# SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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#### FORM 10-QSB

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

For the quarterly period ended December 31, 2000 Commission File No. 0-22307

	00111111331011 11110	101 0 22001	
	SENESCO TECHNOLO		
(Exact Name	e of Small Business Issue		Its Charter)
Delaware			368850
(State or Other Jur Incorporation or Or	isdiction of		Identification No.)
	Princeton, New Jersey		08542
	pal Executive Offices)		(Zip Code)
	(609) 252-		
(Is	suer's Telephone Number,		de)
Section 13 or 15(d) months (or for such	the Issuer: (1) filed of the Securities Exc shorter period that the has been subject to such	hange Act of 1934 registrant was red	during the past 12 quired to file such
	Yes: X	No:	
	per of shares outstanding of December 31, 2000:	of each of the Iss	suer's classes
Class			per of Shares
Common Stock, \$.01	par value		7,872,626
Transitional S	Small Business Disclosure	Format (check one	):
	Yes:	No:	X 
	SENESCO TECHNOLOGIES, I		
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### PART I. FINANCIAL INFORMATION.

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#### ITEM 1. FINANCIAL STATEMENTS.

Certain information and footnote disclosures required under generally accepted accounting principles have been condensed or omitted from the following consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission, however, Senesco Technologies, Inc., a Delaware corporation (the "Company"), and its subsidiary, Senesco, Inc., a New Jersey corporation ("Senesco"), believe that the disclosures are adequate so that the information presented is not misleading in any material respect.

The results of operations for the interim periods presented herein are not necessarily indicative of the results to be expected for the entire fiscal year.

# SENESCO TECHNOLOGIES, INC. AND SUBSIDIARY (A DEVELOPMENT STAGE COMPANY) CONDENSED CONSOLIDATED BALANCE SHEET

(unaudited)

	December 31, 2000	June 30, 2000
ASSETS		
CURRENT ASSETS:		
Cash  Prepaid expense and other current assets	\$ 620,122 8,257	\$ 1,555,749 9,223
Total Current Assets	628,379	1,564,972
Equipment, net	64,638 142,161 10,863	70,613 97,414 10,863
TOTAL ASSETS	\$ 846,041 ======	\$ 1,743,862 =======
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$ 128,512 90,706	\$ 76,143 138,588
Total Current Liabilities	219,218	214,731
Grant payable	10,573	10,573
TOTAL LIABILITIES	229,791	225,304
STOCKHOLDERS' EQUITY:		
Preferred stock, authorized 5,000,000 shares, \$0.01 par value, no shares issued		
Common stock, authorized 20,000,000 shares, \$0.01 par value, 7,872,626 shares issued and outstanding	78,726 5,320,701 (4,627,589) (155,588)	78,726 5,234,475 (3,613,911) (180,732)
Total Stockholders' Equity	616,250	1,518,558
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TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 846,041 ======	\$ 1,743,862 =======

See Notes to Condensed Consolidated Financial Statements.

#### (A DEVELOPMENT STAGE COMPANY)

# CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS -----(unaudited)

From Inception For the Three For the Three For the Six For the Six on July 1, 1998 Months Ended Months Ended Months Ended Months Ended through December 31, December 31, December 31, December 31, December 31, 2000 2000 1999 2000 1999 Revenue..... --\$ - -\$ --Operating Expenses: 407,893 329,081 3,118,785 General and administrative..... 742,327 620,216 Research and development..... 130,714 77,609 247,832 196,809 897,749 Non-cash charges for options and warrants issued in exchange for services...... 111,370 40,350 81,783 177,779 685,722 ---------------Total Operating Expenses..... 578,957 488,473 1,101,529 994,804 4,702,256 (60, 331)(60,331)(60,331) Sale of state income tax loss.... Interest income, net..... (11, 238)(27,520) (14,336)Net Loss..... \$ (507,388) \$ (488,473) \$(1,013,678) \$ (994,804) \$(4,627,589) ======== ======== ======== ======== ======== Basic and Diluted Net Loss Per Common Share..... (0.06) \$ (0.08) \$ (0.13) \$ (0.16) ======== ======== =========

6,212,134

========

7,872,626

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6,212,134

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See Notes to Condensed Consolidated Financial Statements.

7,872,626

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Basic and Diluted Weighted Average Number of Common

Shares Outstanding.....

(A DEVELOPMENT STAGE COMPANY)

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 ${\tt CONDENSED} \ \ {\tt CONSOLIDATED} \ \ {\tt STATEMENT} \ \ {\tt OF} \ \ {\tt STOCKHOLDERS'} \ \ {\tt EQUITY} \ \ ({\tt DEFICIT})$ 

FROM INCEPTION ON JULY 1, 1998 THROUGH DECEMBER 31, 2000

(unaudited)

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Deferred Compensation Related to the Issuance of Options and Warrants	Total
	Shares	Amount				
Common stock outstanding	1,999,796	\$ 19,998	\$ (19,998)			
Contribution of capital			85,179			\$ 85,179
Issuance of common stock in reverse merger on January 22, 1999 at \$0.01 per share	3,400,000	34,000	(34,000)			
Issuance of common stock for cash on May 21, 1999 at \$2.63437 per share	759,194	7,592	1,988,390			1,995,982
Issuance of common stock for placement fees on May 21, 1999 at \$0.01 per share	53,144	531	(531)			
Fair market value of options and warrants granted on September 7, 1999			252,578		\$ (72,132)	180,446
Fair market value of warrants granted on October 1, 1999			171,400		(108,600)	62,800
Fair market value of warrants granted on December 15, 1999			331,106			331,106
Issuance of common stock for cash on January 26, 2000 at \$2.867647 per share	17,436	174	49,826			50,000
Issuance of common stock for cash on January 31, 2000 at \$2.87875 per share	34,737	347	99,653			100,000

See Notes to Condensed Consolidated Financial Statements.

