

Item 5.01. Changes in Control of Registrant.

On November 6, 2009, each of Stanford Venture Capital Holdings, Inc. (“SVCH”) and Stanford International Bank, Ltd. (“SIBL”) (collectively SVCH and SIBL are referred to herein as “Stanford”), who are the beneficial owners of a significant interest in Senesco Technologies, Inc., (“Senesco” or the “Company”), simultaneously entered into definitive agreements with certain members of the Company’s Board of Directors to sell all of their respective interests in the Company, including shares of common stock, convertible debentures and warrants, (the “Securities”) held by each of the Stanford entities to each of Harlan W. Waksal, M.D., Rudolf Stalder, Christopher Forbes, David Rector, John N. Braca, Jack Van Hulst, Warren Isabelle and the Thomas C. Quick Charitable Foundation. Each of Harlan W. Waksal, M.D., Rudolf Stalder, Christopher Forbes, David Rector, John N. Braca, Jack Van Hulst and Warren Isabelle are members of the Company’s Board of Directors. The Thomas C. Quick Charitable Foundation is an affiliate of Mr. Thomas C. Quick who is also a member of the Company’s Board of Directors. Such transaction was negotiated privately between Stanford and the foregoing persons and their affiliates.

Stanford and its affiliates, including SVCH and SIBL are under receivership, and, accordingly, the transactions are subject to the approval of the United States District Court for the Northern District of Texas which has jurisdiction for the assets of SVCH and SIBL. The agreements also contain other closing conditions including, but not limited to the receipt of all United States governmental and regulatory approvals, if any, the receipt of any third party approvals, consents and/or waivers as may be required in connection with the transaction and compliance with all United States regulatory and governmental requirements, including proof acceptable to the purchasers, that upon transfer to the purchasers, that the purchasers will receive valid title to the Securities, free and clear of all liens.

As a result of the transaction, it is anticipated that the members of the Company’s Board of Directors, as a group, will beneficially own a controlling interest of approximately 49.4% of the Company’s common stock. In addition, Mr. Christopher Forbes, who was the main investor in the transaction, will, individually, beneficially own approximately 36.5% of the Company’s common stock.

Item 8.01 Other Events

On November 9, 2009, the Company issued a press release announcing the execution of the foregoing purchase agreements. A copy of this press release is furnished as Exhibit 99.1.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No. Description

99.1 Press Release of Senesco Technologies, Inc. dated November 9, 2009.

SIGNATURE

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: November 9, 2009

By: /s/ Bruce Galton
Name: Bruce Galton
Title: President and Chief Executive Officer
