

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

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**FORM 8-K/A**

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): April 1, 2010

**Senesco Technologies, Inc.**

(Exact Name of Registrant as Specified in Charter)

Delaware

(State or Other Jurisdiction  
of Incorporation)

001-31326

(Commission File Number)

84-1368850

(IRS Employer Identification No.)

303 George Street, Suite 420, New Brunswick, New Jersey

(Address of Principal Executive Offices)

08901

(Zip Code)

(732) 296-8400

(Registrant's telephone number,  
including area code)

Not applicable

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425).
  - ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12).
  - ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)).
  - ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)).
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**Item 3.01            Notice of Delisting or Failure to Satisfy a Continued Listing Rule or Standard; Transfer of Listing.**

On April 1, 2010, Senesco Technologies, Inc. (the “Company”) received a notice from the NYSE Amex LLC (“NYSE”) providing notification that, the Company does not meet one of the NYSE’s continued listing standards as set forth in Part 10 of the NYSE company guide and the Company has therefore become subject to the procedures and requirements of Section 1009 of the NYSE company guide. Specifically, the Company is not in compliance with Section 704 of the NYSE company guide in that it failed to hold its annual meeting of stockholders during the year ended December 31, 2009.

To maintain an NYSE listing, the Company must submit a plan by April 15, 2010 advising the NYSE of action it has taken, or will take that would bring the Company into compliance with the continued listing standards by July 1, 2010. We are taking steps to prepare and submit such a plan to the NYSE on or before April 15, 2010.

The Listings Qualifications Department of the NYSE will evaluate the Company’s plan and determine whether it reasonably demonstrates the Company’s ability to regain compliance with the continued listing standards by July 1, 2010. If the NYSE accepts the Company’s plan, the Company may be able to continue its listing during the plan period provided that the Company demonstrates progress consistent with its plan and complies with other applicable NYSE listing qualifications. If the Company fails to submit a satisfactory plan or fails to demonstrate progress consistent with the plan accepted by the NYSE, the NYSE may initiate delisting procedures. During the plan period the Company will be subject to periodic review to determine whether the Company is making progress consistent with the plan.

**Item 9.01            Financial Statements and Exhibits.**

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release, dated April 8, 2010 relating to the receipt of the NYSE notification.

## **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**SENESCO TECHNOLOGIES, INC.**

Dated: April 8, 2010

By: /s/ Jack Van Hulst

Name: Jack Van Hulst

Title: President and Chief Executive Officer

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**Company Contact:**

Senesco Technologies, Inc.  
Jack Van Hulst  
Chief Executive Officer  
(jvanhulst@senesco.com)  
(732) 296-8400

**Investor Relations Contact:**

FD  
Brian Ritchie  
([brian.ritchie@fd.com](mailto:brian.ritchie@fd.com))  
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**SENE스코 TECHNOLOGIES RECEIVES NOTICE OF NON COMPLIANCE FROM NYSE AMEX**

**NEW BRUNSWICK, N.J. (April 8, 2010) – Senesco Technologies, Inc.** (the “Company”) (NYSE Amex: SNT) has received a notice from the NYSE Amex LLC (“NYSE”) providing notification that, the Company does not meet one of the NYSE’s continued listing standards as set forth in Part 10 of the NYSE company guide and the Company has therefore become subject to the procedures and requirements of Section 1009 of the NYSE company guide. Specifically, the Company is not in compliance with Section 704 of the NYSE company guide in that it failed to hold an annual meeting of its stockholders during the year ended December 31, 2009.

To maintain an NYSE listing, Senesco must submit a plan by April 15, 2010 advising the NYSE of action it has taken, or will take, that would bring Senesco into compliance with the continued listing standards by July 1, 2010. The Company is taking steps to prepare and submit such a plan to the NYSE on or before April 15, 2010.

As previously disclosed, the Company recently executed a financing and must seek stockholder approval of certain aspects of the financing. Therefore, the Company anticipates that it will simultaneously hold its annual meeting at the same time it holds a meeting to seek stockholder approval of certain aspects of the financing. The Company expects to file a proxy statement, which will include the information on its annual meeting, in the near future.

The Listings Qualifications Department of the NYSE will evaluate Senesco’s plan and determine whether it reasonably demonstrates the Company’s ability to regain compliance with the continued listing standards by July 1, 2010. If the NYSE accepts Senesco’s plan, the Company may be able to continue its listing during the plan period, provided that Senesco demonstrates progress consistent with its plan and complies with other applicable NYSE listing qualifications. If the Company fails to submit a satisfactory plan or fails to demonstrate progress consistent with the plan accepted by the NYSE, the NYSE may initiate delisting procedures. During the plan period Senesco will be subject to periodic review to determine whether it is achieving progress consistent with the plan.

**About Senesco Technologies, Inc.**

Senesco Technologies, Inc. is a U.S. biotechnology company, headquartered in New Brunswick, NJ. Senesco has initiated preclinical research to trigger or delay cell death in mammals (apoptosis) to determine if the technology is applicable in human medicine. Accelerating apoptosis may have applications to development of cancer treatments. Delaying apoptosis may have applications to certain inflammatory and ischemic diseases. Senesco takes its name from the scientific term for the aging of plant cells: senescence. Delaying cell breakdown in plants extends freshness after harvesting, while increasing crop yields, plant size and resistance to environmental stress. The Company believes that its technology can be used to develop superior strains of crops without any modification other than delaying natural plant senescence. Senesco has partnered with leading-edge companies engaged in agricultural biotechnology and earns research and development fees for applying its gene-regulating platform technology to enhance its partners’ products.

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*Certain statements included in this press release are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results could differ materially from such statements expressed or implied herein as a result of a variety of factors, including, but not limited to: the ability of the Company to consummate additional financings; the development of the Company's gene technology; the approval of the Company's patent applications; the successful implementation of the Company's research and development programs and joint ventures; the success of the Company's license agreements; the acceptance by the market of the Company's products; success of the Company's preliminary studies and preclinical research; competition and the timing of projects and trends in future operating performance, the Company's ability to comply with the continued listing standards of the AMEX, as well as other factors expressed from time to time in the Company's periodic filings with the Securities and Exchange Commission (the "SEC"). As a result, this press release should be read in conjunction with the Company's periodic filings with the SEC. The forward-looking statements contained herein are made only as of the date of this press release, and the Company undertakes no obligation to publicly update such forward-looking statements to reflect subsequent events or circumstances.*

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