(continued)

(A DEVELOPMENT STAGE COMPANY)

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 ${\tt CONDENSED} \ \ {\tt CONSOLIDATED} \ \ {\tt STATEMENT} \ \ {\tt OF} \ \ {\tt STOCKHOLDERS'} \ \ {\tt EQUITY} \ \ ({\tt DEFICIT})$ 

FROM INCEPTION ON JULY 1, 1998 THROUGH DECEMBER 31, 2000

(unaudited)

	Common Stock		Capital in Excess of Par Value	Deficit Accumulated During the Development Stage	Deferred Compensation Related to the Issuance of Options and Warrants	Total
	Shares	Amount				
Issuance of common stock for cash on February 4, 2000 at \$2.934582 per share	85,191	852	249,148			250,000
Issuance of common stock for cash on March 15, 2000 at \$2.527875 per share	51,428	514	129,486			130,000
Issuance of common stock for cash on June 22, 2000 for \$1.50 per share	1,471,700	14,718	2,192,833			2,207,551
Commissions, legal and bank fees associated with issuances for the year ended June 30, 2000			(260,595)			(260,595)
Fair market value of warrants granted on October 2, 2000			40,350			40,350
Change in fair market value of options and warrants granted			45,876		25,144	71,020
Net loss				(4,627,589)		(4,627,589)
Balance at December 31, 2000	7,872,626	\$ 78,726	\$5,320,701	\$(4,627,589)	\$(155,588)	\$ 616,250

See Notes to Condensed Consolidated Financial Statements.

### (A DEVELOPMENT STAGE COMPANY)

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### ${\tt CONDENSED} \ \ {\tt CONSOLIDATED} \ \ {\tt STATEMENT} \ \ {\tt OF} \ \ {\tt CASH} \ \ {\tt FLOWS}$

(unaudited)

	For the Six Months Ended December 31, 2000	For the Six Months Ended December 31, 1999	From Inception on July 1, 1998 through December 31, 2000
Cash flows used in operating activities: Net loss	\$(1,013,678)	\$(994,804)	\$(4,627,589)
by stockholder	111,370 10,812	177,779 8,576	85,179 685,722 33,528
Prepaid expense and other current assets  Security deposit	966 	12,542 	(8,257) (10,863)
Accounts payable	52,369 (47,882)	(8,218) 2,874	128,512 90,706
Net cash used in operating activities	(886,043)	(801,251)	(3,623,062)
Cash flows from investing activities: Patent costs Purchase of equipment	(47,421) (2,163)	(20,353) (10,195)	(148,955) (91,372)
Net cash used in investing activities	(49,584)	(30,548)	(240,327)
Cash flows provided by financing activities: Proceeds from grant Net proceeds from issuance of common stock		10,573 	10,573 4,472,938
Cash flows provided by financing activities		10,573	4,483,511
Net (decrease) increase in cash	(935,627)	(821,226)	620,122
Cash at beginning of period	1,555,749	946,691	
Cash at end of period	\$ 620,122 =======	\$ 125,465 ======	\$ 620,122 =======
Supplemental disclosures of cash flow information: Interest paid	\$ ======	\$ ======	\$ 22,317 =======

See Notes to Condensed Consolidated Financial Statements.

# NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

#### NOTE 1 - BASIS OF PRESENTATION:

The financial statements included herein have been prepared by the Company, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-KSB for the year ended June 30. 2000.

In the opinion of the Company's management, the accompanying unaudited condensed consolidated financial statements contain all adjustments, consisting solely of those which are of a normal recurring nature, necessary to present fairly its financial position as of December 31, 2000 and as of June 30, 2000, the results of its operations for the three month periods ended December 31, 2000 and 1999, the results of its operations and cash flows for the six month periods ended December 31, 2000 and 1999 and for the period from inception on July 1, 1998 through December 31, 2000.

Interim results are not necessarily indicative of results for the full fiscal year.  $% \left( 1\right) =\left( 1\right) +\left( 1\right)$ 

Senesco, a wholly-owned subsidiary of the Company, was incorporated on November 24, 1998 and is the successor entity to Senesco, L.L.C., a New Jersey limited liability company, which was formed on June 25, 1998 but commenced operations on July 1, 1998. This transfer was accounted for at historical cost in a manner similar to a pooling of interest with the recording of net assets acquired at their historical book value.

Senesco is a development stage company that was organized to commercially exploit technology acquired and developed in connection with the identification and characterization of genes which control the aging (senescence) of all flowers, fruits and vegetables (plant tissues), increase crop production (yield) in horticultural and agronomic crops and reduce the harmful effects of environmental stress.

#### NOTE 2 - LOSS PER SHARE:

Net loss per common share is computed by dividing the loss by the weighted average number of common shares outstanding during the period. Since September 7, 1999, the Company has had outstanding options and warrants to purchase its common stock, \$0.01 par value per share (the "Common Stock"), however, shares to be issued upon the exercise of options and warrants are not included in the computation of diluted loss per share as their effect is anti-dilutive.

#### NOTE 3 - SIGNIFICANT EVENTS:

On March 30, 2000, the Company and Fahnestock & Co. Inc. ("Fahnestock") entered into a financial advisory and investment banking agreement ("The Investment Banking Agreement") with a term of six months. On October 2, 2000, the Company and Fahnestock extended their Investment Banking Agreement by executing a new agreement, pursuant to which Fahnestock will continue to provide the Company with financial advice and will also continue to provide the Company with investment banking services on an exclusive basis for a six (6) month term (the "Extended Investment Banking Agreement"). Pursuant to the Extended Investment Banking Agreement, Fahnestock will receive a consulting fee of \$7,500 per month, of which, \$22,500 was paid upon the execution of the Extended Investment Banking Agreement and \$22,500 was payable on January 2, 2001. In conjunction with the Extended Investment Banking Agreement, the Company has issued to Fahnestock a five-year warrant to purchase 30,000 shares of common stock at an exercise price of \$3.1875.

In October 2000, pursuant to the New Jersey Technology Tax Credit Transfer Program (the "Program"), the Company received approval from the New Jersey Economic Development Authority (the "EDA") to sell the Company's June 30, 1999 New Jersey net operating loss tax benefit of \$71,296. In December 2000, the Company sold this tax benefit and received net proceeds of \$60,331 pursuant to the sale of the entire New Jersey net operating loss tax benefit. The Company may apply to participate in the Program to sell its New Jersey net operating loss tax benefit in the amount of approximately \$163,000 for the year ended June 30, 2000. An application must be submitted to the EDA by June 30, 2001. However, there can be no assurance that the Company will be approved to participate for the year ended June 30, 2000, or if approved, that the Company will be able to sell all or part of the New Jersey net operating loss tax benefit.

