## FORM 4

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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 OMB Number: 3235-0287 Estimated average burden

| hours per response:      | 0.5 |
|--------------------------|-----|
| Estimated average burden |     |

| 1. Name and Address of Reporting Person <sup>*</sup><br>RECTOR DAVID |         | rson*    | 2. Issuer Name and Ticker or Trading Symbol<br><u>SENESCO TECHNOLOGIES INC</u> [ SNT ] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) |                               |                  |  |  |  |
|--|---------|----------|--|---|-------------------------------|------------------|--|--|--|
|  |         |          |  | X   | Director                      | 10% Owner        |  |  |  |
| y  |         |          |  | 1   | Officer (give title           | Other (specify   |  |  |  |
| (Last)   | (First) | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year)                                       |   | below)                        | below)           |  |  |  |
| 303 GEORGE S   | STREET  |          | 05/19/2005   |   |                               |                  |  |  |  |
| SUITE 420  |         |          |  |   |                               |                  |  |  |  |
| SUITE 420 (Street)   |         |          | 4. If Amendment, Date of Original Filed (Month/Day/Year)                               | 6. Individual or Joint/Group Filing (Check Applicable Line)             |                               |                  |  |  |  |
| ( )  |         |          |  | X   | Form filed by One Re          | porting Person   |  |  |  |
| NEW<br>BRUNSWICK   | NJ      | 08901    |  |   | Form filed by More the Person | an One Reporting |  |  |  |
| (City)   | (State) | (Zip)    |  |   |                               |                  |  |  |  |

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

| 1. Title of Security (Instr. 3) | 2. Transaction<br>Date<br>(Month/Day/Year) | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | e, Transaction I<br>Code (Instr. 5 |   | 4. Securities Acquired (A) or<br>Disposed Of (D) (Instr. 3, 4 and<br>5) |               |                              | Securities<br>Beneficially         | Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4) | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership |
|---------------------------------|--|---|------------------------------------|---|---|---------------|------------------------------|------------------------------------|---|---|
|                                 |  |   | Code                               | v | Amount  | (A) or<br>(D) | Price                        | Transaction(s)<br>(Instr. 3 and 4) |   | (Instr. 4)  |
| Senesco Technologies, Inc.      | 05/19/2005                                 |   | Р                                  |   | 3,000   | A             | <b>\$2.22</b> <sup>(1)</sup> | 52,500                             | D   |   |

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

| 1. Title of<br>Derivative<br>Security<br>(Instr. 3) | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4.<br>Transa<br>Code (<br>8) |   | 5. Nu<br>of<br>Deriv<br>Secu<br>Acqu<br>(A) or<br>Dispo<br>of (D)<br>(Instr<br>and 5 | ative<br>rities<br>ired<br>osed | Expiration Date<br>(Month/Day/Year)<br>d |                    | n Date Amount of |  | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) | Form:<br>Direct (D) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|---|---|--|---|------------------------------|---|--|---------------------------------|--|--------------------|------------------|--|---|--|---------------------|--|
|   |   |  |   | Code                         | v | (A)  | (D)                             | Date<br>Exercisable                      | Expiration<br>Date | Title            | Amount<br>or<br>Number<br>of<br>Shares |   |  |                     |  |

Explanation of Responses:

1. Purchased 3,000 shares of common stock at a weighted average price per share of \$2.22

### David Rector

<u>05/19/2005</u>

Date

\*\* Signature of Reporting Person

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.