavy Plan.

(h) “Top-Heavy Plan” means, for any Plan Year, each plan in the Aggregation Group for such Plan Year if, as of the applicable Determination Date, the Key Employee Ratio exceeds sixty percent (60%).

(i) “Year of Top-Heavy Service” means, for any Participant, a Plan Year in which he completes 1,000 or more Hours of Service, excluding:

- (1) Plan Years commencing prior to January 1, 1984; and
- (2) Plan Years in which the Plan is not a Top-Heavy Plan.

### 13.3 Minimum Contribution for Non-Key Employees

(a) In each Plan Year in which the Plan is a Top-Heavy Plan, each Eligible Employee who is a Non-Key Employee (except an Eligible Employee who is a Non-Key Employee as to the Plan Year of reference but who was a Key Employee as to any earlier Plan Year) and who is an Employee on the last day of such Plan Year will receive a total minimum

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Participating Company or Affiliated Company contribution (including forfeitures) under all plans described in Paragraphs (a)(1) and (a)(2) of Section 13.2 of not less than three percent (3%) of the Eligible Employee's Compensation for the Plan Year Elective deferrals to such plans made on behalf of a Participant in plan years beginning after December 31, 1984 but before January 1, 1989 shall be deemed to be Company contributions for the purpose of this Subsection. Elective deferrals to such plans shall not be used to meet the minimum contribution requirements of this Subsection. Employer matching contributions shall be taken into account for purposes of satisfying the minimum contribution requirements of Code Section 416(c)(2). Employer matching contributions that are used to satisfy the minimum contribution requirements shall be treated as matching contributions for purposes of Code Section 401(m).

(b) The percentage set forth in Subsection (a) shall be reduced to the percentage at which contributions, including forfeitures, are made (or are required to be made) for a Plan Year for the Key Employee for whom such percentage is the highest for that Plan Year. This percentage shall be determined for each Key Employee by dividing the contribution for such Key Employee by his Compensation for the Plan Year. All defined contribution plans required to be included in an Aggregation Group shall be treated as one plan for the purpose of this Section; however, this Section shall not apply to any plan which is required to be included in the Aggregation Group if such plan enables a defined benefit plan in the group to meet the requirements of Code Section 401(a)(4) or 410.

(c) If a Non-Key Employee described in Subsection (a) participates in both a defined benefit plan and a defined contribution plan described in Paragraphs (a)(1) and (a)(2) of Section 13.2, the Participating Company is not required to provide such Employee with both the minimum benefit under the defined benefit plan and the minimum contribution. In such event, the Non-Key Employee shall not receive the minimum contribution described in this Section if he has the minimum benefit required by Code Section 416 under the defined benefit Top-Heavy Plan.



13.4 Vesting. The vested interest in the Employer Matching Account and the Personal Retirement Account of each Participant with one or more Hours of Service in a Plan Year in which the Plan is a Top-Heavy Plan shall be determined in accordance with the following schedule:

<u>Years of Service Interest</u>	<u>Nonforfeitable</u>
Less than 1 Year of Service	0%
1 or more Years of Service	33 1/3%
2 or more Years of Service	66 2/3%
3 or more Years of Service	100%

13.5 Social Security. The Plan, for each Plan Year in which it is a Top-Heavy Plan, must meet the requirements of this Article without regard to any Social Security or similar contributions or benefits.

**ARTICLE XIV**  
**GENERAL PROVISIONS**

14.1 No Employment Rights. Neither the action of the Company in establishing the Plan, nor of any Participating Company in adopting the Plan, nor any provisions of the Plan, nor any action taken by the Company, any Participating Company or the Committee shall be construed as giving to any Employee the right to be retained in the employ of the Company or any Participating Company, or any right to payment except to the extent of the benefits provided in the Plan to be paid from the Fund.

14.2 Governing Law. Except to the extent superseded by ERISA, all questions pertaining to the validity, construction, and operation of the Plan shall be determined in accordance with the laws of the state in which the principal place of business of the Company is located.

14.3 Severability of Provisions. If any provision of this Plan is determined to be void by any court of competent jurisdiction, the Plan shall continue to operate and, for the purposes of the jurisdiction of that court only, shall be deemed not to include the provisions determined to be void.

14.4 No Interest in Fund. No person shall have any interest in, or right to, any part of the principal or income of the Fund, except as and to the extent expressly provided in this Plan and in the Trust Agreement.

14.5 Spendthrift Clause. No benefit payable at any time under this Plan and no interest or expectancy herein shall be anticipated, assigned, or alienated by any Participant or beneficiary, or subject to attachment, garnishment, levy, execution, or other legal or equitable process, except for: (1) a Federal tax levy made pursuant to Code Section 6331, (2) any benefit payable pursuant to a qualified domestic relations order, and (3) an offset of a Participant's benefits as described in Section 206(d)(4) of ERISA. Any attempt to alienate or assign a benefit hereunder, whether currently or hereafter payable, shall be void.

14.6 Incapacity. If the Committee deems any Participant who is entitled to receive payments hereunder incapable of receiving or disbursing the same by reason of Age, illness, infirmity, or incapacity of any kind, the Committee may direct the Trustee to apply such payments directly for the comfort, support, and maintenance of such Participant, or to pay the same to any responsible person caring for the Participant who is determined by the Committee to be qualified to receive and disburse such payments for the Participant's benefit; and the receipt of such person shall be a complete acquittance for the payment of the benefit. Payments pursuant to this Section shall be complete discharge to the extent thereof of any and all liability of the Participating Companies, the Committee, the Trustee, and the Fund.

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14.7 Withholding. The Committee and the Trustee shall have the right to withhold any and all state, local, and Federal taxes which may be withheld in accordance with applicable law.

14.8 Missing Persons. Neither the Trustee nor any Participating Company shall be obliged to search for or ascertain the whereabouts of any individual entitled to benefits under the Plan. Any individual entitled to benefits under the Plan who does not file a timely claim for his benefits will be allowed to file a claim at any later date, and payment of his benefits will commence after that later date, except that, in the event the Participating Company is satisfied that a Participant has no Spouse or that a Participant's Spouse cannot be located (as described in Section 5.8), and the Participant is in fact married or the Spouse is later located, whichever is applicable, such Spouse shall not be deemed an individual entitled to benefits under the Plan.

**ARTICLE XV**  
**RIGHTS OF ALTERNATE PAYEES**

15.1 General. Except as otherwise provided in this Article, an Alternate Payee shall have no rights to a Participant's benefit and shall have no rights under this Plan other than those rights specifically granted to the Alternate Payee pursuant to a Qualified Domestic Relations Order. Notwithstanding the foregoing, an Alternate Payee shall have the right to appeal the denial of a claim for any benefits awarded to the Alternate Payee pursuant to a Qualified Domestic Relations Order, as provided in Section 10.4. Any interest of an Alternate Payee in the Accounts of a Participant, other than an interest payable solely upon the Participant's death pursuant to a Qualified Domestic Relations Order which provides that the Alternate Payee shall be treated as the Participant's surviving Spouse, shall be separately accounted for by the Trustee in the name and for the benefit of the Alternate Payee.

15.2 Distribution.

(a) Notwithstanding anything in this Plan to the contrary, a Qualified Domestic Relations Order may provide that any benefits of a Participant payable to an Alternate Payee shall be distributed immediately or at any other time specified in the order. If the order does not specify the time at which benefits shall be payable to the Alternate Payee, the Alternate Payee may elect to have benefits payable as of a Participant's Separation from Service in accordance with Section 5.2, or in accordance with Sections 5.3 or 5.4, but as of the Alternate payee's death or Total Disability, respectively.

(b) If a Qualified Domestic Relations Order does not provide the form of distribution of benefits payable to an Alternate Payee, the Alternate Payee shall receive distribution in a single lump sum payment.