On December 1, 2000, pursuant to the Company's 1998 Stock Incentive Plan (the "Plan"), the Company granted options to purchase an aggregate of 25,000 shares of its Common Stock to the new Chief Financial Officer of the Company at an exercise price equal to \$2.25 per share. Such options vest as follows: (i) 1/6 vest on the date of grant; (ii) 1/6 vest six months from the date of grant; (iii) 1/3 vest on the first anniversary from the date of grant; and (iv) 1/3 vest on the second anniversary from the date of grant.

Effective December 1, 2000, the former Chief Financial Officer resigned from the Company. Accordingly, an aggregate of 16,666 options to purchase shares of the Company's Common Stock issued pursuant to the Plan have been forfeited.

Also, on December 1, 2000, pursuant to the Plan, the Company granted options to purchase an aggregate of 35,000 shares of its Common Stock to another executive officer of the Company at an exercise price equal to \$2.25 per share. Such options vest as follows: (i) 1/3 vest on the date of grant; (ii) 1/3 vest on the first anniversary from the date of grant; and (iii) 1/3 vest on the second anniversary from the date of grant.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND PLAN OF OPERATION.

#### OVERVIEW

History and Organization

On March 27, 1997, Nava Leisure USA, Inc., an Idaho corporation ("Nava"), voluntarily registered its common stock under Section 12(g) of the Securities Exchange Act of 1934, as amended, in order to make information concerning itself more readily available to the public. On January 22, 1999, Senesco, Inc., a New Jersey corporation ("Senesco"), merged with and into a wholly-owned subsidiary of Nava, and the stockholders of Senesco received newly issued, unregistered and restricted common stock of Nava such that the stockholders of Senesco acquired a majority of Nava's outstanding common stock (the "Merger"). Pursuant to the Merger, Nava changed its name to Senesco Technologies, Inc. (herein referred to as the "Company"), and Senesco remained a wholly-owned subsidiary of the Company.

On September 29, 1999, the Company declared a 2-for-1 stock split (the "Stock Split") of its common stock (the "Common Stock") which became effective on the NASD OTC Bulletin Board on October 25, 1999. All share amounts and per share prices stated herein have been adjusted to reflect such Stock Split.

On September 30, 1999, the Company reincorporated from the State of Idaho to the State of Delaware.

Business of the Company

The business of the Company is currently operated through Senesco, its wholly-owned subsidiary. The primary business of the Company is the development and commercial exploitation of potentially significant technology involving the identification and characterization of genes that the Company believes control the aging (senescence) of all flowers, fruits and vegetables (plant tissues), increase crop production (yield) in horticultural and agronomic crops and reduce the harmful effects of environmental stress.

Senescence in plant tissues is the natural aging of these tissues. Loss of cellular membrane integrity is an early event during the senescence of all plant tissues that prompts the deterioration of fresh flowers, fruits and vegetables. This loss of integrity, which is attributable to the formation of lipid metabolites in membrane bilayers that "phase-separate," causes the membranes to become "leaky." A decline in cell function ensues, leading to deterioration and eventual death (spoilage) of the tissue. A delay in senescence increases shelf life which extends the plant's growth timeframe and allows the plant to devote more time to the photosynthetic process. The Company has shown that the additional energy gained in this period leads directly to increased seed production, and therefore increases crop yield. Seed production is a vital economic and agricultural factor because oil-bearing crops store oil in their seeds. This yields a more efficient crop. The Company has also shown that delaying senescence allows the plant to allocate more energy toward growth, leading to larger plants (increased biomass), which is vital for crops used to feed livestock (forage) and leafy crops. Most recently, the Company has shown that delaying senescence results in crops which exhibit increased resilience to water deprivation.

Drought resistant crops may ultimately be more cost effective due to reduced loss in the field and less time spent on crop management.

The technology presently utilized by the industry for increasing the shelf life in certain flowers, fruits and vegetables relies on reducing ethylene biosynthesis, and hence only has application to a limited number of plants that are ethylene-sensitive. Current industry technology for attempting to increase crop yield relies on delaying leaf senescence which has also proven ineffective up to this time.

The Company's research and development program focuses on the discovery and development of new gene technologies which aim to confer positive traits on fruits, flowers, vegetables, forestry species and agronomic crops. To date, the Company has isolated and characterized the senescence-induced lipase gene, deoxyhypusine synthase ("DHS") gene and Factor 5A gene in certain species of plants. The Company's initial goal is to inhibit the expression of (or "silence") these genes to delay senescence, which will extend shelf life, increase biomass, increase yield and increase resistance to environmental stress, thereby demonstrating "proof of concept" in each category of crop. The Company then plans to license the technology to strategic partners and enter into joint ventures.

The Company is currently working with tomato, carnation, Arabidopsis (a model plant which produces oil in a manner similar to canola) and banana plants, and it has obtained "proof of concept" for the lipase and DHS genes in several of these species. Near-term research and development initiatives include: (i) silencing the Factor 5A gene in these four types of plants; and (ii) further propagation of transformed plants with the Company's silenced genes.

Subsequent initiatives include: (i) expanding the lipase, DHS and Factor 5A gene technology into a variety of other commercially viable agricultural crops such as canola, lettuce, melon and strawberries; and (ii) developing transformed plants that possess new beneficial traits such as protection against disease. The Company's strategy focuses on various plants to allow flexibility that will accommodate different plant reproduction strategies among the various sectors of the broad agricultural and horticultural markets. There can be no assurance, however, that the Company's research and development efforts will be successful, or if successful, that the Company will be able to commercially exploit its technology.

The Company's research and development is performed by third party researchers at the discretion of the Company pursuant to various research agreements. The primary research and development effort takes place at The University of Waterloo in Ontario, Canada, where the technology was developed. Additional research and development is performed at the University of California, Davis and Hebrew University in Rehovot, Israel, as well as through the Company's Joint Venture with Rahan Meristem in Israel.

