

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

**FORM 11-K**

(Mark One)

**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 numbers: 333-136463, 333-174883, 333-196664**

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

**Airgas, Inc. Deferred Compensation Plan II**

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

**Airgas, Inc.  
259 North Radnor-Chester Road  
Suite 100  
Radnor, PA 19087-5283**

**AIRGAS, INC.**  
**DEFERRED COMPENSATION PLAN II**

ANNUAL REPORT ON FORM 11-K

December 31, 2015

**TABLE OF CONTENTS**

	<u>Page</u>
<a href="#">Report of Independent Registered Public Accounting Firm</a>	<a href="#">3</a>
AUDITED FINANCIAL STATEMENTS	
<a href="#">Statements of Financial Position as of December 31, 2015 and 2014</a>	<a href="#">4</a>
<a href="#">Statements of Changes in Plan Equity for the Years Ended December 31, 2015, 2014 and 2013</a>	<a href="#">5</a>
<a href="#">Notes to Financial Statements</a>	<a href="#">6</a>
<a href="#">SIGNATURES</a>	<a href="#">9</a>
<a href="#">EXHIBIT INDEX</a>	

## **Report of Independent Registered Public Accounting Firm**

The DCP II Committee:

We have audited the accompanying statements of financial position of the Airgas, Inc. Deferred Compensation Plan II (the Plan) as of December 31, 2015 and 2014, and the related statements of changes in plan equity for each of the years in the three-year period ended December 31, 2015. 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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 financial position of the Plan as of December 31, 2015 and 2014, and the changes in plan equity for each of the years in the three-year period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

Philadelphia, Pennsylvania  
March 29, 2016

**AIRGAS, INC.**  
**DEFERRED COMPENSATION PLAN II**  
**STATEMENTS OF FINANCIAL POSITION**

	<u>December 31,</u> <u>2015</u>	<u>December 31,</u> <u>2014</u>
<b>ASSETS</b>		
Receivable from Airgas, Inc.	\$ 14,587,056	\$ 13,435,901
<b>PLAN EQUITY</b>		
Plan equity	\$ 14,587,056	\$ 13,435,901

See accompanying notes to financial statements.

**AIRGAS, INC.**  
**DEFERRED COMPENSATION PLAN II**

STATEMENTS OF CHANGES IN PLAN EQUITY

	Years Ended December 31,		
	2015	2014	2013
Increases (decreases) in plan equity attributed to:			
Investment income from notional investments:			
Net appreciation (depreciation) in fair value of investments	\$ (569,866)	\$ 34,568	\$ 1,834,443
Dividends and realized gains	954,232	910,842	462,076
Net investment income	384,366	945,410	2,296,519
Participant contributions to notional investments	1,999,150	1,386,884	1,951,929
Participant distributions from notional investments	(1,232,361)	(2,453,226)	(882,684)
Net change in plan equity	1,151,155	(120,932)	3,365,764
Plan equity at beginning of period	13,435,901	13,556,833	10,191,069
Plan equity at end of period	<u>\$ 14,587,056</u>	<u>\$ 13,435,901</u>	<u>\$ 13,556,833</u>

See accompanying notes to financial statements.

**AIRGAS, INC.**  
**DEFERRED COMPENSATION PLAN II**  
NOTES TO FINANCIAL STATEMENTS

**(1) Description of the Plan**

The following description of the Airgas, Inc. Deferred Compensation Plan II provides general information only. Participants should refer to the Plan document for more complete information.

*General*

The Deferred Compensation Plan II was originally approved by the Board of Directors of Airgas, Inc. (the “Board”) on May 24, 2006 effective July 2006, and was amended and restated by the Board on August 4, 2015 effective September 1, 2015 (the “Plan”). The purpose of the Plan is to permit non-employee directors and a select group of highly compensated employees of Airgas, Inc. and its subsidiaries (“Airgas” or the “Company”) to defer the receipt of compensation for personal income tax purposes that would otherwise become payable to them. It is intended that the Plan, by providing this deferral opportunity, will assist the Company in retaining and attracting individuals of exceptional ability by providing them with this benefit.

The DCP II Committee (the “Committee”), appointed by the Board, serves as the Plan Administrator. At its sole discretion, the Board may, at any time, partially or completely terminate the Plan.

*Participation and Deferrals*

Plan participation is limited to non-employee directors and those key employees who are designated by the Committee as eligible to participate in the Plan. The Plan permits the deferral of up to 75% of the participant’s salary, and up to 100% of the participant’s bonus or director’s fee. Participant deferrals are credited to a book account and are deemed invested in notional investment funds selected by the participant from a family of funds, one of which tracks the Company’s common stock (see Note 2). Investment gains and losses are credited or charged to a participant’s account based on earnings or losses in the selected valuation funds. Participant deferrals and net notional investment gains or losses that are credited or charged to a participant’s account are fully vested. However, participant deferrals are not protected from investment risk in the notional funds.

*Distributions*

Distribution of amounts credited to a participant’s account will commence upon the date specified by the participant. A participant must elect, effective as of the beginning of each calendar year, a distribution date with respect to his or her deferrals for such plan year. Such a date may be a specified date that is no earlier than during the third year following the plan year with respect to which the deferrals designated for distribution were credited to the participant’s account (a “Specified Date”), without regard to Separation from Service (as defined below). Alternatively, a participant may elect to have distributions of his or her deferrals for such plan year commence upon Separation from Service, or commence at the earlier of the Specified Date or Separation from Service. Separation from Service means a participant’s termination of employment or termination of service as a non-employee director with the Company, including the death of a participant. A participant may choose benefit payments in either a lump sum or annual, quarterly or monthly installments for between two and fifteen years. A participant may change the timing of his or her distributions. However, the change must be made at least one year prior to the date the distribution was to begin, and the added period of deferral must be at least five years after the date the deferral was to be distributed and is not effective until twelve months after the date the change was made. Distributions to participants are payable in cash.

