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

SCHEDULE 13D

(Amendment No.)
Under the Securities Exchange Act of 1934

Rose Rock Midstream, L.P.

(Name of Issuer)

Common units representing limited partner interests
(Title of Class of Securities)

777149105
(CUSIP Number)

**Candice L. Cheeseman
General Counsel and Secretary
Two Warren Place
6120 S. Yale Avenue, Suite 700
Tulsa, OK 74136-4216**

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

January 7, 2012
(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

* 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 disclosures provided in a prior cover page.

The information required on 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 ("Act") 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)	Names of reporting persons SemGroup Corporation
(2)	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>
(3)	SEC use only
(4)	Source of funds (see instructions) AF
(5)	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>
(6)	Citizenship or place of organization Delaware
Number of shares beneficially owned by each reporting person with	(7) Sole voting power -0-
	(8) Shared voting power* 1,389,709
	(9) Sole dispositive power -0-
	(10) Shared dispositive power* 1,389,709
(11)	Aggregate amount beneficially owned by each reporting person* 1,389,709
(12)	Check if the aggregate amount in Row (11) excludes certain shares (see instructions) <input type="checkbox"/>
(13)	Percent of class represented by amount in Row (11) 16.6%
(14)	Type of reporting person (see instructions) CO

* SemGroup Corporation also may be deemed to beneficially own 8,389,709 subordinated units representing limited partner interests in the Issuer (the “*Subordinated Units*”), which Subordinated Units are owned directly by Rose Rock Midstream Holdings, LLC. The Subordinated Units have no expiration date and will convert into Common Units on a one-for-one basis at the end of the subordination period described in the Issuer’s Registration Statement on Form S-1, as amended (File No. 333-176260).

(1)	Names of reporting persons Rose Rock Midstream Holdings, LLC	
(2)	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
(3)	SEC use only	
(4)	Source of funds (see instructions) OO	
(5)	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
(6)	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	(7)	Sole voting power -0-
	(8)	Shared voting power* 1,389,709
	(9)	Sole dispositive power -0-
	(10)	Shared dispositive power* 1,389,709
(11)	Aggregate amount beneficially owned by each reporting person* 1,389,709	
(12)	Check if the aggregate amount in Row (11) excludes certain shares (see instructions) <input type="checkbox"/>	
(13)	Percent of class represented by amount in Row (11) 16.6%	
(14)	Type of reporting person (see instructions) OO	

* Rose Rock Midstream Holdings, LLC also holds 8,389,709 subordinated units representing limited partner interests in the Issuer (the “**Subordinated Units**”). The Subordinated Units have no expiration date and will convert into Common Units on a one-for-one basis at the end of the subordination period described in the Issuer’s Registration Statement on Form S-1, as amended (File No. 333-176260).

(1)	Names of reporting persons Rose Rock Midstream Corporation	
(2)	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
(3)	SEC use only	
(4)	Source of funds (see instructions) OO	
(5)	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
(6)	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	(7)	Sole voting power -0-
	(8)	Shared voting power 171,218
	(9)	Sole dispositive power -0-
	(10)	Shared dispositive power 171,218
(11)	Aggregate amount beneficially owned by each reporting person 171,218	
(12)	Check if the aggregate amount in Row (11) excludes certain shares (see instructions) <input type="checkbox"/>	
(13)	Percent of class represented by amount in Row (11) 2.0%	
(14)	Type of reporting person (see instructions) CO	

Item 1. Security and Issuer

This Schedule 13D relates to common units (“*Common Units*”) representing limited partner interests in Rose Rock Midstream, L.P. (the “*Issuer*”). The Issuer is a Delaware limited partnership with its principal executive offices located at Two Warren Place, 6120 S. Yale, Suite 700, Tulsa, Oklahoma 74136-4216.

