

AIRGAS INC
Form SC 13G/A
January 21, 2011

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 1)*

Airgas, Inc.
(Name of Issuer)

Common
(Title of Class of Securities)

009363102
(CUSIP Number)

December 31, 2010
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- | | |
|-----------------------|---------------|
| <input type="radio"/> | Rule 13d-1(b) |
| <input type="radio"/> | Rule 13d-1(c) |
| <input type="radio"/> | Rule 13d-1(d) |

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1. NAME OF REPORTING PERSONS
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

2. Pentwater Capital Management LP
CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*
(a)
(b) T

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware USA

5. SOLE VOTING POWER

| | |
|--------------------------|-----------------------------|
| NUMBER OF SHARES | 0 |
| 6. SHARED VOTING POWER | |
| BENEFICIALLY OWNED BY | 4,548,300 |
| EACH | 7. SOLE DISPOSITIVE POWER |
| REPORTING PERSON | 0 |
| WITH | 8. SHARED DISPOSITIVE POWER |
| | 4,548,300 |

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

4,548,300

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.41%

12. TYPE OF REPORTING PERSON*

IA

*SEE INSTRUCTIONS BEFORE FILLING OUT!

0

Item 1(a).
Airgas, Inc.

Name of Issuer:

Item 1(b).
259 North Radnor-Chester Road Suite 100
Radnor, PA 19087-5283

Address of Issuer's Principal Executive Offices:

Item 2(a).
Pentwater Capital Management, LP

Name of Person Filing:

Item 2(b).
227 West Monroe Suite 4000
Chicago, IL 60606

Address of Principal Business Office, or if None, Residence:

Item 2(c).
Delaware USA

Citizenship:

Item 2(d).
Common Stock

Title of Class of Securities:

Item 2(e).
009363102

CUSIP Number:

Item 3. If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

- (a) Broker or dealer registered under Section 15 of the Exchange Act.
- (b) Bank as defined in Section 3(a)(6) of the Exchange Act.
- (c) Insurance company as defined in Section 3(a)(19) of the Exchange Act.
- (d) Investment company registered under Section 8 of the Investment Company Act.
- (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;
- (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
- (j) Group, in accordance with

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

| | | |
|-----------|-------|---|
| 4,548,300 | (a) | Amount beneficially owned: |
| 5.41% | (b) | Percent of class: |
| | (c) | Number of shares as to which such person has: |
| 0 | (i) | Sole power to vote or to direct the vote |
| 4,548,300 | (ii) | Shared power to vote or to direct the vote |
| 0 | (iii) | Sole power to dispose or to direct the disposition of |
| 4,548,300 | (iv) | Shared power to dispose or to direct the disposition of |

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities check the following o.

Item 6. Ownership of More Than Five Percent on Behalf of Another Person.

N/A

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

N/A

Item 8. Identification and Classification of Members of the Group.

N/A

Item 9. Notice of Dissolution of Group.

N/A

Item 10. Certifications.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having such purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

January 21, 2011
(Date)

/s/ Neal Nenadovic
(Signature)

Neal Nenadovic/ Chief Financial Officer
(Name/Title)

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See 240.13d-7 for other parties for whom copies are to be sent.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)