(c) If the Qualified Domestic Relations Order does not specify the Participant's Accounts, or Investment Media in which such Accounts are invested, from which amounts shall be separately accounted for an Alternate Payee, such amounts shall be segregated from the Participant's Accounts, and the Investment Media in which such Accounts are invested, on a pro rata basis.

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15.3 Withdrawals. Unless a Qualified Domestic Relations Order provides to the contrary, an Alternate Payee shall not be permitted to make any withdrawals under Article VIII. Notwithstanding the foregoing, an Alternate Payee shall in no event have the right to make withdrawals under Section 8.2, and any Qualified Domestic Relations Order which purports to give an Alternate Payee such a right shall be invalid and unenforceable to that extent.

15.4 Death Benefits. Unless a Qualified Domestic Relations Order provides to the contrary, an Alternate Payee shall have the right to designate a beneficiary, in the same manner as provided in Section 5.8 with respect to a Participant (except that no spousal consent shall be required), who shall receive benefits payable to the Alternate Payee which have not been distributed at the time of the Alternate Payee's death. If the Alternate Payee does not designate a beneficiary, or if the beneficiary predeceases the Alternate Payee, benefits payable to the Alternate Payee which have not been distributed shall be paid to the Alternate Payee's estate.

15.5 Investment Direction. Unless a Qualified Domestic Relations Order provides to the contrary, an Alternate Payee shall have the right to direct the investment of any portion of a Participant's Accounts payable to the Alternate Payee under such order in the same manner as provided in Article XI with respect to a Participant, which amounts shall be separately accounted for by the Trustee in the Alternate Payee's name.

**ARTICLE XVI**  
**TREATMENT OF RETURNING VETERANS**

16.1 Applicability and Effective Date. The rights of any Returning Veteran who resumes employment with a Participating Company on or after December 12, 1994 shall be modified as set forth in this Article.

16.2 Eligibility to Participate. For purposes of Section 2.2:

(a) A Returning Veteran who was an Eligible Employee immediately prior to his Qualified Military Service shall be deemed to have remained an Eligible Employee throughout his Qualified Military Service.

(b) A Returning Veteran who would have become an Eligible Employee during the period of his Qualified Military Service, but for the resulting absence from employment, shall be deemed to have become an Eligible Employee as of the date he would have become an Eligible Employee if he had not entered into Qualified Military Service.

16.3 No Period of Severance or Break in Service. A Returning Veteran shall be deemed not to have any Period of Severance or Break in Service on account of his Qualified Military Service.

16.4 Vesting Credit. A Returning Veteran's Years of Service shall be determined under Sections 6.2 and 6.6, except that his period of Qualified Military Service shall not be treated as a Period of Severance or Break in Service.

16.5 Restoration of Pre-Tax Basic and/or After-Tax Supplemental Contributions

(a) Each Returning Veteran who, during his period of Qualified Military Service, would have been eligible to make Pre-Tax Basic and/or After-Tax Supplemental Contributions shall be permitted to contribute an amount equal to the Pre-Tax Basic and/or After-Tax Supplemental Contributions that he could have made during such absence from employment. Such "make-up" contributions shall be made during the period that begins with his reemployment by the Participating Company and ends with: (1) the expiration of a period of five (5) years, or (2) if shorter, a period of three times the period of Qualified Military Service.

(b) Any make-up contributions described in Subsection (a) hereof shall be in addition to those Pre-Tax Basic and/or After-Tax Supplemental Contributions that the Participant may elect to make pursuant to Section 3.1.

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16.6 Determination of Compensation. For purposes of determining the amount of any make-up contributions under Section 16.5, and for applying the limits of Section 3.10, a Participant's Compensation during any period of Qualified Military Service shall be deemed to equal either:

(a) the Compensation he would have received but for such Qualified Military Service, based on the rate of pay he would have received from a Participating Company; or

(b) if the amount described in (a) above is not reasonably certain, his average Compensation from a Participating Company during the twelve (12)-month period immediately preceding the Qualified Military Service (or, if shorter, the period of employment immediately preceding the Qualified Military Service). Such amount shall be adjusted as necessary to reflect the length of the Participant's Qualified Military Service.

16.7 Restoration of Matching Contributions. If a Returning Veteran contributes "make-up" Pre-Tax Basic Contributions pursuant to Section 16.5, the Participating Company shall contribute on his behalf the related Matching Contributions that it would have made under Section 2.6 if such Pre-Tax Basic Contributions had been made in the year to which they relate. Such Matching Contributions shall not include the earnings that would have accrued on such amount.

16.8 Restoration of Personal Retirement Contributions. A Participating Company shall contribute on behalf of each Returning Veteran the Personal Retirement Contributions that it would have made for such Participant under Section 3.5, but for his absence due to Qualified Military Service. Such Personal Retirement Contributions shall not include the earnings that would have accrued on such amount.

16.9 Application of Certain Limitations

(a) For purposes of applying the limitations of Section 3.10, any make-up contributions described in Section 16.5, any related Matching Contributions described in Section 16.7, and any Personal Retirement Contributions described in Section 16.8, shall be treated as contributions for the Limitation Year to which they relate, rather than the Limitation Year in which they are actually made.

(b) For purposes of applying the limitation of Subsection 3.1(c), any such make-up contributions described in Section 16.5 which are Pre-Tax Basic Contributions shall be treated as contributions for the calendar year to which they relate, rather than the calendar year in which they are actually made.

(c) For purposes of applying the limitations of Section 3.8 and Article XIII, any make-up contributions described in Section 16.5, any related Matching Contributions described in Section 16.7, and any Personal Retirement Contributions described in Section 16.8, shall be disregarded, both for the Plan Year to which the contributions relate, and for the Plan Year in which they are actually made.

16.10 Suspension of Loan Repayments. Notwithstanding any provisions of Article IX to the contrary, if a Participant receives a loan from the Plan and enters into Qualified Military Service during the term of the loan, a decrease in Compensation or failure to make required loan repayments during such Qualified Military Service shall not result in a default under Section 9.4.

16.11 Administrative Rules and Procedures. The Committee shall establish such rules and procedures as it deems necessary or desirable to implement the provisions of this Article, provided that they are not in violation of the Uniformed Services Employment and Reemployment Rights Act of 1994, any regulations thereunder, or any other applicable law.

Executed this 27th day of January, 2016.

PQ CORPORATION  
BENEFIT PLANS COMMITTEE

/s/ Susan Olafson  
Susan Olafson, Director Benefits, Compensation/HRIS

/s/ Anthony A. Albrecht  
Tony Albrecht, Director Internal Audit/SOX

/s/ Joseph Cistone  
Joe Cistone, Manager Industrial Relations, NA



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**SCHEDULE A**

**PARTICIPATING COMPANIES**

The following employers have duly adopted this Plan for their employees and are thus Participating Companies as of January 1, 2016:

PQ Corporation  
Potters Industries Inc.

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**SCHEDULE B**

**SCHEDULE OF MINIMUM DISTRIBUTION REQUIREMENTS**

**Section 1. General Rules**

1.1. Effective Date. The provisions of this Schedule will apply for purposes of determining required minimum distributions.

**Section 2. Time and Manner of Distribution**

2.1. Required Beginning Date. The Participant's entire interest will be distributed, or begin to be distributed, to the Participant no later than the Participant's required beginning date.

2.2 Death of Participant Before Distributions Begin. If the Participant dies before distributions begin, the Participant's entire interest will be distributed, or begin to be distributed, no later than as follows:

(a) If the Participant's surviving Spouse is the Participant's sole designated beneficiary, then distributions to the surviving Spouse will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died, or by December 31 of the calendar year in which the Participant would have attained Age 70 1/2, if later.

(b) If the Participant's surviving Spouse is not the Participant's sole designated beneficiary, then distributions to the designated beneficiary will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died.

(c) If there is no designated beneficiary as of September 30 of the year following the year of the Participant's death, the Participant's entire interest will be distributed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(d) If the Participant's surviving Spouse is the Participant's sole designated beneficiary and the surviving Spouse dies after the Participant but before distributions to the surviving Spouse begin, this Section 2.2, other than Section 2.2(a), will apply as if the surviving Spouse were the Participant.