Item 2. Identity and Background

This Schedule 13D is filed jointly, pursuant to a Joint Filing Agreement attached hereto as Exhibit 1, by the following persons (collectively, the “*Reporting Persons*”):

1. SemGroup Corporation, a Delaware corporation (“*SemGroup*”), whose principal business is to provide gathering, transportation, storage, distribution, blending, marketing, and other midstream services primarily to independent producers, refiners of petroleum products, and other market participants located in the Midwest and Rocky Mountain regions of the United States of America, Canada and the West Coast of the United Kingdom.
2. Rose Rock Midstream Holdings, LLC, a Delaware limited liability company (“*Holdings*”), whose principal business is the ownership of 1,218,491 Common Units, 8,389,709 subordinated units representing limited partner interests in the Issuer (“*Subordinated Units*”), and 100% of the interests in the general partner of the Issuer.
3. Rose Rock Midstream Corporation, a Delaware corporation (“*RRMC*”), whose principal business is the ownership of 171,218 Common Units.

Holdings is a direct, wholly-owned subsidiary of SemGroup. RRMC is a direct, wholly-owned subsidiary of Holdings. SemGroup is a New York Stock Exchange (“*NYSE*”) listed company, whose common stock trades on the NYSE under the symbol “SEMG”.

The principal business and office address of each of the Reporting Persons is Two Warren Place, 6120 S. Yale Avenue, Suite 700, Tulsa, OK 74136-4216.

The name and present principal occupation of each director and executive officer of SemGroup (collectively, the “*SemGroup Directors and Officers*”) are set forth below. All executive officers and directors listed are United States citizens.

<u>Name</u>	<u>Principal Occupation</u>
Norman J. Szydlowski*	SemGroup Director, President and Chief Executive Officer
John F. Chlebowski*	SemGroup Chairman of the Board of Directors and Director
Ronald A. Ballschmiede(1)	SemGroup Director and Executive Vice President and Chief Financial Officer of Chicago Bridge & Iron Co. N.V., an engineering, procurement and construction company that focuses on the energy and natural resource industry
Sarah M. Barpoulis(2)	SemGroup Director and provides asset management and advisory services to the merchant energy sector through Interim Energy Solutions, LLC
Karl F. Kurz(3)	SemGroup Director and Managing Director of CCMP Capital Advisors, LLC, a global private equity firm
Thomas R. McDaniel*	SemGroup Director
James H. Lytal*	SemGroup Director
Robert N. Fitzgerald*	SemGroup Senior Vice President and Chief Financial Officer
Candice L. Cheeseman*	SemGroup General Counsel and Secretary
Timothy R. O’Sullivan*	SemGroup Vice President, Corporate Planning and Strategic Initiatives

- * The business address of each such person is c/o SemGroup Corporation, Two Warren Place, 6120 S. Yale Avenue, Suite 700, Tulsa, OK 74136-4216.
- (1) His business address is One CB&I Plaza, 2103 Research Forest Drive, The Woodlands, TX 77380-2624.
 - (2) Her business address is 9828 Wilden Lane, Potomac, MD 20854-2055.
 - (3) His business address is 24 Waterway Ave., Suite 750, The Woodlands, TX 77380.

Each of Norman J. Szydlowski, Robert N. Fitzgerald and Timothy R. O'Sullivan is also a director on the board of directors of each of Holdings and RRMC. Norman J. Szydlowski is President and Chief Executive Officer of each of Holdings and RRMC. Robert N. Fitzgerald is Senior Vice President and Chief Financial Officer of each of Holdings and RRMC. Timothy R. O'Sullivan is Vice President of each of Holdings and RRMC. Candice L. Cheeseman is General Counsel and Secretary of each of Holdings and RRMC. Peter L. Schwiering ("**Schwiering**") is Chief Operating Officer of each of Holdings and RRMC. Schwiering's business address is c/o SemGroup Corporation, Two Warren Place, 6120 S. Yale Avenue, Suite 700, Tulsa, OK 74136-4216. Schwiering is a United States citizen and his principal occupation is President of SemCrude, L.P., President of White Cliffs Pipeline, L.L.C. and Vice President of SemTrucking, L.P., each of which are affiliates of SemGroup. Paul Largess ("**Largess**") is Vice President, Controller and Chief Accounting Officer of each of Holdings and RRMC. Largess' business address is c/o SemGroup Corporation, Two Warren Place, 6120 S. Yale Avenue, Suite 700, Tulsa, OK 74136-4216. Largess is a United States citizen and his principal occupation is Vice President, Controller and Chief Accounting Officer of SemGroup. The SemGroup Directors and Officers, Schwiering, Largess and the Reporting Persons are collectively referred to herein as the "**Covered Persons**".

