

QUAKER CHEMICAL CORP  
Form 11-K  
June 22, 2016

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

**FORM 11-K**

**[X] ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended December 31, 2015**

**OR**

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

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

**Commission file number 001-12019**

**A. Full title of plan and the address of the plan, if different from that of the issuer named below:**

**Quaker Chemical Corporation**

**Retirement Savings Plan**

**B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:**

**Quaker Chemical Corporation**

**One Quaker Park**

**901 E. Hector Street**

**Conshohocken, PA 19428-2380**



**Quaker Chemical Corporation**

**Retirement Savings Plan**

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**Report of Independent Registered Public Accounting Firm**

**To the Plan Administrator**

**Quaker Chemical Corporation Retirement Savings Plan**

**Conshohocken, Pennsylvania**

We have audited the accompanying statements of net assets available for benefits of the Quaker Chemical Corporation Retirement Savings Plan (the "Plan") as of December 31, 2015 and 2014, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2015 and 2014, and the changes in net assets available for benefits for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

The accompanying supplemental Schedule of Assets (Held at End of Year) as of December 31, 2015 has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental schedule is the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental schedule reconciles to the financial statements or the underlying accounting and other records, as applicable and performing procedures to test the completeness and accuracy of the information presented in the supplemental schedule. In forming our opinion on the supplemental schedule, we evaluated whether the supplemental schedule, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental schedule is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ BDO USA, LLP

**Philadelphia, Pennsylvania**  
**June 22, 2016**

**QUAKER CHEMICAL CORPORATION****RETIREMENT SAVINGS PLAN****STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS**

	<b>As of December 31,</b>	
	<b>2015</b>	<b>2014</b>
<b>Assets</b>		
Investments:		
Registered investment companies	\$ 63,655,016	\$ 62,344,894
Vanguard Retirement Savings Trust	11,187,003	10,660,691
Quaker Chemical Corporation Stock Fund	25,084,402	27,986,422
Participant-directed brokerage account	1,196,181	1,354,961
Total investments	101,122,602	102,346,968
Receivables:		
Employer's contributions	140,374	145,258
Participant notes receivable	1,672,037	1,773,083
Total receivables	1,812,411	1,918,341
Net assets available for benefits	\$ 102,935,013	\$ 104,265,309

*The accompanying notes are an integral part of the financial statements*

**QUAKER CHEMICAL CORPORATION**  
**RETIREMENT SAVINGS PLAN**

**STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS**

	<b>For the Year Ended December 31,</b>	
	<b>2015</b>	<b>2014</b>
<b>Additions</b>		
Investment income:		
Interest and dividend income, investments	\$ 3,861,630	\$ 2,699,140
Net (decrease) increase in fair value of investments	(7,360,470)	6,881,843
	(3,498,840)	9,580,983
Interest income, participant notes receivable	71,419	64,295
Contributions:		
Employer	2,747,149	2,588,065
Participant	4,374,025	3,948,252
	7,121,174	6,536,317
Other additions:		
Plan merger assets transfer in	—	6,000,515
Total additions	3,693,753	22,182,110
<b>Deductions</b>		
Payment of benefits	5,024,049	8,869,456
Total deductions	5,024,049	8,869,456
Net (decrease) increase	(1,330,296)	13,312,654
Net assets available for benefits:		
Beginning of year	104,265,309	90,952,655
End of year	\$ 102,935,013	\$ 104,265,309

*The accompanying notes are an integral part of the financial statements*



**Quaker Chemical Corporation**

**Retirement Savings Plan**

**Notes to Financial Statements**

**NOTE 1 – DESCRIPTION OF PLAN**

The following description of the Quaker Chemical Corporation Retirement Savings Plan (the “Plan”) provides only general information. The Plan document provides a complete description of the Plan’s provisions.