A participant who suffers a severe financial hardship due to an unforeseeable emergency may request a hardship withdrawal from the Plan. The Committee has complete discretion to determine whether to permit any such hardship withdrawal. The amount of any hardship withdrawal may not exceed the amount that the Committee determines to be necessary to alleviate the hardship (plus an amount necessary to pay any taxes applicable to the distribution).

**AIRGAS, INC.**  
**DEFERRED COMPENSATION PLAN II**

NOTES TO FINANCIAL STATEMENTS (continued)

In the event of a change in the ownership or effective control of Airgas (a “Change in Control”), the Committee or, if so determined by the Board, the Board shall distribute the participants’ accounts to the participants, terminate the plan and distribute the participants’ accounts, or make appropriate provisions for an acquiring employer in the Change of Control to assume and continue the Plan in effect. To the extent that the Change in Control results in a participant’s Separation from Service, the Board will pay the participant the amount held in his or her account in accordance with the participant’s election described above.

*Trust*

The Plan is an unfunded plan. The obligation to make benefit payments under the Plan is solely an obligation of the Company. However, the Company may establish one or more trusts to assist in the payment of benefits. The Company has established a trust (the “Trust”) for the Plan, in which the Vanguard Fiduciary Trust Company (“Vanguard”) serves as the trustee. Although the Company maintains the Trust to accumulate certain assets to assist the Company in meeting its obligations under the Plan, the Plan has no investments of its own. The sole asset of the Plan is a receivable from the Company in an amount equal to the sum of all participants’ account balances. Plan participants are considered to be unsecured creditors, with no secured or preferential rights to any assets of the Company. Assets held by the Trust are available to the Company’s general creditors in the event of insolvency of the Company.

As of December 31, 2015, the Trust assets were primarily invested in various mutual funds of Vanguard and a fund based on the common stock of Airgas, Inc. All investments of the Trust are carried at fair value. The weighted average cost of specific investments sold by the Trust is used to compute realized gains and losses.

**(2) Merger Agreement**

On November 17, 2015, the Company announced that it had entered into a definitive agreement for the acquisition of the Company by L’Air Liquide, S.A. (“Air Liquide”) in a merger (the “Merger”) pursuant to an Agreement and Plan of Merger, dated November 17, 2015, by and among the Company, Air Liquide and AL Acquisition Corporation, an indirect wholly owned subsidiary of Air Liquide (the “Merger Agreement”). As consideration for the Merger, each outstanding share of the common stock of the Company, will automatically be converted into the right to receive \$143 in cash. The notional investment fund under the Plan related to the Company’s common stock will continue until the Merger is complete; however, as of January 5, 2016, no additional contributions into the fund will be allowed.

The closing of the Merger is subject to customary closing conditions, including the adoption of the Merger Agreement by the affirmative vote of the holders of at least a majority of all outstanding shares of common stock, which occurred on February 23, 2016, and the receipt of antitrust approval, which is yet to be received.

**(3) Summary of Accounting Policies**

*Basis of Accounting*

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

*Use of Estimates*

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires Plan management to make estimates and assumptions that affect the reported amounts of assets and changes in Plan equity. Actual results could differ from those estimates.

**AIRGAS, INC.**  
**DEFERRED COMPENSATION PLAN II**

NOTES TO FINANCIAL STATEMENTS (continued)

*Receivable from the Company*

The Plan is unfunded with benefits paid solely out of the general assets of the Company. The Plan records a receivable from the Company equal to the sum of all participants' account balances. The carrying value of the receivable approximates fair value.

*Administrative Expenses of the Plan*

All administrative expenses of the Plan are paid by the Company. Any brokerage fees for the purchase of shares on behalf of Plan participants are paid by the Company.

*Risks and Uncertainties*

The amount of the Plan's receivable from Airgas, Inc. is based on the performance of the notional investment securities, which consist of the Vanguard mutual funds and the Airgas, Inc. Common Stock Fund. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level 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 financial statements.

**(4) Federal Income Tax**

The Plan is established as an unfunded deferred compensation plan under the Internal Revenue Code and is not subject to federal income tax. Accordingly, a participant will not incur federal income tax liability when (1) compensation is deferred pursuant to the Plan, (2) notional investment gains or losses are credited or charged to a participant's account, or (3) dividends are credited to a participant's account. Rather, a participant will incur federal income tax liability for such contributions and income only when distributions are made to a participant.

Accounting principles generally accepted in the United States of America require Plan management to evaluate tax positions taken by the Plan and recognize a tax liability if the Plan has taken an uncertain tax position that more likely than not would not be sustained upon examination by the Internal Revenue Service. The Plan Administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2015, there are no uncertain tax positions taken or expected to be taken that would require recognition of a liability or disclosure in the financial statements.

The Plan is not qualified under Section 401(a) of the Internal Revenue Code and is not subject to the provisions of the Employee Retirement Income Security Act of 1974.

SIGNATURES

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

AIRGAS, INC. DEFERRED COMPENSATION PLAN II  
(Name of Plan)

BY: DCP II Committee  
as Plan Administrator

/s/ Mariette J. Mooyman

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Mariette J. Mooyman

/s/ Joseph C. Sullivan

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Joseph C. Sullivan

/s/ Carol A. Guinan

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Carol A. Guinan

DATED: March 29, 2016

EXHIBIT INDEX

Exhibit

23            Consent of Independent Registered Public Accounting Firm