#### Target Markets

The Company's technology enhances crops that are reproduced both through seeds and propagation, which are the only two means of commercial crop reproduction. Propagation is a process whereby the plant does not produce fertile seeds and must reproduce through cuttings from the parent plant which are planted and become new plants. The complexities associated with marketing and distribution in the worldwide produce market will require the Company to adopt a multi-faceted commercialization strategy. The Company plans to enter into licensing agreements and strategic relationships with a variety of companies on a crop-by-crop basis. The Company also plans to enter into joint ventures where it will have more direct control over commercialization activities in the end-use market for species which have well established channels of distribution.

#### Joint Venture

On May 14, 1999, the Company entered into a joint venture agreement with Rahan Meristem Ltd., an Israeli company ("Rahan"), engaged in the worldwide export marketing of banana germ-plasm (the "Joint Venture"). The Company has contributed, by way of a limited, exclusive world-wide license to the Joint Venture, access to its technology, discoveries, inventions, know-how (patentable or otherwise), pertaining to plant genes and their cognate expressed proteins that are induced during senescence (plant aging) for the purpose of developing, on a joint basis, genetically altered banana plants which will result in a "longer shelf life" banana. Rahan has contributed its technology, inventions and know-how with respect to banana plants. The Joint Venture is equally owned by each of the parties. There can be no assurance, however, that the Company's Joint Venture will be successful, or if successful, that the Company will be able to commercially exploit its technology.

The Joint Venture applied for and received a conditional grant that totals approximately \$340,000, which constitutes 50% of the Joint Venture's research and development budget over a four year period, from the Israel - U.S. Binational Research and Development (the "BIRD") Foundation (the "BIRD Grant"). Pursuant to the BIRD Grant, such grant, along with certain royalty payments, shall only be repaid to the BIRD Foundation upon the commercial success of the Joint Venture's technology, which success is measured based upon certain benchmarks and/or milestones achieved by the Joint Venture. These benchmarks are reported periodically to the Foundation by the Joint Venture. As of December 31, 2000, Senesco has directly received \$10,573 from the BIRD Foundation for research and development expenses the Company has incurred which are associated with the research and development efforts of the Joint Venture. In January, 2001, the Company directly received an additional \$11,089. The Company expects to receive additional installments of the BIRD Grant as its expenditures associated with the Joint Venture increase above certain levels.

#### INTELLECTUAL PROPERTY

#### Research and Development

The inventor of the Company's technology, John E. Thompson, Ph.D., is the Dean of Science at the University of Waterloo in Waterloo, Ontario and is the Executive Vice President of Research and Development of the Company. Dr. Thompson is also a stockholder of the Company and owns 10.8% of the outstanding shares of the Company's Common Stock as of December 31, 2000. Senesco entered into a three-year research and development agreement, dated as of September 1, 1998 (the "Research and Development Agreement"), with the University of Waterloo and Dr. Thompson as the principal inventor. The Research and Development Agreement provides that the University of Waterloo will perform research and development under the direction of Senesco, and Senesco will pay for the cost of this work and make certain payments totaling approximately CDN\$1,250,000 (as therein). As of December 31, 2000, such amount represented approximately US \$833,000. In return for these payments, the Company has all rights to the intellectual property derived from the research. During the three month periods ended December 31, 2000 and December 31, 1999, the Company has spent approximately \$130,714 and \$77,609, respectively, on all research and development. During the six month periods ended December 31, 2000 and December 31, 1999, the Company has spent approximately \$247,832 and \$196,809, respectively, on all research and development.

Effective May 1, 1999, the Company entered into a consulting agreement for research and development with Dr. Thompson. This agreement provides for monthly payments of \$3,000 through June 2001. The agreement shall automatically renew for two (2) additional three (3) year terms, unless either of the parties provides the other with written notice within six (6) months of the end of the term.

The Company's future research and development program focuses on the discovery and development of new gene technologies which aim to extend shelf life and to confer other positive traits on fruits, flowers, vegetables and agronomic row crops. Over the next twelve months, the Company plans the following research and development initiatives: (i) the isolation of new genes in the Arabidopsis, tomato, lettuce, soybean, rapeseed (canola) and melon plants, among others, at the University of Waterloo; (ii) the isolation of new genes in the carnation plant pursuant to an informal agreement with Dr. Sasha Vainstein of Hebrew University; and (iii) the isolation of new genes in the banana plant through the Joint Venture. The Company also plans to develop transformed plants that possess new beneficial traits such as protection against drought and disease, which will then be developed in each of these varieties. The Company may further expand its research and development initiative beyond the crops listed above.

Dr. Thompson and his colleagues, Dr. Yuwen Hong and Dr. Katalin Hudak, filed a patent application on June 26, 1998 (the "Original Patent Application") to protect their invention, which is directed to methods for controlling senescence in plants. By assignment dated June 25, 1998 and recorded with the United States Patent and Trademark Office (the "PTO"), on June 26, 1998, Drs. Thompson, Hong and Hudak assigned all of their rights in and to the Original Patent Application and any other applications filed in the United States or elsewhere with respect to the invention and/or improvements thereto to Senesco, L.L.C. Senesco succeeded to the assignment and ownership of the Original Patent Application. Drs. Thompson, Hong and Hudak filed an amendment to the Original Patent Application on February 16, 1999 (the "Amended Patent Application" together with the Original Patent Application, the "First Patent Application") titled "DNA Encoding A Plant Lipase, Transgenic Plants and a Method for Controlling Senescence in Plants." The Amended Patent Application serves as a continuation of the Original Patent Application. Concurrent with the filing of the Amended Patent Application with the PTO and as in the case of the Original Patent Application, Drs. Thompson, Hong and Hudak assigned all of their rights in and to the Amended Patent Application and any other applications filed in the United States or elsewhere with respect to such invention and/or improvements thereto to Senesco. Drs. Thompson, Hong and Hudak have received shares of restricted Common Stock of the Company in consideration for the assignment of the First Patent Application. The inventions, which were the subject of the First Patent Application, include a method for controlling senescence of plants, a vector containing a cDNA whose expression regulates senescence, and a transformed microorganism expressing the lipase of cDNA. Management believes that the inventions provide a means for delaying deterioration and spoilage, which could greatly increase the shelf-life of fruits, vegetables, and flowers by silencing or substantially repressing the expression of the lipase gene induced coincident with the onset of senescence.