For purposes of this Section 2.2 and Section 4, unless Section 2.2(d) applies, distributions are considered to begin on the Participant's required beginning date. If Section 2.2(d) applies, distributions are considered to begin on the date distributions are required to begin to the surviving Spouse under Section 2.2(a). If distributions under an annuity purchased from an insurance company irrevocably commence to the Participant before the Participant's required beginning date (or to the Participant's surviving Spouse before the date distributions are required to begin to the surviving Spouse under Section 2.2(a)), the date distributions are considered to begin is the date distributions actually commence.

2.3. Forms of Distribution. Unless the Participant's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the required beginning date, as of the first distribution calendar year distributions will be made in accordance with Sections 3 and 4 of this Schedule. If the Participant's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder will be made in accordance with the requirements of Code Section 401(a)(9) and the Treasury Regulations.

### **Section 3. Required Minimum Distributions During Participant's Lifetime.**

3.1. Amount of Required Minimum Distribution For Each Distribution Calendar Year. During the Participant's lifetime, the minimum amount that will be distributed for each distribution calendar year is the lesser of:

(a) the quotient obtained by dividing the Participant's account balance by the distribution period in the Uniform Lifetime Table set forth in Section 1.401(a)(9)-9 of the Treasury Regulations, using the Participant's age as of the Participant's birthday in the distribution calendar year; or

(b) if the Participant's sole designated beneficiary for the distribution calendar year is the Participant's Spouse, the quotient obtained by dividing the Participant's account balance by the number in the Joint and Last Survivor Table set forth in Section 1.401(a)(9)-9 of the Treasury Regulations, using the Participant's and Spouse's attained ages as of the Participant's and Spouse's birthdays in the distribution calendar year.

3.2 Lifetime Required Minimum Distributions Continue Through Year of Participant's Death. Required minimum distributions will be determined under this Section 3 beginning with the first distribution calendar year and up to and including the distribution calendar year that includes the Participant's date of death.

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**Section 4. Required Minimum Distributions After Participant's Death.**

**4.1 Death On or After Date Distributions Begin.**

(a) *Participant Survived by Designated Beneficiary.* If the Participant dies on or after the date distributions begin and there is a designated beneficiary, the minimum amount that will be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's account balance by the longer of the remaining life expectancy of the Participant or the remaining life expectancy of the Participant's designated beneficiary, determined as follows:

(1) The Participant's remaining life expectancy is calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.

(2) If the Participant's surviving Spouse is the Participant's sole designated beneficiary, the remaining life expectancy of the surviving Spouse is calculated for each distribution calendar year after the year of the Participant's death using the surviving Spouse's age as of the Spouse's birthday in that year. For distribution calendar years after the year of the surviving Spouse's death, the remaining life expectancy of the surviving Spouse is calculated using the age of the surviving Spouse as of the Spouse's birthday in the calendar year of the Spouse's death, reduced by one for each subsequent calendar year.

(3) If the Participant's surviving Spouse is not the Participant's sole designated beneficiary, the designated beneficiary's remaining life expectancy is calculated using the age of the beneficiary in the year following the year of the Participant's death, reduced by one for each subsequent year.

(b) *No Designated Beneficiary.* If the Participant dies on or after the date distributions begin and there is no designated beneficiary as of September 30 of the year after the year of the Participant's death, the minimum amount that will be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's account balance by the Participant's remaining life expectancy calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.

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4.2. Death Before Date Distributions Begin.

(a) *Participant Survived by Designated Beneficiary.* If the Participant dies before the date distributions begin and there is a designated beneficiary, the minimum amount that will be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's account balance by the remaining life expectancy of the Participant's designated beneficiary, determined as provided in Section 4.1.

(b) *No Designated Beneficiary.* If the Participant dies before the date distributions begin and there is no designated beneficiary as of September 30 of the year following the year of the Participant's death, distribution of the Participant's entire interest will be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(c) *Death of Surviving Spouse Before Distributions to Surviving Spouse Are Required to Begin.* If the Participant dies before the date distributions begin, the Participant's surviving Spouse is the Participant's sole designated beneficiary, and the surviving Spouse dies before distributions are required to begin to the surviving Spouse under Section 2.2(a), this Section 4.2 will apply as if the surviving Spouse were the Participant.

**Section 5. Definitions.**

5.1. Designated beneficiary. The individual who is designated as the beneficiary under Section 5.8 of the Plan and is the designated beneficiary under Code Section 401(a)(9) and Section 1.401(a)(9)-1, Q&A-4, of the Treasury Regulations.

5.2. Distribution calendar year. A calendar year for which a minimum distribution is required. For distributions beginning before the Participant's death, the first distribution calendar year is the calendar year immediately preceding the calendar year which contains the Participant's required beginning date. For distributions beginning after the Participant's death, the first distribution calendar year is the calendar year in which distributions are required to begin under Section 2.2. The required minimum distribution for the Participant's first distribution calendar year will be made on or before the Participant's required beginning date. The required minimum distribution for other distribution calendar years, including the required minimum distribution for the distribution calendar year in which the Participant's required beginning date occurs, will be made on or before December 31 of that distribution calendar year.

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5.3. Life expectancy. Life expectancy as computed by use of the Single Life Table in Section 1.401(a)(9)-9 of the Treasury Regulations.

5.4. Participant's account balance. The account balance as of the last valuation date in the calendar year immediately preceding the distribution calendar year (valuation calendar year) increased by the amount of any contributions made and allocated or forfeitures allocated to the account balance as of dates in the valuation calendar year after the valuation date and decreased by distributions made in the valuation calendar year after the valuation date. The account balance for the valuation calendar year includes any amounts rolled over or transferred to the Plan either in the valuation calendar year or in the distribution calendar year if distributed or transferred in the valuation calendar year.

5.5. Required beginning date. The date specified in the definition of "Required Beginning Date" set forth in Article I of the Plan.

**SCHEDULE C**

**PART I** For the purpose of determining an Eligible Employee's Compensation under Paragraph (a) of the definition of "Compensation," an Eligible Employee's base pay received from a Participating Company shall be deemed to include the following elements of remuneration, and no others:

Payroll Code (former)<sup>1</sup> – Description:

0003 - Unpaid time (negative wages)  
1001 - Regular pay  
1007 - Holiday  
1008 - Vacation  
1009 - Sick Pay  
1010 - Mileage  
1021 - Funeral Pay  
1101 - Salary  
1108 - Vacation Payout  
1109 - Sick Payout  
1110 - Mileage Level 2  
1119 - Salary STD  
1210 - Mileage Level 3  
1310 - Mileage Level 4  
1410 - Mileage Level PT/Temp  
1510 - Mileage Team

**PART II** For the purpose of determining an Eligible Employee's Compensation under Paragraph (b) of the definition of "Compensation," an Eligible Employee's earnings received from a Participating Company shall be deemed to include the following elements of remuneration, and no others:

Payroll Code (former)<sup>2</sup> – Description:

0003 - Unpaid time (negative wages)  
1001 - Regular pay  
1002 - Overtime  
1003 - Double time  
1004 - Straight overtime  
1005 - Third shift

<sup>1</sup> These are the payroll codes in effect as of the date when this Schedule C was first added to the Plan. Due to actual later, or potential future, changes in payroll practices, systems or providers, there is a chance that, with the passage of time, these payroll codes have changed, or may change. The payroll codes shown here are not controlling, but are retained merely for historical reference and to serve as a guide or to assist in correlating with any new or updated payroll coding that may be used.

<sup>2</sup> See the preceding footnote 1.

