FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

**OMB APPROVAL** OMB Number: Estimated average burden hours per response: 0.5

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

| 1. Name and Address of Reporting Person*  FEDYSZYN SASCHA P  (Last) (First) (Middle)  303 GEORGE STREET                                      |   |  |   |          | SENESCO TECHNOLOGIES INC [ SNT ]  3. Date of Earliest Transaction (Month/Day/Year)  12/14/2005 |    |          |                          |  |      |  |   |                  | below)  | able)   |  | 10% Ov<br>Other (s<br>below) | /ner   |                                       |
|--|---|--|---|----------|--|----|----------|--------------------------|--|------|--|---|------------------|---|---|--|------------------------------|--|---------------------------------------|
| SUITE 420  (Street) NEW BRUNSWICK  (City) (State) (Zip)  |   |  |   |          | 4. If Amendment, Date of Original Filed (Month/Day/Year)                                       |    |          |                          |  |      |  |   | Line             | ndividual or Joint/Group Filing (Check Applicable e)  X Form filed by One Reporting Person Form filed by More than One Reporting Person |   |  |                              |  |                                       |
|  |   | Tab  | le I - Non-   | -Deriva  | tive   | Se | curities | s Acc                    | guired.  | Disi | posed o  | f. or B   | enef             | iciall  | / Owned   |  |                              |  |                                       |
| 1. Title of Security (Instr. 3)  2. Transac Date (Month/Date)  |   |  |   |          | ction 2A. Deemed Execution Date,   |    |          | 3.<br>Transac<br>Code (I | 3. 4. Securitie<br>Disposed C<br>Code (Instr. 5)               |      | ties Acquired (A) or d Of (D) (Instr. 3, 4 and |   | A) or<br>, 4 and | 5. Amount of<br>Securities<br>Beneficially<br>Owned Following<br>Reported<br>Transaction(s)<br>(Instr. 3 and 4)                         |   | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)  |                              | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4)        |                                       |
| 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 Da<br>if any<br>(Month/Day/\) | ate, Tra | Code (Ins  |    |          |                          | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |      |  | 7. Title and Amount<br>of Securities<br>Underlying<br>Derivative Security<br>(Instr. 3 and 4) |                  | curity  | 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) |                              | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | Beneficial<br>Ownership<br>(Instr. 4) |
|  |   |  |   | Co       | ode  | v  | (A)      |                          | Date<br>Exercisabl   |      | Expiration<br>Date                             | Title   | or<br>Nu<br>of   | nount<br>mber<br>ares   |   |  |                              |  |                                       |
| Common<br>Stock<br>Option <sup>(1)</sup>   | \$1.4   | 12/14/2005                                 |   |          | A  |    | 20,000   |                          | 12/14/200  | 5 1  | 2/14/2015                                      | Commor<br>Stock   | 20               | ,000  | \$0   | 160,000  | 0                            | D  |                                       |

## **Explanation of Responses:**

1. Such options were granted to Mr. Fedyszyn pursuant to the Company's Stock Incentive Plan, as amended, with one-third of such options vesting on the date of grant and one-third of such options vesting on each of the first and second anniversaries of the date of grant.

Sascha P. Fedyszyn

12/16/2005

\*\* 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.