The Company filed a second patent application (the "Second Patent Application", and together with the First Patent Application, collectively, the "Patent Applications") on July 6, 1999, titled "DNA Encoding A Plant Deoxyhypusine Synthase, Transgenic Plants and A Method for Controlling Programmed Cell Death in Plants." The inventors named on the patent are Drs. John E. Thompson, Tzann-Wei Wang and Dongen Lily Lu. Concurrent with the filing of the Second Patent Application with the PTO and as in the case of the First Patent Application, Drs. Thompson, Wang and Lu assigned all of their rights in and to the Second Patent Application and any other applications filed in the United States or elsewhere with respect to such invention and/or improvements thereto to Senesco. Drs. Thompson, Wang and Lu have received options to purchase Common Stock of the Company in consideration for the assignments of the Second Patent Application. The inventions include a method for the genetic modification of plants to control the onset of either age-related or stress-induced senescence, an isolated DNA molecule encoding a senescence induced gene, and an isolated protein encoded by the DNA molecule.

Currently, the Company is in the process of drafting certain patent applications for new senescence technology that should be filed with the PTO in the near future. There can be no assurance that patent protection will be granted with respect to the Patent Applications, or any other applications, or that, if granted, the validity of such patents will not be challenged.

Furthermore, there can be no assurance that claims of infringement upon the proprietary rights of others will not be made, or if made, could be successfully defended against.

#### Competition

The Company's competitors in the field of delaying plant senescence are companies that develop and produce transformed plants in which ethylene biosynthesis has been silenced. Such companies include: Agritope Inc.; Paradigm Genetics; AgrEvo; Bionova Holding Corporation; and Eden Bioscience, among others. The Company believes that its proprietary technology is unique and, therefore, places the Company at a competitive advantage in the industry. However, there can be no assurance that its competitors will not develop a similar product with superior properties or at greater cost-effectiveness than the Company.

#### Government Regulation

At present, the U.S. federal government regulation of biotechnology is divided among three agencies. The U.S. Department of Agriculture (the "USDA") regulates the import, field testing and interstate movement of specific types of genetic engineering that may be used in the creation of transformed plants. The Environmental Protection Agency (the "EPA") regulates activity related to the invention of plant pesticides and herbicides, which may include certain kinds of transformed plants. The Food and Drug Administration (the "FDA") regulates foods derived from new plant varieties. The FDA requires that transformed plants meet the same standards for safety that are required for all other plants and foods in general. Except in the case of additives that significantly alter a food's structure, the FDA does not require any additional standards or specific approval for genetically engineered foods but expects transformed plant developers to consult the FDA before introducing a new food into the market place.

The Company believes that its current activities, which to date have been confined to research and development efforts, do not require licensing or approval by any governmental regulatory agency. The Company may be required, however, to obtain such licensing or approval from the governmental regulatory agencies described above prior to the commercialization of its genetically engineered plants. There can be no assurance that such licensing or approval by any governmental regulatory agency will be obtained in a timely manner, if at all. In addition, government regulations are subject to change and, in such event, there can be no assurance that the Company may not be subject to additional regulations or require such licensing or approval in the future.

#### **Employees**

The Company currently has four (4) employees and three (3) consultants, five (5) of whom are currently executive officers and are involved in the management of the Company.

The officers are assisted by a Scientific Advisory Board made up of prominent experts in the field of transformed plants. A. Carl Leopold, Ph.D. serves as Chairman of the Scientific Advisory Board. He is currently a member and a W.H. Crocker Scientist Emeritus of the Boyce Thompson Institute for Plant Research at Cornell University. Dr. Leopold has held numerous academic appointments and memberships, including staff member of the Science and

Technology Policy Office during the Nixon and Ford Administrations, and positions with the National Science Foundation and the National Aeronautics and Space Administration. Alan B. Bennett, Ph.D., and William R. Woodson, Ph.D. are the other members of the Scientific Advisory Board. Dr. Bennett is the Associate Dean of the College of Agricultural and Environmental Sciences at the University of California, Davis. His research interests include: the molecular biology of tomato fruit development and ripening; the molecular basis of membrane transport; and cell wall disassembly. Dr. Woodson is the Associate Dean of Agriculture and Director of Agricultural Research Programs at Purdue University. He has been a visiting professor at many universities worldwide including the John Innis Institute in England and the Weizmann Institute of Science in Israel. Dr. Woodson is a world-recognized expert in horticultural science and serves on numerous international and national committees and professional societies.

In addition to his service on the Scientific Advisory Board, the Company has utilized Dr. Bennett as a consultant experienced in the transformed plant industry. The Company entered into a one-year consulting agreement for research and development with Dr. Bennett effective July 16, 1999. This agreement provided for monthly payments of \$5,400 through July 15, 2000. The Company is currently renegotiating a consulting agreement to continue with Dr. Bennett's services.

Furthermore, pursuant to the Research and Development Agreement, the majority of the Company's research and development activities are conducted at the University of Waterloo under the supervision of Dr. Thompson. The Company utilizes the University's substantial research staff including graduate and post-graduate researchers.

The Company anticipates hiring additional employees within the next twelve months to meet needs created by possible expansion of its marketing activities and product development.

#### Safe Harbor Statement

Certain statements included in this Form 10-QSB, including, without limitation, statements regarding the anticipated growth in the markets for the Company's services, the continued development of the Company's genetic technology, the approval of the Company's Patent Applications, the possibility of governmental approval in order to sell or offer for sale to the general public a genetically engineered plant or plant product, the successful implementation of the Joint Venture with Rahan, the success of the Research and Development Agreement, statements relating to the Company's Patent Applications, the anticipated longer term growth of the Company's business, and the timing of the projects and trends in future operating performance, are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. The factors discussed herein and others expressed from time to time in the Company's filings with the Securities and Exchange Commission could cause actual results and developments to be materially different from those expressed in or implied by such statements. The Company does not undertake to update any forward-looking statements.

#### LIQUIDITY AND CAPITAL RESOURCES

Overview

As of December 31, 2000, the Company's cash balance was \$620,122, and the Company's working capital was \$409,161. As of December 31, 2000, the Company had a federal tax loss carry-forward of approximately \$2,604,000 and a state tax loss carry-forward of approximately \$1,812,000 to off-set future taxable income. There can be no assurance, however, that the Company will be able to take advantage of any or all of such tax loss carry-forwards, if at all, in future fiscal years.