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1006 - Sunday premium  
1007 - Holiday  
1008 - Vacation  
1009 - Sick pay  
1010 - Mileage  
1012 - Severance (but only to the extent it meets the definition of "Policy Severance Pay"  
in Article I)  
1013 - Other income  
1014 - 12-Hour shift premium  
1015 - Sunday double time  
1017 - 2nd shift doubletime  
1018 - Saturday Hrs. 1.25  
1019 - 3rd shift doubletime  
1020 - Sunday premium overtime  
1021 - Funeral  
1022 - Load rate  
1023 - Second shift  
1024 - Drive shift  
1025 - Lead rate  
1026 - 2nd shift overtime  
1027 - 3rd shift overtime  
1028 - 12-Hour shift OT premium  
1032 - SRP award  
1033 - Commissions  
1034 - Recognition awards  
1036 - Referral bonus  
1039 - Bonus (other) - under any written document or agreement signed on or before  
August 1, 2004  
1042 - Bonus (excluding retention bonus and signing bonus)  
1044 - Fixed Shift Premium  
1045 - Fixed Shift OT  
1046 - Fixed Shift DT  
1047 - Rotating Shift Premium  
1048 - Rotating Shift OT  
1049 - Rotating Shift DT  
1050 - Foreign base salary  
1055 - Per diem  
1075 - Split shift differential  
1076 - Doubleback  
1101 - Salary  
1108 - Vacation payout  
1109 - Sick payout  
1110 - Mileage level 2  
1119 - Salary STD  
1200 - SAP premium



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1210 - Mileage level 3  
1310 - Mileage level 4  
1410 - Mileage level PT/Temp  
1510 - Mileage team

Effective on and after January 1, 2006, for purposes of determining an Eligible Employee's Compensation under Paragraph (b) of the definition of "Compensation", amounts for "Policy Severance Pay" (as defined in Article I) shall not be included within such defined term.

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**SCHEDULE D**

**LIST OF TARGET RETIREMENT FUNDS**

**Vanguard Target Retirement Income Fund Investor Shares**  
**Vanguard Target Retirement 2010 Fund Investor Shares**  
**Vanguard Target Retirement 2015 Fund Investor Shares**  
**Vanguard Target Retirement 2020 Fund Investor Shares**  
**Vanguard Target Retirement 2025 Fund Investor Shares**  
**Vanguard Target Retirement 2030 Fund Investor Shares**  
**Vanguard Target Retirement 2035 Fund Investor Shares**  
**Vanguard Target Retirement 2040 Fund Investor Shares**  
**Vanguard Target Retirement 2045 Fund Investor Shares**  
**Vanguard Target Retirement 2050 Fund Investor Shares**  
**Vanguard Target Retirement 2055 Fund Investor Shares**  
**Vanguard Target Retirement 2060 Fund Investor Shares**

Effective Date: January 1, 2016

## FIRST AMENDMENT

## TO THE

PQ CORPORATION SAVINGS PLAN  
(As Amended and Restated Effective as of January 1, 2016)

This First Amendment (the "*First Amendment*") to the PQ Corporation Savings Plan (as amended and restated effective as of January 1, 2016) (the "*Plan*") is made by PQ Corporation (the "*Corporation*") and is effective as of the dates set forth below. Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Plan.

## WITNESSETH:

- WHEREAS,** Eco Services Operations LLC ("*Original Eco*") previously sponsored and maintained the Eco Services 401(k) Plan (the "*Eco 401(k) Plan*");
- WHEREAS,** as part of a corporate reorganization and restructuring event completed on or around May 4, 2016 ("2016 Reorganization"), Original Eco was merged with and into the Corporation and, as a result, Original Eco ceased to exist as a separate independent entity;
- WHEREAS,** upon the 2016 Reorganization, all assets, rights and obligations held by Original Eco generally transferred to, and were assumed by, the Corporation (including, without limitation, a transfer, and assumption by the Corporation of all of the rights, responsibilities and obligations of Original Eco in its capacity as sponsor and administrator of the Eco 401(k) Plan);
- WHEREAS,** as a further part of the 2016 Reorganization, the identified business operations of Original Eco then held by the Corporation were further transferred and assigned to Eco Services Operations Corp. ("*New Eco*"), but such transfer and assignment of business operations of Original Eco to New Eco did not include any transfer or assignment of sponsorship of the Eco 401(k) Plan and such sponsorship remained with the Corporation;
- WHEREAS,** prior to the 2016 Reorganization, the Corporation sponsored, and presently sponsors and maintains, the Plan;
- WHEREAS,** in order to achieve administrative efficiencies and thereby reduce the administrative costs of simultaneously maintaining the Eco 401(k) Plan and the Plan, the Corporation desires to merge the Eco 401(k) Plan into the Plan, with the Plan being the continuing plan;
- WHEREAS,** to effectuate the merger of the Eco 401(k) Plan into the Plan, the Corporation desires to amend the Plan: (i) to show that New Eco is a participating employer; (ii) to show that employees of New Eco are eligible to participate in the Plan; and, (iii) to include those benefits, rights and features, if any, under the Eco 401(k) Plan that are legally required to be preserved and protected after the merger;
- WHEREAS,** the Board also desires to amend the Plan to provide for a special, non-elective employer contribution for a limited group of eligible participants who are employed by New Eco as of December 31, 2016, and who experienced a cessation of benefit accruals under the Eco Pension Equity Plan effective December 31, 2016; and

**WHEREAS,** the Corporation, as Plan sponsor, is authorized to amend the Plan pursuant to Section 12.1(a) thereof.

**NOW, THEREFORE,** pursuant to Section 12.1(a) of the Plan, the Company hereby amends the Plan as follows:

**Effective December 1, 2016:**

- (i) The current last paragraph of the Introduction to the Plan is amended to read in its entirety as follows (new text underlined; deleted text stricken):

“~~WHEREAS, NOW, THEREFORE,~~ effective January 1, 2016 (except as otherwise set forth therein), the Plan ~~was is~~ continued, amended, and restated as hereinafter set forth.”

- (ii) A new paragraph is added at the end of the Introduction to the Plan to read in its entirety as follows:

“**WHEREAS,** the Plan was further amended, effective December 1, 2016, to reflect the merger of the Eco Services 401(k) Plan with and into the Plan, with the Plan being the surviving entity.”

- (iii) Schedule A is amended to read, in its entirety, as follows (new text underlined):

**“PARTICIPATING COMPANIES**

The following employers have duly adopted this Plan for their employees and are thus Participating Companies as of January 1, 2016:

PQ Corporation  
Potters Industries Inc.

The following employer has duly adopted this Plan for its employees and is thus a Participating Company as of December 1, 2016:  
Eco Services Operations Corp.”

- (iv) The definition of “Account” in Article I – Definitions is amended by adding two new provisions to define and include “Limited 2016 Profit Sharing Contribution Account” and “Eco PEP Replacement Contribution Account” and to read in their entirety as follows:

“‘Limited 2016 Profit Sharing Contribution Account’ means the Account to which are credited Limited 2016 Profit Sharing Contributions allocated to a Participant, adjustments for withdrawals and distributions, and the earnings, losses and expenses attributable thereto.

‘Eco PEP Replacement Contribution Account’ means the Account to which are credited Eco PEP Replacement Contributions allocated to a Participant, adjustments for withdrawals and distributions, and the earnings, losses and expenses attributable thereto.”