*General*

The Plan is a defined contribution plan for certain U.S. employees of Quaker Chemical Corporation (the “Company”) and adopting affiliates (AC Products, Inc. (“AC”), Epmar Corporation (“Epmar”), G.W. Smith & Sons, Inc. (“G.W. Smith”) and Summit Lubricants, Inc. (“Summit”). The Plan is administered by the Global Pension Committee, which is appointed by the Company’s Board of Directors, and is subject to the Employee Retirement Income Security Act of 1974 (“ERISA”).

Employees of the Company and adopting affiliates are eligible to participate in the Plan on their first day of employment or as soon as administratively practicable thereafter, unless specified differently in any bargaining unit agreement.

*Plan Amendments*

The Plan was amended effective January 1, 2014 to allow eligible employees of G.W. Smith and Summit to become participants in the Plan. Concurrent with the amendment, G.W. Smith and Summit became adopting affiliates. The Plan was further amended to merge the G.W. Smith 401(k) Profit Sharing Plan and the Summit 401(k) Plan. The mergers were effective as of January 1, 2014 and the transfers of assets into the Plan occurred in May of 2014. G.W. Smith and Summit participants are not eligible for the Plan’s discretionary non-elective contribution.

As of January 1, 2014, participants who are subject to the collective bargaining agreement with UAW Local 174 became eligible for the non-elective nondiscretionary contribution, equal to 3% of the eligible participant’s compensation, to the extent the participants have completed one year of service.

The Plan was further amended effective January 1, 2014 to broaden the forms of after-tax rollover contributions accepted by the Plan to include any amounts in the participants G.W. Smith or Summit accounts that are attributable to rollover contributions. Such amounts will be transferred to the participant’s Rollover Account under the Plan.

*Contributions*

Participants may elect to contribute on a before-tax and/or after-tax basis any whole percentage of their compensation, up to 50%, during the year, not to exceed the annual Internal Revenue Code limits. At the discretion of the Global Pension Committee, the Plan matches 50% of the first 6% of compensation that is contributed to the Plan, with a maximum matching contribution of 3% of compensation. No changes were made to the discretionary matching provision during 2015 or 2014. In addition, the Plan provides for a non-elective nondiscretionary contribution on behalf of participants who have completed one year of service equal to 3% of the eligible participant's compensation.

All employer contributions may be allocated to the Company Stock Fund, at the sole discretion of the Global Pension Committee. Participants may diversify the investment of Plan funds that are automatically invested in the Company Stock Fund.

The Company's Board of Directors (and AC's Board of Directors with respect to AC participants) reserves the right to make future discretionary non-elective contributions, which are allocated on the basis of eligible participants' compensation. Upon completing one year of service, an eligible participant is eligible to receive discretionary non-elective contributions on the first day of the month coinciding with or next following the date on which the participant meets the one year of service requirement. Epmar, G.W. Smith and Summit participants are not eligible for a discretionary non-elective contribution.

Participants who are eligible to make contributions and who have or will attain age 50 before the end of the Plan year are eligible to make catch-up contributions in accordance with, and subject to, the limitations of Internal Revenue Code Section 414(v). No Company matching contributions are made with respect to catch-up contributions.

The Company makes its non-elective nondiscretionary contribution and a portion of its discretionary matching contribution in shares of Company common stock. Non-cash contributions made by the Company were \$2,133,574 and \$1,999,217 in 2015 and 2014, respectively.

*Participant Accounts*

Each participant's account is credited or deducted with the participant's contribution and any applicable direct expenses and allocation of the Company's contributions and any Plan earnings and losses.

**Quaker Chemical Corporation**

**Retirement Savings Plan**

**Notes to Financial Statements – Continued**

*Participant Notes Receivable*

Participants may borrow from their fund accounts (other than amounts invested in the Company Stock Fund) an amount limited to the lesser of \$50,000 or 50% of the participant's vested account balance. The loans bear interest at a rate equal to the prevailing rate of interest charged for similar loans by lending institutions in the community (generally the prime rate), plus 1%. The term of each participant loan generally may not exceed five years except for principal residence loans. Interest rates on outstanding participant notes receivable at December 31, 2015 and 2014 ranged from 4.25% to 9.25%. Principal and interest is paid ratably through periodic payroll deductions. Loan application fees and annual maintenance fees on all outstanding loans are paid by the participant.