#### Financing Needs

To date, the Company has not generated any revenues. The Company has not been profitable since inception, may incur additional operating losses in the future, and may require additional financing to continue the development and subsequent commercialization of its technology. While the Company does not expect to generate significant revenues from the sale of products in the near future, the Company may enter into licensing or other agreements with marketing and distribution partners that may result in license fees, revenues from contract research, or other related revenue.

The Company expects its capital requirements to increase significantly over the next several years as it commences new research and development efforts, undertakes new product developments, increases sales and administration infrastructure and embarks on developing in-house business capabilities and facilities. The Company's future liquidity and capital funding requirements will depend on numerous factors, including, but not limited to, the levels and costs of the Company's research and development initiatives and the cost and timing of the expansion of the Company's sales and marketing efforts.

On March 30, 2000, the Company and Fahnestock & Co. Inc. ("Fahnestock") entered into a financial advisory and investment banking agreement ("The Investment Banking Agreement") with a term of six months. On October 2, 2000, the Company and Fahnestock extended their Investment Banking Agreement by executing a new agreement, pursuant to which Fahnestock will continue to provide the Company with financial advice and will also continue to provide the Company with investment banking services on an exclusive basis for a six (6) month term (the "Extended Investment Banking Agreement"). Pursuant to the Extended Investment Banking Agreement, Fahnestock will receive a consulting fee of \$7,500 per month, of which, \$22,500 was paid upon the execution of the Extended Investment Banking Agreement and \$22,500 was payable on January 2, 2001. In conjunction with the Extended Investment Banking Agreement, the Company has issued to Fahnestock a five-year warrant to purchase 30,000 shares of common stock at an exercise price of \$3.1875.

In October 2000, pursuant to the New Jersey Technology Tax Credit Transfer Program (the "Program"), the Company received approval from the New Jersey Economic Development Authority (the "EDA") to sell the Company's June 30, 1999 New Jersey net operating loss tax benefit of \$71,296. In December 2000, the Company sold this tax benefit and received net proceeds of \$60,331 pursuant to the sale of the entire New Jersey net operating loss tax benefit. The Company may apply to participate in the Program to sell its New Jersey net operating loss tax benefit in the amount of approximately \$163,000 for the year ended June 30, 2000. An application must be submitted to the EDA by June 30, 2001. However, there can be no assurance that the Company will be approved to participate for the year ended June 30, 2000, or if approved, that the Company will be able to sell all or part of the New Jersey net operating loss tax benefit.

In January 2001, the Company received \$11,089 from the BIRD Foundation for research and development expenses that the Company has incurred in connection with the Joint Venture. In addition, the Company anticipates receiving additional funds from the BIRD Grant in the future to assist in funding its Joint Venture. See "Management's Discussion and Analysis of Financial Condition and Plan of Operation."

In order to fund its research and development and commercialization efforts, including the hiring of additional employees, the Company issued an aggregate 1,471,700 shares of its restricted Common Stock, at \$1.50 per share, for an aggregate gross proceeds equal to \$2,207,551, in connection with a private placement completed on June 22, 2000 (the "Private Placement"). The Company believes it has sufficient cash on hand to support its operating plan through at least June 2001. The Company believes it can support its current operating plan by raising additional funds through the issuance and sale of equity in the near future. There can be no assurance however, that the Company will be able to obtain additional financing, if at all, on terms acceptable to the Company.

Three Months Ended December 31, 2000 and Three Months Ended December 31, 1999

The Company is a development stage company, and revenues for each of the three month periods ended December 31, 2000 and December 31, 1999 were \$0. Operating expenses in each of the three month periods ended December 31, 2000 and December 31, 1999 were comprised of general and administrative expenses, sales and marketing expenses, non-cash advertising, consulting and legal costs and research and development expenses. Operating expenses for the three month periods ended December 31, 2000 and December 31, 1999 were \$578,957 and \$488,473, respectively, an increase of \$90,484 or 18.5%.

General and administrative expenses in each of the three month periods ended December 31, 2000 and December 31, 1999 consisted primarily of professional salaries and benefits, depreciation and amortization, professional and consulting services, office rent and corporate insurance. General and administrative expenses were \$407,893 in the three month period ended December 31, 2000 and \$329,081 in the three month period ended December 31, 1999. The increase during the three month period ended December 31, 2000 of \$78,812, or 24.0%, from the corresponding three month period in 1999, resulted primarily from increases in investor relations, consulting services and payroll expenses.

Research and development expenses in each of the three month periods ended December 31, 2000 and December 31, 1999 consisted primarily of professional salaries and benefits, fees associated with the Research and Development Agreement, direct expenses charged to research and development projects and allocated overhead charged to research and development projects. Research and development expenses for the three month periods ended December 31, 2000 and December 31, 1999 were \$130,714 and \$77,609, respectively. The increase during the three month period ended December 31, 2000 of \$53,105, or 68.4%, from the corresponding three month period ended December 31, 1999, resulted primarily from increases in the research activities pursuant to the Research and Development Agreement with the University of Waterloo.

Non-cash charges for options and warrants issued in exchange for services for the three month periods ended December 31, 2000 and December 31, 1999 were \$40,350 and \$81,783, respectively. Such costs consisted primarily of non-employee stock options and warrants granted as consideration for certain professional, consulting and advertising services.

Six Months Ended December 31, 2000 and Six Months Ended December 31, 1999

The Company is a development stage company, and revenues for each of the six month periods ended December 31, 2000 and December 31, 1999 were \$0. Operating expenses in each of the six month periods ended December 31, 2000 and December 31, 1999 were comprised of general and administrative expenses, sales and marketing expenses, non-cash advertising, consulting and legal costs and research and development expenses. Operating expenses for the six month periods ended December 31, 2000 and December 31, 1999 were \$1,101,529 and \$994,804, respectively, an increase of \$106,725 or 10.7%.