- (v) A new definition of “Limited 2016 Profit Sharing Contribution” is added to Article I – Definitions to read in its entirety as follows:
- “Limited 2016 Profit Sharing Contribution’ means the Participating Company contribution made in accordance with Section 3.6(b). For distribution, valuation and other similar administrative purposes, Limited 2016 Profit Sharing Contributions shall be treated the same as if they were Personal Retirement Contributions, except where the context expressly requires otherwise.”
- (vi) A new definition of “Eco PEP Replacement Contribution” is added to Article I – Definitions to read in its entirety as follows:
- “Eco PEP Replacement Contribution’ means the Participating Company contribution made in accordance with Section 3.6(c). For distribution, valuation and other similar administrative purposes, Eco PEP Replacement Contributions shall be treated the same as if they were Personal Retirement Contributions, except where the context expressly requires otherwise.”
- (vii) The definition of “Personal Retirement Contribution”, as found in Article I – Definitions is amended by adding a new sentence at the end thereof to read in its entirety as follows:
- “For distribution, valuation and other similar administrative purposes, references herein to Personal Retirement Contribution shall incorporate and include Limited 2016 Profit Sharing Contributions and Eco PEP Replacement Contributions.”
- (viii) Section 3.5(a)(ii) (“Personal Retirement Contributions”) is amended by adding a new sentence at the end thereof to read in its entirety as follows:
- “Participants eligible for special, non-elective contributions under Section 3.6(c), shall not be eligible for contributions under this Section 3.5, except as may be provided in Section 3.6(c).”
- (ix) A new Section 3.6 is added to the Plan (with the existing Section 3.6 and subsequent sections renumbered and any references in the Plan to them also changed) to read as follows:
- “3.6 Special Transition Provisions for Eco Participants
- (a) Matching on Nondeductible Employee Contributions. Matching contributions on nondeductible employee contributions (herein, After-Tax Supplemental Contributions), if any, made by Eco Participants shall continue only through December 31, 2016. Effective December 1, 2016, all Matching Contributions shall be made in accordance with Section 3.4, except as provided in this Section 3.6(a).
- (b) Limited 2016 Profit Sharing Contribution For the Plan Year ended December 31, 2016, the Participating Company shall make a Limited 2016 Profit Sharing Contribution in a manner and amount consistent with the provisions of Section Three — Part D of the merged Eco 401(k) Plan, wherein a discretionary profit sharing benefit is allocated as follows:

- (i) the allocation method shall be an age-based integrated formula where the contributions rates (as a percentage of Compensation) are as follows:

Participant age as of December 31, 2016	Contribution Rate as a % of Compensation	Contribution Rate as a % of Compensation above the Integration Level
Under 30	2.0%	0.0%
30 – 34	2.5%	0.0%
35 – 39	3.0%	0.0%
40 – 44	6.0%	1.0%
45 – 49	7.0%	1.5%
50 and over	7.5%	2.0%

- (ii) The Integration Level is defined as the maximum Taxable Wage Base in 2016 for Social Security taxation purposes.
- (iii) In order to share in an allocation of the Limited 2016 Profit Sharing Contribution, an eligible Participant must be employed by the Participating Company on the last day of the 2016 Plan Year, unless the Participant has died or retired after attaining Normal Retirement Age during such Plan Year. A Participant who has incurred a Disability will not be entitled to an allocation of the Limited 2016 Profit Sharing Contribution.
- (c) Eco Services Pension Equity Plan Replacement Contributions For Specified Employees For each Plan Year starting after December 31, 2016, the Participating Company shall make a special, nonelective contribution on behalf of each Participant:
- (i) who was actively employed by and on the payroll of Eco Services Operations Corp., as of December 31, 2016;
  - (ii) who, with respect to any part of a Plan Year to which the special, nonelective contribution relates, is not participating in or accruing benefits under the Eco Services Hourly Pension Plan;
  - (iii) who was eligible to accrue (and, on or after January 1, 2016, was accruing) benefits under the Eco Services Pension Equity Plan (the “PEP”), but after December 31, 2016 stopped accruing such benefits as a result of the freeze of benefit accruals under the PEP effective December 31, 2016; and
  - (iv) who satisfies, as applicable, the requirements of Section 2.8 for employment at the end of a Plan Year, except as provided therein in the case of death, Disability or retirement.

For each Plan Year starting after December 31, 2016, the special, nonelective contribution under this Section 3.6(c) shall be the greater of: (i) the Personal Retirement Contributions described in Section 3.5(a)(ii) based on the Participant’s age as of December 31, 2016 (rather than December 31, 2006), or (ii) an amount determined in accordance with the following schedule based on the Participant’s age as of December 31, 2016:

<u>Age (as of 12/31/2016)</u>	<u>% of Compensation</u>
Under Age 40	4%
Age 40 – 44	6%
Age 45 – 49	7%
Age 50 and over	7.5%

Participants eligible for special, non-elective contributions under this Section 3.6: (1) shall not be eligible for contributions under Section 3.5, except as provided herein; and, (2) shall not move to another age bracket in subsequent years, and special, non-elective contributions made under this Section 3.6(c) for all Plan Years after December 31, 2016, shall be based solely on the Participant's age as of December 31, 2016, regardless of the Participant's actual age at the time the contribution is earned or made.

Participants either:

- (1) employed by Eco Services Operations Corp. who meet the requirements of Section 3.6(c)(i), (ii) and (iv), but who do not meet the requirements of Section 3.6(c)(iii); or,
- (2) hired and employed by Eco Services Operations Corp. or any other Participating Company after December 31, 2016,

shall not be eligible for contributions under this Section 3.6(c), but instead shall be eligible for contributions under Section 3.5 (if otherwise eligible under Sections 2.8 and 3.5) at a rate of four percent (4%) of Compensation. Participants who are otherwise eligible for contributions under this Section 3.6(c), but at any time during a Plan Year fail to be eligible because they participate in and accrue benefits under the Eco Services Hourly Pension Plan, shall be eligible for contributions under this Section 3.6(c) in any later Plan Year if they otherwise meet the eligibility requirements, when they later cease to participate and accrue benefits under the Eco Services Hourly Pension Plan with respect to any part of the Plan Year; provided, however, that contributions under this Section 3.6(c) shall be based on such Participant's age as of December 31, 2016."

- (x) Section 6.1 is amended by adding a new subsection (e) at the end thereof to read in its entirety as follows:

"(e) Notwithstanding anything herein to the contrary, all of the existing Account balances transferred from the Eco 401(k) Plan on December 1, 2016 shall be and are fully vested."

(xi) Section 7.2 is amended by adding a new subsection (c) at the end thereof to read in its entirety as follows:

“(c) Distributions of an Employee’s Employee Rollover Account attributed to balances carried over from the Eco 401(k) Plan shall be made in accordance with Schedule E.”

(xii) A new Schedule E (titled “Eco Services 401(k) Plan (2016 Merger) — Protected Benefits, Rights and Features”) shall be, and it hereby is, attached to the Plan and shall contain a listing and description of the benefits, rights and features under the Eco Services 401(k) Plan (which was merged with and into this Plan on or around December 1, 2016) that shall be, and are, preserved and protected for benefit accounts in place immediately prior to the effective date of such merger.

**IN WITNESS WHEREOF**, the Corporation has caused this First Amendment to be executed by its duly authorized representatives this 30<sup>th</sup> day of December, 2016.

**PQ CORPORATION  
BENEFIT PLANS COMMITTEE**

/s/ Susan Olafson  
Susan Olafson, Director Benefits, Compensation/HRIS

/s/ Anthony A. Albrecht  
Tony Albrecht, Director Internal Audit/SOX

/s/ Joe Cistone  
Joe Cistone, Manager Industrial Relations, NA



**SCHEDULE E**

**ECO SERVICES 401(k) PLAN (2016 MERGER) –**

**PROVISIONS FOR PROTECTED BENEFITS, RIGHTS AND FEATURES**

In connection with the merger of the Eco Services 401(k) Plan (“Eco 401(k) Plan”) with, and into, the PQ Corporation Savings Plan (which merger was effective on or around December 1, 2016), the following benefits, rights and features shall be, and they hereby are, protected and preserved to the extent of the transferred account balances from the Eco 401(k) Plan:

1. Rollover contributions (to the extent held in the Eco 401(k) Plan immediately prior to the merger event) may be withdrawn by a participant at any time, including while the participant remains in service with the Participating Company.
2. Account balances (to the extent held in the Eco 401(k) Plan immediately prior to the merger event) may be withdrawn by a participant at any time, if done in accordance with a “qualifying reservist” withdrawal, as defined in the Eco 401(K) Plan.
3. In the event a participant becomes eligible for a distribution (and elects in accordance with such administrative forms and processes as may be required by the Plan Administrator), the participant is not required to take a single lump sum, but may request a partial distribution of his Account (but only to the extent of that portion held in the Eco 401(k) Plan immediately prior to the merger event).
4. A participant who incurs a Disability, but who has not yet had a Separation from Service, shall be entitled to request a distribution or withdrawal of his Account (but only to the extent of that portion held in the Eco 401(k) Plan immediately prior to the merger event).