*Payment of Benefits*

Generally, upon separation of service, for any reason, a participant may receive a lump sum amount equal to the value of the participant's account. In addition, a participant may elect to take an in-service distribution from their rollover account prior to reaching age 59 ½, and from all accounts upon reaching age 59 ½. If a participant's vested account balance exceeds \$1,000, the participant may defer payment until the first of the month coincident with or next following attainment of age 65.

*Hardship Withdrawals*

Participants who are actively employed and who meet certain requirements may take a hardship withdrawal from their elective contributions. Participants who receive a hardship withdrawal will not be eligible to make contributions for six months following the receipt of the hardship withdrawal.

*Vesting*

Upon entering the Plan, participants are fully vested in Company matching contributions, Company discretionary non-elective contributions, Company nondiscretionary non-elective contributions and employee deferrals plus actual earnings.

*Plan Termination*

Although it has not expressed any intent to do so, the Company has the right to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, participants would remain 100% vested.

**NOTE 2 – SUMMARY OF ACCOUNTING POLICIES**

*Basis of Accounting*

The Plan's financial statements are prepared on the accrual basis of accounting.

*Use of Estimates*

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein, and disclosure of contingent assets and liabilities. The most significant estimate is the determination of the fair values of the Plan's investments. Actual results could differ from those estimates.

*Administration of Plan Assets*

The Plan's assets are held by the Trustee of the Plan. Certain administrative functions are performed by officers or employees of the Company. No such officer or employee receives compensation from the Plan. Substantially all administrative expenses, including the Trustee's and audit fees, are paid directly by the Company and are therefore excluded from these financial statements.

*Investment Valuation and Income Recognition*

The Plan's investments are recorded at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Plan management determines the Plan's valuation policies utilizing information provided by the Trustee. Refer to Note 5 – Fair Value Measures for further information.

Purchases and sales of investments are recorded on a trade-date basis. Net (decrease) increase in fair value of investments includes gains and losses on investments bought and sold during the year as well as unrealized gains and losses on those held at year end. Interest income is accrued when earned. Dividend income is recorded on the ex-dividend date. Capital gain distributions are included in dividend income.

Net investment returns reflect certain fees paid by the investment funds, which include costs for portfolio management, administrative and other services as described in each fund's prospectus. These fees are deducted by the investment funds prior to allocation of the Plan's investment earnings activity and are therefore not separately identified as Plan expenses.

**Quaker Chemical Corporation**

**Retirement Savings Plan**

**Notes to Financial Statements – Continued**

*Participant Notes Receivable*

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Interest income is recorded on the accrual basis. No allowance for credit losses was recorded as of December 31, 2015 or 2014. Delinquent notes receivable from participants are recorded as a benefit payment when the Plan Administrator deems the participant note receivable to be in default based on the terms of the Plan document.

*Payment of Benefits*

Benefits are recorded when paid.

*Recently Issued Accounting Standards*

In July 2015, the Financial Accounting Standards Board (“FASB”) issued Accounting Standard Update (“ASU”) No. 2015-12, *Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): (Part I) Fully Benefit-Responsive Investment Contracts, (Part II) Plan Investment Disclosures, (Part III) Measurement Date Practical Expedient*. The amendments in this update remove the requirement to report fully benefit-responsive investment contracts at fair value with an adjustment to contract value and to simplify certain investment disclosures required for employee benefit plans. The update designates contract value as the only required measure for fully benefit-responsive investment contracts and eliminates certain disclosures (Part I). Additionally, the update eliminates the requirements to disclose individual investments greater than 5% or more of net assets available for benefits, the net appreciation or depreciation for investments by general type, and the investment information disaggregated based on nature, characteristics and risks. The update eliminates the requirement to disaggregate participant-directed investments within a self-directed brokerage account and allows for reporting such investments as a single type of investment (Part II). The update also allows plans to measure investments and investment-related accounts as of a month-end date that is closest to the plan’s fiscal year end, when the fiscal period does not coincide with a month-end (Part III). The amendments in this update are effective for fiscal years beginning after December 15, 2015 and should be applied on a retrospective basis for the periods presented for Parts I and II and on a prospective basis for Part III. Early adoption is permitted.