(d) During the last five years, none of the Covered Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the last five years, none of the Covered Persons were a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

On December 14, 2011, the Issuer completed its initial public offering (the "**Offering**") of 7,000,000 Common Units pursuant to a Registration Statement on Form S-1, as amended (File No. 333-176260) (the "**Registration Statement**"). In connection with the closing of the Offering, (i) Holdings exchanged its existing 97.0% limited partner interest in the Issuer for 168,491 Common Units, 8,389,709 Subordinated Units and the right to receive additional Common Units in the event that the over-allotment option granted to the underwriters was not exercised in full, and (ii) RRMC exchanged its existing 1.0% limited partner interest in the Issuer for 171,218 Common Units. In connection with the Offering, the Issuer granted the underwriters a 30-day option to purchase up to an additional 1,050,000 Common Units. The 30-day option period expired on January 7, 2012 without the underwriters having exercised the option to purchase any of the additional Common Units. Therefore, pursuant to the Issuer's Second Amended and Restated Agreement of Limited Partnership (the "**Agreement of Limited Partnership**"), 1,050,000 Common Units were issued to Holdings as of such date.

The Subordinated Units have no expiration date and will convert into Common Units on a one-for-one basis at the end of the subordination period described in the Issuer's Registration Statement and in the Agreement of Limited Partnership.

The Common Units owned by Holdings and RRMC and the Subordinated Units owned by Holdings have been pledged as collateral to secure all indebtedness and obligations of SemGroup arising under SemGroup's senior credit facility.

On December 14, 2011, the following Covered Persons acquired, with personal funds, beneficial ownership of Common Units through the Issuer's directed unit program at the initial public offering price of \$20.00 per Common Unit, as follows:

<u>Covered Person</u>	<u>Number of Common Units Purchased</u>
Norman J. Szydowski	15,000
John F. Chlebowski	10,000
Sarah M. Barpoulis	5,000
Karl F. Kurz	5,000
Robert N. Fitzgerald	3,000
Candice L. Cheeseman	5,000
Timothy R. O'Sullivan	2,500
Peter L. Schwiering	5,000

Item 4. Purpose of Transaction

The information contained in Item 3 above is incorporated herein by reference.

The Common Units described herein were acquired for investment purposes. The Covered Persons will continuously evaluate their investment in the Common Units, alternative investment opportunities and all other factors deemed relevant in determining whether additional Common Units will be acquired by any of the Covered Persons or by other affiliated persons or whether any of the Covered Persons or any such other affiliated persons will dispose of Common Units. At any time, subject to the expiration of the 180-day lock-up agreement entered into by the Reporting Persons and certain of the SemGroup Directors and Officers in connection with the Offering, additional Common Units may be acquired or some or all of the Common Units beneficially owned by the Covered Persons may be sold, in either case in the open market, in privately negotiated transactions or otherwise. SemGroup Directors and Officers may acquire Common Units pursuant to awards granted from time to time under the Rose Rock Midstream Equity Incentive Plan.

Holdings is the sole member of Rose Rock Midstream GP, LLC, the general partner of the Issuer (the "**General Partner**"). Pursuant to the First Amended and Restated Limited Liability Company Agreement of the General Partner (the "**GP LLC Agreement**"), Holdings has the right to appoint the board of directors of the General Partner. Through the right to appoint the board of directors of the General Partner pursuant to the GP LLC Agreement, Holdings and, through its 100% ownership of Holdings, SemGroup have the ability to influence the management and policies and control of the Issuer. In accordance with NYSE rules, one additional independent director will be appointed to the board of directors of the General Partner within 12 months of the Issuer's listing of the Common Units on the NYSE.