In addition, until such time as the Plan Administrator of this Plan receives or obtains new, or updated, versions in accordance with the terms of the Plan, then any of the administrative forms, materials or other documents that, prior to the merger, were generated and on file in connection with the Eco 401(k) Plan shall be carried over and used in the administration of the Plan.

By way of example, and not by way of limitation, these administrative forms, materials or other documents include, if any:

- beneficiary designations
- salary reduction (or similar) agreements
- loan applications, security agreements and promissory notes
- applications for benefits paid over time
- tax withholding elections and waivers
- participant, spousal and other consents
- approval/denial letters for qualified domestic relations orders (QDROs)

## SECOND AMENDMENT

## TO THE

**PQ CORPORATION SAVINGS PLAN  
(As Amended and Restated January 1, 2016)**

**WHEREAS**, PQ Corporation (the “*Company*”) sponsors and maintains the PQ Corporation Savings Plan, as amended and restated effective January 1, 2016 (the “*Plan*”);

**WHEREAS**, on or about January 29, 2016, the Company submitted an Application for Determination for Employee Benefit Plan (Form 5300) to the IRS requesting a determination that the Plan is a qualified plan under Section 401(a) of the Internal Revenue Code;

**WHEREAS**, as part of its review of the Application for Determination for Employee Benefit Plan (Form 5300), the IRS requested that the Plan be amended to: (i) change the date as of which the Plan recognizes same-sex spouses from October 1, 2013, to June 26, 2013; and (ii) to address the topic of employer securities;

**WHEREAS**, the Company now desires to amend the Plan to comply with the changes requested by the IRS; and

**WHEREAS**, under Subsection 12.1(a) of the Plan, the PQ Corporation Benefit Plans Committee has the authority to amend the Plan.

**NOW, THEREFORE, IT IS RESOLVED** that the Plan is and shall be amended as follows:

**Effective June 26, 2013:**

1. The defined term “Spouse”, as found in **Article I – Definitions**, is amended such that all references to “October 1, 2013”, be stricken and replaced with “June 26, 2013”.

**Effective January 1, 2016:**

2. **Article XI – The Fund**, is amended such that a new subsection (f) is added to Section 11.5 (Investments) to read in its entirety as follows:

“(f) Notwithstanding the Participants’ ability to direct investments under this Section 11.5 and the Trustee’s general authority under Section 11.4 to invest and hold Plan assets in any form of property, including common and preferred stocks, the Trustee shall not invest Plan assets in employer securities, as defined in section 407(d)(1) of ERISA.”

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3. All other provisions of the Plan not expressly mentioned herein shall remain unchanged.

Executed this 1st day of December, 2017.

**PQ CORPORATION  
BENEFIT PLANS COMMITTEE**

/s/ Susan Olafson

Susan Olafson, Director Benefits, Compensation & HRIS

/s/ Anthony A. Albrecht

Tony Albrecht, Director Internal Audit/SOX

/s/ Joseph Cistone

Joe Cistone, Manager Industrial Relations, NA

## THIRD AMENDMENT

## TO THE

PQ CORPORATION SAVINGS PLAN  
(As Amended and Restated Effective as of January 1, 2016)

This Third Amendment (the “*Third Amendment*”) to the PQ Corporation Savings Plan, as amended and restated effective as of January 1, 2016 (the “*Plan*”), is made by PQ Corporation (the “*Company*”) and is effective as of the dates set forth below. Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Plan.

## WITNESSETH:

- WHEREAS,** the Company currently sponsors and maintains the Plan;
- WHEREAS,** the ultimate parent company to the Company, PQ Group Holdings Inc. (the “*Parent Company*”), is a publicly traded company;
- WHEREAS,** the Company desires to amend the Plan to allow participants in the Plan the opportunity to invest a portion of their account balances under the Plan in stock of the Parent Company effective October 1, 2018; and
- WHEREAS,** the Company, as Plan sponsor, is authorized to amend the Plan pursuant to Section 12.1(a) thereof.

**NOW, THEREFORE,** pursuant to Section 12.1(a) of the Plan, the Company hereby amends the Plan as follows:

**Effective October 1, 2018:**

- (i) A new whereas clause is added to the Introduction section of the Plan, immediately following the last whereas clause thereof, to read as follows:
- “WHEREAS, the Plan was further amended, in accordance with a Favorable Determination Letter issued to the Plan by the Internal Revenue Service on September 22, 2017, to change the definition of “Spouse” effective as of June 26, 2013, and to clarify that the Plan does not invest in employer securities effective as of January 1, 2016.”
- (ii) The definitions of “Eco PEP Replacement Contribution Account” and “Limited 2016 Profit Sharing Contribution Account” in Article I of the Plan are amended by deleting the word “means” and replacing, in each occurrence thereof, with a dash.
- (iii) The following definitions are added to Article I of the Plan, in the appropriate alphabetical order:
- “Company Investment Program” means the portion of the Plan represented by the aggregate of each Participants’ Parent Company Stock Account, which is described in Article XVII.
- “Company Investment Contributions” means contributions made by or on behalf of Participants to their Parent Company Stock Account pursuant to Section 17.4.

“Investment Fiduciary Committee” means the individuals appointed by the Board of Directors to supervise the selection, monitoring, and removal of Investment Medium offered under the Plan. In the event an Investment Fiduciary Committee is not appointed by the Board of Directors, the Committee shall serve as the Investment Fiduciary Committee.

“Parent Company” means PQ Group Holdings Inc.

“Parent Company Stock” means common stock (par value \$0.01/share) of the Parent Company.

“Parent Company Stock Account” means the definition provided such term in Section 17.2.

- (iv) The definition of “Change of Control” in Article I of the Plan is amended by revising paragraph (a) thereof to read, in pertinent part, as follows (new text underlined):

“(a) a change in the ownership or control of the Company, or Parent Company, effected through a transaction or series of transactions...”

- (v) The definition of “Investment Medium” in Article I of the Plan is amended by adding the following sentence to the end thereof:

“Effective October 1, 2018, Parent Company Stock may be offered as an Investment Media under the Plan, subject to the limitations in Section 17.2 and the Committee’s discretion to restrict or remove Parent Company Stock as an Investment Media under the Plan pursuant to Section 10.6(a).”

- (vi) The definition of “Personal Retirement Contributions” in Article I of the Plan is amended by revising the first sentence thereof to read as follows (deleted text stricken; new text underlined):

“Personal Retirement Contributions” means the amounts contributed by ~~the a~~ a Participating Company pursuant to Section 3.5.”

- (vii) Section 2.9 is amended by deleting the word “finish” in the first sentence thereof and replacing with the word “furnish.”

- (viii) Section 3.6 is amended by adding the word “Total” immediately before the word “Disability” in each occurrence thereof in subsections (b)(iii) and (c)(iv).

- (ix) Section 8.7 is amended by revising the last sentence thereof to read as follows (new text underlined):

“Unless so specified, distribution will be made out of the Participant’s interest in the various Investment Media in proportion to the Participant’s share in such Investment Media, provided, however, that a Participant’s Parent Company Stock Account will be liquidated to the extent necessary to maintain the limitations on investments in Parent Company Stock under Section 17.2(a).”

- (x) Section 9.1 is amended by inserting the following new paragraph immediately following the last sentence thereof:

“A Participant may specify to which Investment Medium or Investment Media a loan under this Article is to be charged provided, however, that in all events the limitations on investments in Parent Company Stock under Section 17.2(a) shall be maintained. Unless so specified, distribution of the loan will be made out of the Participant’s interest in the various Investment Media in proportion to the Participant’s share in such Investment Media.”