In May 2015, the FASB issued ASU No. 2015-07, *Fair Value Measurement (Topic 820) – Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent) (Subtopic 835-30)* regarding the required disclosures for entities that elect to measure the fair value of certain investments using the net asset value per share (or its equivalent) practical expedient in accordance with the fair value measurement authoritative guidance. The update removes the requirement to categorize within the fair value hierarchy investments that are eligible to be measured at fair value using the net asset value per share practical expedient, and also limits the requirement to make certain other disclosures, for all such investments. The amendments in this update are effective for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years, and should be applied on a retrospective basis for the periods presented. Early adoption is permitted.

The Plan has elected to early adopt the applicable parts of the above recently issued accounting standards in 2015 and, accordingly, has prepared the accompanying financial statements and footnotes in conformance with the applicable standards.

**NOTE 3 – RISKS AND UNCERTAINTIES**

The Plan provides for investment options in various investment securities. Investment securities are exposed to various risks such as interest rate, credit and overall market volatility risks. Due to levels of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

**NOTE 4 – VANGUARD RETIREMENT SAVINGS TRUST**

The Plan invests in a trust, the Vanguard Retirement Savings Trust ("VRST"), which is composed of an investment in fully benefit-responsive contracts that are issued by insurance companies and commercial banks and in contracts that are backed by bond funds and trusts that are selected by the Trustee. Contract value, as reported by VRST, is the amount participants would receive if they were to initiate a permitted transaction under the terms of the Plan, and also, represents contributions made under the contract, plus earnings, less participant withdrawals. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value. Certain events limit the Plan's ability to transact at contract value, including: 1) Premature termination of the contracts by the Plan; 2) Plan termination; and 3) Bankruptcy of the Plan sponsor. The Plan administrator does not believe that any events that would limit the Plan's ability to transact at contract value with Plan participants are probable of occurring. Contract issuers may terminate and settle the contracts at other than contract value if there is a change in qualification status of a participant, sponsor or plan, a breach of material obligations under the contract and misrepresentation by the contract holder or failure of the underlying portfolio to conform to pre-established investment guidelines.

**Quaker Chemical Corporation**

**Retirement Savings Plan**

**Notes to Financial Statements – Continued**

**NOTE 5 – FAIR VALUE MEASURES**

The Plan applies the guidance of the FASB regarding fair value measurements, which establishes a common definition for fair value. Specifically, the guidance utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The following is a brief description of those three levels:

- Level 1: Observable inputs such as quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.
- Level 3: Unobservable inputs that reflect the reporting entity's own assumptions.

The following is a description of the valuation methodologies used for the investments measured at fair value, including the general classification of such instruments pursuant to the valuation hierarchy:

*Registered Investment Companies*

The shares of registered investment companies, which represent the NAV of shares held by the Plan, are valued based on quoted market prices on an exchange in an active market and are classified as Level 1 investments.

*Common Stock Fund*

The common stock fund is comprised of investments in the Quaker Chemical Corporation Stock Fund, which is composed of shares of the Company and uninvested cash. The shares of the Company are traded on an exchange in an active market and are classified as a Level 1 investment.

*Participant-Directed Brokerage Account*

The participant-directed brokerage account is mainly composed of investments in common stock and registered investment companies, which are valued based on quoted market prices on an exchange in an active market and are classified as Level 1 investments.