The General Partner directly owns 342,437 notional general partner units representing a 2.0% general partner interest in the Issuer (the "**General Partner Interest**") and certain incentive distribution rights. The Agreement of Limited Partnership restricts the ability of the General Partner to transfer or sell the General Partner Interest prior to December 31, 2021. The General Partner may transfer or sell the General Partner Interest on or after December 31, 2021.

Under the Agreement of Limited Partnership, the Issuer has agreed to register for resale under the Securities Act of 1933, as amended, and applicable state securities laws any Common Units, Subordinated Units or other Issuer securities proposed to be sold by the General Partner or any of its affiliates if an exemption from the registration requirements is not otherwise available. These registration rights generally continue for two years following any withdrawal or removal of the General Partner as the Issuer's general partner.

Pursuant to the terms of the Agreement of Limited Partnership, the General Partner may only be removed from its position as general partner if such removal is approved by the holders of not less than 66-2/3% of the outstanding Common Units and Subordinated Units, including Common Units and Subordinated Units held by the General Partner and its affiliates, voting as a single class.

The Agreement of Limited Partnership contains specific provisions that are intended to discourage a person or group from attempting to remove the General Partner as the Issuer's general partner or otherwise change the Issuer's management. If any person or group, other than the General Partner and its affiliates, acquires beneficial ownership of 20% or more of any class of partnership interests, that person or group loses voting rights with respect to all of such partnership interests. This loss of voting rights does not apply to any person or group that acquires partnership interests directly from the General Partner or its affiliates and any transferees of that person or group approved by the General Partner or to any person or group who acquires partnership interests with the prior approval of the board of directors of the General Partner.

Except as described herein, none of the Covered Persons has any current plans or proposals that would be related to or would result in any of the matters described in Items 4(a)-(j) of Schedule 13D; however, as part of their ongoing evaluation of this investment and investment alternatives, the Covered Persons may consider such matters in the future and, subject to applicable law, may formulate a plan with respect to such matters, and, from time to time, the Covered Persons may hold discussions with or make formal proposals to management of the Issuer or the board of directors of the General Partner, other holders of Common Units or other third parties regarding such matters.

References to, and the descriptions of, the Agreement of Limited Partnership and the GP LLC Agreement in this Item 4 and in Items 3 and 6 are qualified in their entirety by reference to the full text of the agreements, which are filed as Exhibits 2 and 3 to this Schedule 13D, respectively, and each is incorporated herein by reference.

Item 5. Interest in Securities of the Issuer

(a)(b) The information contained on the cover pages and in Items 2 and 3 of this Schedule 13D is incorporated herein by reference.

SemGroup, Holdings and RRMC are the beneficial owners of the number and percentage of Common Units stated in rows (11) and (13) on the respective corresponding cover pages hereto.

Holdings is a direct, wholly-owned subsidiary of SemGroup and RRMC is a direct, wholly-owned subsidiary of Holdings. As such, the Common Units directly owned by RRMC are also shown as beneficially owned by each of Holdings and SemGroup and the Common Units directly owned by Holdings are also shown as beneficially owned by SemGroup. By reason of these relationships, SemGroup is reported as having shared power to vote, or to direct the vote, and shared power to dispose, or direct the disposition of, the Common Units directly owned by each of Holdings and RRMC. Holdings is reported as having shared power to vote, or to direct the vote, and shared power to dispose, or direct the disposition of, the Common Units directly owned by RRMC.

The ownership percentages included in this Schedule 13D for the Reporting Persons are based on 8,389,709 Common Units outstanding as of January 7, 2012, consisting of (a) 7,000,000 Common Units issued upon the closing of the Offering, (b) 1,218,491 Common Units issued to Holdings as described in Item 3, and (c) 171,218 Common Units issued to RRMC as described in Item 3. Outstanding units do not include the Subordinated Units.

Neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission by any of the Covered Persons (other than by such Covered Person solely with respect to the Common Units owned directly by such Covered Person) that they are the beneficial owner of any of the Common Units referred to herein for the purposes of Section 13(d) of the Act, or for any other purpose, and such beneficial ownership is expressly disclaimed by each Covered Person (other than by such Covered Person solely with respect to the Common Units owned directly by such Covered Person) except to the extent of such Covered Person's pecuniary interest, if any, in the Common Units.

(c) Except as described above in Item 3, the Covered Persons have not engaged in any transactions in any equity securities of the Issuer during the past 60 days.

(d)(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer

The information contained in Items 2, 3 and 4 of this Schedule 13D is incorporated herein by reference.

The General Partner, as the sole general partner of the Issuer, Holdings and RRMC, as limited partners of the Issuer, and all other limited partners of the Issuer are party to the Agreement of Limited Partnership. Among other things, the Agreement of Limited Partnership sets forth the rights of the parties thereto with respect to distributions of cash (including the minimum quarterly distribution of \$0.3625 per unit per quarter, or \$1.45 per unit on an annualized basis, to be paid no later than 45 days after the end of each fiscal quarter of the Issuer), allocation of profits and losses, the terms of the conversion of the Subordinated Units into Common Units and voting rights.

Item 7. Material to be Filed as Exhibits

- 1 Joint Filing Agreement among the Reporting Persons, dated January 17, 2012.
- 2 Second Amended and Restated Agreement of Limited Partnership of Rose Rock Midstream, L.P., dated December 14, 2011 (filed as Exhibit 3.1 to the Issuer's Current Report on Form 8-K filed with the SEC on December 20, 2011, and incorporated herein in its entirety by reference).
- 3 First Amended and Restated Limited Liability Company Agreement of Rose Rock Midstream GP, LLC, dated December 14, 2011 (filed as Exhibit 3.2 to the Issuer's Current Report on Form 8-K filed with the SEC on December 20, 2011, and incorporated herein in its entirety by reference).

SIGNATURES

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

Dated: January 17, 2012

SEMGROUP CORPORATION

By: /s/ Robert N. Fitzgerald
Name: Robert N. Fitzgerald
Title: Senior Vice President and Chief Financial Officer

ROSE ROCK MIDSTREAM HOLDINGS, LLC

By: /s/ Robert N. Fitzgerald
Name: Robert N. Fitzgerald
Title: Senior Vice President and Chief Financial Officer

ROSE ROCK MIDSTREAM CORPORATION

By: /s/ Robert N. Fitzgerald
Name: Robert N. Fitzgerald
Title: Senior Vice President and Chief Financial Officer

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
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3	First Amended and Restated Limited Liability Company Agreement of Rose Rock Midstream GP, LLC, dated December 14, 2011 (filed as Exhibit 3.2 to the Issuer's Current Report on Form 8-K filed with the SEC on December 20, 2011, and incorporated herein in its entirety by reference).

JOINT FILING AGREEMENT

This JOINT FILING AGREEMENT is entered into as of January 17, 2012, by and among the signatories hereto. The undersigned hereby agree that the Statement on Schedule 13D with respect to the common units representing limited partnership interests in Rose Rock Midstream, L.P., a Delaware limited partnership, is, and any amendment thereafter signed by each of the undersigned shall be, filed on behalf of each of the undersigned pursuant to and in accordance with the provisions of Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended. The undersigned further agree to the filing of this Joint Filing Agreement as an exhibit to such joint filing.

IN WITNESS WHEREOF, the undersigned hereby execute this Joint Filing Agreement as of the date first above written.

SEMGROUP CORPORATION

By: /s/ Robert N. Fitzgerald
Name: Robert N. Fitzgerald
Title: Senior Vice President and Chief Financial Officer

ROSE ROCK MIDSTREAM HOLDINGS, LLC

By: /s/ Robert N. Fitzgerald
Name: Robert N. Fitzgerald
Title: Senior Vice President and Chief Financial Officer

ROSE ROCK MIDSTREAM CORPORATION

By: /s/ Robert N. Fitzgerald
Name: Robert N. Fitzgerald
Title: Senior Vice President and Chief Financial Officer