General and administrative expenses in each of the six month periods ended December 31, 2000 and December 31, 1999 consisted primarily of professional salaries and benefits, depreciation and amortization, professional and consulting services, office rent and corporate insurance. General and administrative expenses were \$742,327 in the six month period ended December 31, 2000 and \$620,216 in the six month period ended December 31, 1999. The increase during the six month period ended December 31, 2000 of \$122,111, or 19.7%, from the corresponding six month period in 1999, resulted primarily from increases in investor relations, consulting services and payroll expenses.

Research and development expenses in each of the six month periods ended December 31, 2000 and December 31, 1999 consisted primarily of professional salaries and benefits, fees associated with the Research and Development Agreement, direct expenses charged to research and development projects and allocated overhead charged to research and development projects. Research and development expenses for the six month periods ended December 31, 2000 and December 31, 1999 were \$247,832 and \$196,809, respectively. The increase during the six month period ended December 31, 2000 of \$51,023, or 25.9%, from the six month period ended December 31, 1999, resulted primarily from increases in the research activities pursuant to the Research and Development Agreement with the University of Waterloo.

Non-cash charges for options and warrants issued in exchange for services for the six month periods ended December 31, 2000 and December 31, 1999 were \$111,370 and \$177,779, respectively. Such costs consisted primarily of non-employee stock options and warrants granted as consideration for certain professional consulting and advertising services.

Period From Inception on July 1, 1998 through December 31, 2000

The Company is a development stage company. From inception through December 31, 2000, the Company had no revenues.

The Company has incurred losses each year since inception and has an accumulated deficit of \$4,627,589 at December 31, 2000. The Company expects to continue to incur losses over, approximately, the next two to three years from expenditures on research, product development, marketing and administrative activities.

The Company does not expect to generate significant revenues from product sales for, approximately, the next two to three years during which the Company will engage in significant research and development efforts. However, the Company may enter into licensing or other agreements with marketing and distribution partners that may result in license fees, revenues from contract research, and other related revenues. No assurance can be given, however, that such research and development efforts will result in any commercially viable products, or that any licensing or other agreements with marketing and distribution partners will be entered into and result in revenues. Successful future operations will depend on the Company's ability to transform its research and development activities into commercializable products.

#### ITEM 2. CHANGES IN SECURITIES.

On March 30, 2000, the Company and Fahnestock entered into a financial advisory and investment banking agreement ("The Investment Banking Agreement") with a term of six months. On October 2, 2000, the Company and Fahnestock extended their Investment Banking Agreement by executing a new agreement, pursuant to which Fahnestock will continue to provide the Company with financial advice and will also continue to provide the Company with investment banking services on an exclusive basis for a six (6) month term (the "Extended Investment Banking Agreement"). Pursuant to the Extended Investment Banking Agreement, Fahnestock will receive a consulting fee of \$7,500 per month, of which, \$22,500 was paid upon the execution of the Extended Investment Banking Agreement and \$22,500 was payable on January 2, 2001. In conjunction with the Extended Investment Banking Agreement, the Company has issued to Fahnestock a five-year warrant to purchase 30,000 shares of common stock at an exercise price of \$3.1875.

On December 1, 2000, pursuant to the Company's 1998 Stock Incentive Plan (the "Plan"), the Company granted options to purchase an aggregate of 25,000 shares of its Common Stock to the new Chief Financial Officer of the Company at an exercise price equal to \$2.25 per share. Such options vest as follows: (i) 1/6 vest on the date of grant; (ii) 1/6 vest six months from the date of grant; (iii) 1/3 vest on the first anniversary from the date of grant; and (iv) 1/3 vest on the second anniversary from the date of grant.

Effective December 1, 2000, the former Chief Financial Officer resigned from the Company. Accordingly, an aggregate of 16,666 options to purchase shares of the Company's Common Stock issued pursuant to the Plan have been forfeited.

Also, on December 1, 2000, pursuant to the Plan, the Company granted options to purchase an aggregate of 35,000 shares of its Common Stock to another executive officer of the Company at an exercise price equal to \$2.25 per share. Such options vest as follows: (i) 1/3 vest on the date of grant; (ii) 1/3 vest on the first anniversary from the date of grant; and (iii) 1/3 vest on the second anniversary from the date of grant.

No underwriter was employed by the Company in connection with the issuance of the securities described above. The Company believes that the issuance of the foregoing securities was exempt from registration under Section 4(2) of the Securities Act of 1933, as amended (the "Act"), as transactions not involving a public offering and such securities having been acquired for investment and not with a view to distribution, and/or pursuant to Rule 701 promulgated under the Act as transactions involving the issuance of securities pursuant to certain compensatory benefit plans. No public offering was involved and the securities were acquired only by accredited investors or employees of the Company pursuant to the Company's Plan and only for investment and not with a view to distribution. Appropriate legends have been affixed to the foregoing securities, and all recipients had adequate access to information about the Company.

#### ITEM 4. STOCKHOLDER VOTE.

- (a) The Annual Meeting of Stockholders of the Company (the "Meeting") was held on November 30, 2000.
- (b) The following is a complete list of the current Directors of the Company, each of whom were elected to a one-year term at the Meeting, and whose term of office continued after the meeting.

Phillip O. Escaravage Christopher Forbes Steven Katz Thomas C. Quick Ruedi Stalder

- (c) There were 4,960,691 shares of common stock of the Company, \$.01 par value (the "Common Stock"), present at the Meeting in person or by proxy out of a total number of 7,872,626 shares of Common Stock issued and outstanding and entitled to vote at the Meeting.
  - (i) The proposals and results of the vote of the stockholders taken at the Meeting by ballot and by proxy as solicited by the Company on behalf of the Board of Directors were as follows:
    - (A) For the election of the nominees for the Board of Directors of the Company:

Nominee	For	Withheld
Phillip O. Escaravage	4,936,353	24,338
Christopher Forbes	4,936,353	24,338
Steven Katz	4,936,353	24,338
Thomas C. Quick	4,936,353	24,338
Ruedi Stalder	4,936,353	24,338

(B) For the proposal to ratify the appointment of Goldstein Golub and Kessler, LLP as independent auditors of the Company for the fiscal year ending June 30, 2001:

For	Against	Abstain		
4,953,041	6,788	862		

#### ITEM 5. OTHER INFORMATION.

Reconstitution of Board of Directors and Compensation and Audit Committees

On October 2, 2000, the Board of Directors, by unanimous written consent, amended the By-laws of the Company (the "Amended By-laws") to declassify the Board of Directors. The Amended By-laws eliminated the Class A and Class B distinction between members of the Board of Directors, however, the total number of directors constituting the entire Board of Directors of the Company remains unchanged at five. Pursuant to the Amended By-laws, all five directors are of a single class and have a one-year term. Except for the declassification of the Board of Directors as described above, no other changes were made to the Company's By-laws.