The valuation methodologies described above may produce fair value calculations that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methodologies are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date. There have been no significant changes in methodologies used or transfers between levels during the years ended December 31, 2015 and 2014.

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As of December 31, 2015 and 2014, the Plan's investments measured at fair value on a recurring basis were as follows:

<u>Assets</u>	<b>Fair Value Measurements at December 31, 2015</b>			
	<b>Total Fair Value</b>	<b>Using Fair Value Hierarchy</b>		
		<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
Registered investment companies	\$ 63,655,016	\$ 63,655,016	\$ —	\$ —
Common stock fund	25,084,402	25,084,402	—	—
Participant-directed brokerage account	1,196,181	1,196,181	—	—
Total investments in fair value hierarchy	\$ 89,935,599	\$ 89,935,599	\$ —	\$ —
Common/collective trust measured at NAV *	11,187,003	—	—	—
Total investments	\$ 101,122,602	\$ 89,935,599	\$ —	\$ —



## Quaker Chemical Corporation

## Retirement Savings Plan

## Notes to Financial Statements – Continued

<u>Assets</u>	Fair Value Measurements at December 31, 2014				
	Total Fair Value	Using Fair Value Hierarchy			Level 3
		Level 1	Level 2	Level 3	
Registered investment companies	\$ 62,344,894	\$ 62,344,894	\$ —	\$ —	—
Common stock fund	27,986,422	27,986,422	—	—	—
Participant-directed brokerage account	1,354,961	1,354,961	—	—	—
Total investments in fair value hierarchy	\$ 91,686,277	\$ 91,686,277	\$ —	\$ —	—
Common/collective trust measured at NAV *	10,660,691	—	—	—	—
Total investments	\$ 102,346,968	\$ 91,686,277	\$ —	\$ —	—

\* Certain investments that are measured at fair value using the NAV per share (or its equivalent) have not been classified in the fair value hierarchy in accordance with the adoption of ASU 2015-07. The fair value amounts presented in these tables are intended to permit reconciliation of the fair value hierarchies to the line items presented in the statements of net assets available for benefits.

**NOTE 6 – PARTY-IN-INTEREST TRANSACTIONS**

The Plan invests in shares of mutual funds and a collective trust managed by an affiliate of Vanguard Fiduciary Trust Company (“VFTC”). VFTC acts as Trustee for Plan investments. In addition, certain Plan assets are invested in shares of the Quaker Chemical Corporation Stock Fund. Transactions in such investments qualify as party-in-interest transactions and are exempt from the prohibited transaction rules. Fees incurred by the Plan for investment management services are included in the net (decrease) increase in the fair value of investments.

Participant notes receivable qualify as party-in-interest transactions and are exempt from the prohibited transaction rules.

**NOTE 7 – TAX STATUS**

The Internal Revenue Service (“IRS”) informed the Company by letter dated September 27, 2012, that the Plan is qualified under Internal Revenue Code (“IRC”) Section 401(a). The Plan has since been amended, however, the plan administrator continues to believe the Plan is currently designed and being operated in compliance with the applicable requirements of the IRC. The Plan was submitted for a favorable determination letter application on January 29, 2016. The plan administrator has not identified any uncertain tax positions which would require adjustment to or disclosure in the Plan’s financial statements. The IRS has the ability to examine the Plan’s tax return filings for all open tax years, which generally relate to the three prior years.

**NOTE 8 – PLAN MERGER**

In May 2014, the G.W. Smith 401(k) Profit Sharing Plan and the Summit 401(k) Plan were merged into the Plan. The assets transferred into the Plan are included in the Statement of Changes in Net Assets Available for Benefits as Other additions. The assets transferred were as follows:

	<b>Assets Transferred</b>
Participant assets	\$ 5,983,886
Participant loan accounts	16,629
Total assets transferred in	\$ 6,000,515

**NOTE 9 – RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500**

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500 as of December 31, 2014:

	<b>2014</b>
Net assets available for benefits per the financial statements	\$ 104,265,309
Adjustment from contract value to fair value for fully-benefit responsive investment contracts	327,253
Net assets available for benefits per the Form 5500	\$ 104,592,562

**Quaker Chemical Corporation**

**Retirement Savings Plan**

**Notes to Financial Statements – Continued**

The following is a reconciliation of the changes in net assets available for benefits per the financial statements to the Form 5500 for the year ended December 31, 2015:

	<b>2015</b>
Decrease in net assets available for benefits per the financial statements	\$ (1,330,296)
Change in adjustment from contract value to fair value for fully benefit-responsive investment contracts	(327,253)
Decrease in net assets available for benefits per the Form 5500	\$ (1,657,549)

**NOTE 10 – SUBSEQUENT EVENTS**

The Plan was amended and restated effective January 1, 2016 to incorporate prior amendments and to exclude certain items from the definition of compensation.

The Company and the Plan have evaluated subsequent events through the date that these financial statements were issued, and there were no subsequent events, other than described above, which would require an adjustment or additional disclosures to the financial statements.

**Quaker Chemical Corporation**

**Retirement Savings Plan**

**Schedule of Assets (Held at End of Year)**

**As of December 31, 2015**

Quaker Chemical Corporation Retirement Savings Plan, EIN 23-0993790, PN 112

Attachment to Form 5500, Schedule H, Part IV, Line i:

<b>Identity of Issue</b>	<b>Investment Type</b>	<b>Current Value (a)</b>
Columbia Small Cap Growth Fund, Inc.	Registered Investment Company	\$ 3,200,702
* Vanguard 500 Index Fund Investor Shares	Registered Investment Company	14,878,224
* Vanguard Balanced Index Fund Investor Shares	Registered Investment Company	3,123,572
* Vanguard Extended Market Index Fund Investor Shares	Registered Investment Company	4,679,471
* Vanguard International Growth Fund Investor Shares	Registered Investment Company	4,031,817
* Vanguard Prime Money Market Fund	Registered Investment Company	320
* Vanguard Target Retirement 2010 Fund	Registered Investment Company	453,369
* Vanguard Target Retirement 2015 Fund	Registered Investment Company	1,335,531
* Vanguard Target Retirement 2020 Fund	Registered Investment Company	4,040,738
* Vanguard Target Retirement 2025 Fund	Registered Investment Company	3,587,807
* Vanguard Target Retirement 2030 Fund	Registered Investment Company	2,945,004
* Vanguard Target Retirement 2035 Fund	Registered Investment Company	1,292,915
* Vanguard Target Retirement 2040 Fund	Registered Investment Company	1,406,077
* Vanguard Target Retirement 2045 Fund	Registered Investment Company	775,448
* Vanguard Target Retirement 2050 Fund	Registered Investment Company	773,394
* Vanguard Target Retirement 2055 Fund	Registered Investment Company	340,535
* Vanguard Target Retirement 2060 Fund	Registered Investment Company	34,334
* Vanguard Target Retirement Income	Registered Investment Company	2,052,653
* Vanguard Total Bond Market Index Fund Investor Shares	Registered Investment Company	6,109,537
* Vanguard U.S. Growth Fund Investor Shares	Registered Investment Company	5,045,568
* Vanguard Windsor II Fund Investor Shares	Registered Investment Company	3,548,000
* Vanguard Brokerage Option	Vanguard Brokerage Option	1,196,181
* Vanguard Retirement Savings Trust	Common/Collective Trust	11,187,003
* Quaker Chemical Corporation	Common Stock Fund	25,084,402
* Participant notes receivable	(4.25% to 9.25%)	1,672,037
		\$ 102,794,639

\* Party-in-Interest

(a) Cost is not required for participant directed investments

Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed by the undersigned hereunto duly authorized.

June 22, 2016

Quaker Chemical Corporation Retirement Savings Plan

By:

/s/ Mary Dean Hall

Mary Dean Hall, Vice President, Chief  
Financial Officer and Treasurer