(xi) Section 10.3 is amended to read, in its entirety, as follows (deleted text stricken; new text underlined):

“10.3 Functioning of Committees. The Committee, the Investment Fiduciary Committee and those persons or entities to whom ~~the such~~ Committees ~~has have~~ delegated responsibilities shall keep accurate records and minutes of meetings, interpretations, and decisions. The Committee and Investment Fiduciary Committee shall act by majority vote of the members, and such action shall be evidenced by a written document.”

(xii) Section 10.5 is amended to read, in its entirety, as follows (new text underlined):

“Indemnification. Each member of the Committee, the Investment Fiduciary Committee, and any other person who is an Employee or director of a Participating Company or an Affiliated Company shall be indemnified and held harmless by the Company against and with respect to all damages, losses, obligations, liabilities, liens, deficiencies, costs and expenses, including without limitation, reasonable attorney’s fees and other costs incident to any suit, action, investigation, claim or proceedings to which he may be a party by reason of his performance of administrative functions and duties under the Plan, except in relation to matters as to which he shall be held liable for an act of willful misconduct in the performance of his duties. The foregoing right to indemnification shall be in addition to such other rights as the Committee member, Investment Fiduciary Committee member, or other person may enjoy as a matter of law or by reason of insurance coverage of any kind. Rights granted hereunder shall be in addition to and not in lieu of any rights to indemnification to which the Committee member, Investment Fiduciary Committee member, or other person may be entitled pursuant to the by-laws of the Participating Company.”

(xiii) New Section 10.6 is added to Article 10 to read, in its entirety, as follows:

“10.6 Investment Selection. All contributions under the Plan shall be delivered to the Trustee and shall be invested, as provided in Section 11.5, and in accordance with a Participant’s then current investment elections in one or more of the Investment Medium then available under the Plan. The Plan shall be administered in accordance with Section 404(c) of ERISA, and regulations and guidance promulgated thereunder.

(a) Investment Options (Other Than Parent Company Stock). The Investment Fiduciary Committee may provide any form of investment option it determines to be advisable; provided, however, that such funds and options are made available uniformly to all Participants and in accordance with Section 404(c) of ERISA. Such additional funds and options may include, but shall not be limited to mutual funds, target date funds, or any other investment fund comprising any combination of investments. The Investment Fiduciary Committee may eliminate any Investment Medium or Media under the Plan as the Investment Fiduciary Committee determines to be advisable, and, in connection with such change, direct that the amounts invested in any affected Investment Medium or Media be transferred to another Investment Medium or Media chosen by the Investment Fiduciary Committee.

(b) Parent Company Stock. Notwithstanding any provision herein to the contrary and subject to the Company's right to amend the Plan pursuant to Section 12.1, the Investment Fiduciary Committee shall have full discretion and authority to modify, remove, eliminate or restrict Parent Company Stock as an Investment Media under the Plan, with or without notice to Participants, and to transfer any amounts invested in Parent Company Stock to any other investment fund or option in the absence of the express written (or other method acceptable to the Committee) direction of the affected Participant with respect to such other investment fund or option."

(xiv) Section 11.5 is amended by adding the following sentences immediately following the first sentence of subsection (b):

"As provided in Section 17.2(b), no more than 15% of the contributions made by or on behalf of a Participant pursuant to Section 3.1 (Pre-Tax Basic and After Tax Supplement Contributions), Section 3.4 (Matching Contributions), Section 3.6(c) (Eco PEP Replacement Contributions) and Section 7.1 (Rollover Contributions) may be designated as Company Investment Contributions and allocated to the Participant's Parent Company Stock Account. In addition, as provided in Section 17.2(a), no more than 15% of the aggregate value of all the Accounts of a Participant, as represented by the Parent Company Stock Account, may be invested in Parent Company Stock, when such investment arises by reason of newly contributed monies, or exchanges out of other Investment Medium and, into Parent Company Stock."

(xv) Section 11.5(f) is revised to read, in its entirety, as follows (new text underlined):

"(f) Notwithstanding the Participants' ability to direct investments under this Section 11.5 and the Trustee's general authority under Section 11.4 to invest and hold Plan assets in any form of property, including common and preferred stocks, effective January 1, 2016 and through September 30, 2018, the Trustee shall not invest Plan assets in employer securities, as defined in section 407(d)(1) of ERISA."

(xvi) A new subsection (g) is added to Section 11.5 to read, in its entirety, as follows:

"Effective October 1, 2018, a Participant shall, pursuant to Article XVII and in accordance with rules established by the Committee, be eligible to: (i) direct that a portion of the amounts held in any of the Participant's Accounts under the Plan be allocated to the Participant's Parent Company Stock Account and invested in Parent Company Stock, and (ii) designate a portion of the contributions made by or on behalf of a Participant pursuant to Section 3.1 (Pre-Tax Basic and After Tax Supplement Contributions), Section 3.4 (Matching Contributions), Section 3.6(c) (Eco PEP Replacement Contributions) and Section 7.1 (Rollover Contributions) be allocated to the Participant's Parent Company Stock Account and invested in Parent Company Stock."

(xvii) A new Article XVII is added to the Plan to read, in its entirety, as follows:

**"ARTICLE XVII**  
**INVESTMENT IN PARENT COMPANY STOCK**

17.1 Establishment of Company Investment Program. Effective October 1, 2018, a Company Investment Program has been established as a component of the Plan. Such component of the Plan is designed to allow the establishment of a Parent Company Stock Account (as defined herein) for, and on behalf of, each Participant through which Participants may elect to invest in Parent Company Stock. All Participants' Parent Company Stock Accounts under the Plan shall be collectively administered under the Company Investment Program, with each such Parent Company Stock Account separately accounted for within the Company Investment Program.

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17.2 Parent Company Stock Account. Within the Company Investment Program, the Committee shall establish a Parent Company Stock Account, and any appropriate subaccounts, in the name of each Participant and shall thereafter maintain a record thereof. "Parent Company Stock Account" shall mean the subaccount(s) established pursuant to Section 4.1 to track holdings in Parent Company Stock, with respect to those Participants who elect to invest in Parent Company Stock pursuant to Section 11.5(g) and this Article XVII, including adjustments for withdrawals and distributions, and the earnings, losses and expenses attributable thereto.

(a) A Participant shall be eligible to direct that a portion of the amounts held in the Participant's Accounts under the Plan (with the exception of any amount that is not 100% vested pursuant to Section 6.1) be transferred to the Participant's Parent Company Stock Account and immediately thereafter be invested in Parent Company Stock, subject however to the limitation that no more than 15% of the aggregate value of all the Accounts of a Participant may be invested in Parent Company Stock, when such investment arises by reason of newly contributed monies, or exchanges out of other Investment Medium and, into Parent Company Stock.

(b) A Participant shall be eligible to elect that a portion of the contributions made by or on behalf of a Participant pursuant to Section 3.1 (Pre-Tax Basic and After Tax Supplement Contributions), Section 3.4 (Matching Contributions), Section 3.6(c) (Eco PEP Replacement Contributions) and Section 7.1 (Rollover Contributions) be designated as Company Investment Contributions and allocated to the Participant's Parent Company Stock Account, provided however that no more than 15% of any category of such contributions may be designated as Company Investment Contributions.

(c) The Parent Company Stock Account of each Participant shall be credited and debited periodically during each Plan Year in which a Parent Company Stock Account is maintained on behalf of a Participant with, as applicable: (i) any stock and cash dividends paid on the shares of Parent Company Stock then allocated to the Participant's Parent Company Stock Account; (ii) any additions in the number of shares of Parent Company Stock held for such Participant in the Plan due to a stock split issued with respect to such Parent Company Stock; and (iii) any additions or reductions in the number of shares of Parent Company Stock held for such Participant in the Plan due to the reallocation of the investment of the Participant's Parent Company Stock Account in accordance with Sections 10.6 and 17.4.

