

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL | |
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|---|--|---|
| 1. Name and Address of Reporting Person* <u>SemGroup Corp</u> (Last) (First) (Middle) 6120 S. YALE AVE., STE. 700 (Street) TULSA OK 74136-4216 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>Rose Rock Midstream, L.P. [RRMS]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below) |
| | 3. Date of Earliest Transaction (Month/Day/Year) 01/07/2012 | |
| | | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---|--------------------------------------|--|--------------------------------|---|---|------------|-------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Units representing limited partner interests | 01/07/2012 | | A | | 1,050,000 | A | (2) | 1,389,709 | I | See footnotes ⁽¹⁾⁽²⁾ |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|--|--|---|--|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | | | | | |

1. Name and Address of Reporting Person*
SemGroup Corp
 (Last) (First) (Middle)
 6120 S. YALE AVE., STE. 700
 (Street)
 TULSA OK 74136-4216
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
Rose Rock Midstream Holdings, LLC
 (Last) (First) (Middle)
 6120 S. YALE AVE., STE. 700
 (Street)
 TULSA OK 74136-4216
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
Rose Rock Midstream Corp
 (Last) (First) (Middle)
 6120 S. YALE AVE., STE. 700
 (Street)

TULSA OK 74136-4216

(City) (State) (Zip)

Explanation of Responses:

1. This Form 4 is being filed jointly by SemGroup Corporation ("SemGroup"), Rose Rock Midstream Holdings, LLC ("Holdings") and Rose Rock Midstream Corporation ("RRMC"). SemGroup directly owns 100% of the outstanding membership interests of Holdings. Holdings directly owns 100% of the issued and outstanding shares of common stock of RRMC. SemGroup may therefore be deemed to beneficially own securities of the Issuer owned directly by Holdings and RRMC and Holdings may therefore be deemed to beneficially own securities of the Issuer owned directly by RRMC.

2. In connection with the closing of the initial public offering of the Issuer, the Issuer granted the underwriters a 30-day option to purchase up to an additional 1,050,000 common units representing limited partner interests in the Issuer ("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, 1,050,000 Common Units were issued to Holdings as of such date.

Candice L. Cheeseman,
Secretary and General Counsel 01/10/2012
of SemGroup Corporation

Candice L. Cheeseman,
Secretary and General Counsel 01/10/2012
of Rose Rose Midstream
Holdings, LLC

Candice L. Cheeseman,
Secretary and General Counsel 01/10/2012
of Rose Rose Midstream
Corporation

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.