17.3 [Reserved]

17.4 Investment Directions. Notwithstanding the initial source of assets in a Participant's Parent Company Stock Account (e.g. Pre-Tax Basic Contributions, Matching Contributions, Personal Retirement Contributions, etc.) the Participant shall retain the right to direct investments of such Parent Company Stock Account, subject to the provisions of Sections 10.6, 11.5 and 17.2.

17.5 Payment of Dividends. Any cash dividends paid with respect to Parent Company Stock in the Company Investment Program as of the record date shall be reinvested in Parent Company Stock within a Participant's Parent Company Stock Account.



17.6 Voting and Tender of Parent Company Stock. Each Participant (which term for purposes of this Section shall include the beneficiary of a deceased Participant) shall be entitled to direct the Trustee, in accordance with the following, as to the exercise of any and all voting and all other rights attributable to a shareholder of record of Parent Company Stock then allocated to the Participant's Parent Company Stock Account.

(a) As soon as practicable following the record date for voting at any meeting of the shareholders of the Parent Company, the Committee shall furnish (or cause to be furnished) each Participant with an appropriate form whereby the Participant may instruct the Trustee as to the manner in which the Trustee is to vote the number of full shares (if any) of Parent Company Stock in the Participant's Parent Company Stock Account as of the Valuation Date that is the record date. If the board of directors of the Parent Company is soliciting proxies in connection with any such meeting, the Trustee shall use its best efforts to timely distribute (or cause to be distributed) to the Participants a copy of such proxy soliciting materials. All such instructions from Participants shall be maintained by the Trustee in accordance with procedures designed to safeguard the confidentiality of such information, except to the extent necessary to comply with law, regulation or legal process not preempted by ERISA. The Trustee shall vote shares in the manner instructed by the Participant.

The Trustee shall vote the shares of Parent Company Stock allocated to the Parent Company Stock Accounts of Participants as to which the Trustee has not received timely voting instructions in the same proportion as the shares as to which it has received timely voting instructions.

(b) As used herein, an "Acquisition Offer" shall be an offer made by any person or group to acquire or exchange all or part of the outstanding securities of the Parent Company, including any such securities held in the Plan. In the event of an Acquisition Offer, (i) the Committee shall use its best efforts to timely distribute (or cause to be distributed) to the Participants a copy of such information that is distributed to stockholders in connection with such Acquisition Offer and (ii) each Participant shall be entitled to direct the Trustee (on a form furnished (or caused to be furnished) by the Committee) to tender or exchange all or part of the shares of Parent Company Stock in the Participant's Parent Company Stock Account. If the Trustee timely receives such an instruction to tender or exchange a Participant's securities, the Trustee shall tender or exchange the Participant's securities in accordance with such instructions. All such instructions from Participants shall be maintained by the Trustee in accordance with procedures designed to safeguard the confidentiality of such information, except to the extent necessary to comply with law, regulation or legal process not preempted by ERISA. Any such securities as to which the Trustee does not timely receive instructions shall not be tendered or exchanged by the Trustee. Any reasonable expenses of the Trustee related to the distribution of such materials shall be borne by the Company or the Participating Companies.

17.7 Right to Receive a Distribution of Stock. The distribution of a Participant's Parent Company Stock Account will be made in accordance with Article V. At the Participant's election, such distribution will be made in whole shares of Parent Company Stock (with the value of any fractional share of Parent Company Stock paid in cash), cash, or a combination of both in accordance with Section 5.7. In the event a Participant elects to receive a distribution of Parent Company Stock Account in whole shares, upon request of the Participant, such distribution may be made in accordance with Code section 402(e)(4), and regulations promulgated thereunder. In the absence of a Participant election regarding the distribution of the Participant's Parent Company Stock Account, such distribution shall be paid in cash.

17.8 Share Legend. Shares of Parent Company Stock in the Plan held or distributed by the Trustee may include such legend restrictions on transferability as the Parent Company may reasonably require in order to assure compliance with applicable federal and state securities laws.”

(xviii) Schedule A (Participating Companies) is amended to read, in its entirety, as follows (new text underlined):

“The following employers have duly adopted this Plan for their employees and are thus Participating Companies as of January 1, 2016:

PQ Corporation  
Potters Industries, LLC (successor in interests of Potters Industries Inc.)

The following employer has duly adopted this Plan for its employees and is thus a Participating Company as of December 1, 2016:

Eco Services Operations Corp.”

**IN WITNESS WHEREOF**, the Company has caused this Third Amendment to be executed by its duly authorized representative this 28th day of September, 2018.

PQ Corporation

By: /s/ William J. Sichko, Jr.

*Signature*

Title: Chief Administrative Officer

William J. Sichko, Jr.

*Name printed*

INTERNAL REVENUE SERVICE  
P. O. BOX 2508  
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: SEP 22 2017

Employer Identification Number:  
23-0972750

DLN:  
17007035081016

PQ CORPORATION  
C/O COZEN OCONNOR  
JOHN H WILSON  
ONE OXFORD CENTRE 26TH FLR  
PITTSBURGH, PA 15219

Person to Contact:  
HOPE A CROUCH  
Contact Telephone Number:  
(513) 975-6170

ID# 17156

Plan Name:  
PQ CORPORATION SAVINGS PLAN

Plan Number: 003

Dear Applicant:

Based on the information you provided, we're issuing this favorable determination letter for your plan listed above. Our favorable determination only applies to the status of your plan under the Internal Revenue Code. To use this letter as proof of the plan's status, you must keep this letter, the application forms, and all correspondence with us about your application.

Your determination letter doesn't apply to any qualification changes that become effective, any guidance issued, or any statutes enacted after the dates specified in the Cumulative List of Changes in Plan Requirements (the Cumulative List) .

Your plan's continued qualification in its present form will depend on its effect in operation (Income Tax Regulations Section 1.401-1(b) (3)). We may review the status of the plan in operation periodically.

You can find more information on favorable determination letters in Publication 794, Favorable Determination Letter, including:

- The significance and scope of reliance on this letter
- The effect of any elective determination request in your application materials
- The reporting requirements for qualified plans
- Examples of the effect of a plan's operation on its qualified status.

You can get a copy of Publication 794 by visiting our website at [www.irs.gov/formspubs](http://www.irs.gov/formspubs) or by calling 1-800-TAX-FORM (1-800-829-3676) to request a copy.

This letter considered the 2014 Cumulative List of Changes in Plan Qualification Requirements.

This determination letter applies to the amendments dated on 1/27/16 & 12/30/13.

This determination letter also applies to the amendments dated on

Letter 5274

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PQ CORPORATION

9/9/09.

We made this determination on the condition you adopt the proposed amendments you submitted in your letter dated 9/19/17, on or before the date provided in Income Tax Regulations Section 1.401(b) -1.

If you submitted a Form 2848, Power of Attorney and Declaration of Representative, or Form 8821, Tax Information Authorization, with your application and asked us to send your authorized representative or appointee copies of written communications, we will send a copy of this letter to him or her.

If you have questions, contact the person listed at the top of this letter.

Sincerely,

/s/ Khin M. Chow

Director, Employee Plans  
Rulings and Agreements

Letter 5274

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on FormS-8 of our report dated March 22, 2018 relating to the financial statements and financial statement schedule, which appears in PQ Group Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017.

/s/ PricewaterhouseCoopers LLP  
Philadelphia, Pennsylvania  
October 1, 2018

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on FormS-8 of PQ Group Holdings Inc. of our report dated March 22, 2018, relating to the financial statements of Zeolyst International, which appears in PQ Group Holdings Inc.'s Annual Report on Form 10 -K for the year ended December 31, 2017.

/s/ PricewaterhouseCoopers LLP  
Philadelphia, Pennsylvania  
October 1, 2018