Also, on October 2, 2000, the Board of Directors of the Company reduced the number of members that comprise each of its Compensation and Audit Committees, from three (3) directors to two (2) directors. Effective October 2, 2000, the Board of Directors appointed Christopher Forbes and Thomas C. Quick to serve on the compensation and audit committees. Messrs. Forbes and Quick are independent directors as defined in Rule 4200(a)(15) of the NASD's listing standards.

#### Management Restructuring

Effective December 1, 2000, the Company accepted the resignation of Richard Sirkin as Chief Financial Officer and Treasurer and appointed Joel Brooks as Chief Financial Officer and Treasurer.

#### Investment Banking Agreement

On March 30, 2000, the Company and Fahnestock entered into a financial advisory and investment banking agreement ("The Investment Banking Agreement") with a term of six months. On October 2, 2000, the Company and Fahnestock extended their Investment Banking Agreement by executing a new agreement, pursuant to which Fahnestock will continue to provide the Company with financial advice and will also continue to provide the Company with investment banking services on an exclusive basis for a six (6) month term (the "Extended Investment Banking Agreement"). Pursuant to the Extended Investment Banking Agreement, Fahnestock will receive a consulting fee of \$7,500 per month, of which, \$22,500 was paid upon the execution of the Extended Investment Banking Agreement and \$22,500 was payable on January 2, 2001. In conjunction with the Extended Investment Banking Agreement, the Company has issued to Fahnestock a five-year warrant to purchase 30,000 shares of common stock at an exercise price of \$3.1875.

#### ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

- (a) Exhibits.
  - 3 Amended and Restated By-laws of the Company as adopted on October 2, 2000.
  - 4 Form of Warrant Agreement by and between the Company and Fahnestock & Co. Inc., dated October 2, 2000.
  - 10 Investment Banking Agreement, dated as of October 2, 2000, by and between the Company and Fahnestock & Co. Inc.
- (b) Reports on Form 8-K.

None.

#### **SIGNATURES**

In accordance with the requirements of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SENESCO TECHNOLOGIES, INC.

DATE: February 14, 2001 By: /s/ Steven Katz

Steven Katz, President

and Chief Operating Officer (Principal Executive Officer)

DATE: February 14, 2001 By: /s/ Joel Brooks

Joel Brooks, Chief Financial Officer

and Treasurer

(Principal Financial and Accounting

Officer)

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SENESCO TECHNOLOGIES, INC.

(a Delaware corporation)

ARTICLE I

Stockholders

SECTION 1. Fixing Date for Determination of Stockholders of Record. In

order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors and which record date: (1) in the case of determination of stockholders entitled to vote at any meeting of stockholders or adjournment thereof, shall, unless otherwise required by law, not be more than sixty nor less than ten days before the date of such meeting; (2) in the case of determination of stockholders entitled to express consent to corporate action in writing without a meeting, shall not be more than ten days after the date upon which the resolution fixing the record date is adopted by the Board of Directors; and (3) in the case of any other action, shall not be more than sixty days prior to such other action. If no record date is fixed: (1) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held; (2) the record date for determining stockholders entitled to express consent to corporate action in writing without a meeting, when no prior action of the Board of Directors is required by law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the corporation in accordance with applicable law, or, if prior action by the Board of Directors is required by law, shall be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action; and (3) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

SECTION 2. Annual Meetings. The annual meeting of stockholders for the election of directors and for the transaction of such other business as may properly come before the meeting shall be held each year at such date and time, within or without the State of Delaware, as the Board of Directors shall determine.

SECTION 3. Special Meetings. Special meetings of stockholders for the

transaction of such business as may properly come before the meeting may be called only by the Chief Executive Officer, President, Chairman of the Board of Directors (if any) or by order of a majority of the Board of Directors, and shall be held at such date and time, within or without the State of Delaware, as may be specified by such order. Whenever the directors shall fail to fix such place, the meeting shall be held at the principal executive office of the Corporation.

SECTION 4. Notice of Meetings. Written notice of all meetings of the

stockholders, stating the place, date and hour of the meeting and the place within the city or other municipality or community at which the list of stockholders may be examined, shall be mailed or delivered to each stockholder not less than 10 nor more than 60 days prior to the meeting. Notice of any special meeting shall state in general terms the purpose or purposes for which the meeting is to be held and the business transacted at any such meeting shall be limited to matters relating to the purpose or purposes set forth in the notice of meeting.

SECTION 5. Stockholder Lists. The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least 10 days before every

meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present.

The stock ledger shall be the only evidence as to who are the stockholders entitled to examine the stock ledger, the list required by this section or the books of the Corporation, or to vote in person or by proxy at any meeting of stockholders.

SECTION 6. Quorum. Except as otherwise provided by law or the Corporation's

Certificate of Incorporation, a quorum for the transaction of business at any meeting of stockholders shall consist of the holders of record of a majority of the issued and outstanding shares of the capital stock of the Corporation entitled to vote at the meeting, present in person or by proxy. At all meetings of the stockholders at which a quorum is present, all matters, except as otherwise provided by law or the Certificate of Incorporation, shall be decided by the vote of the holders of a majority of the shares entitled to vote thereat present in person or by proxy. If there be no such quorum, the holders of a majority of such shares so present or represented may adjourn the meeting from time to time, without further notice, until a quorum shall have been obtained. When a quorum is once present it is not broken by the subsequent withdrawal of any stockholder.

SECTION 7. Organization. Meetings of stockholders shall be presided over

by the Chairman, if any, or if none or in the Chairman's absence, the Vice-Chairman, if any, or if none or in the Vice-Chairman's absence the Chief Executive Officer or President, or, if none of the foregoing is present, by a chairman to be chosen by the stockholders entitled to vote who are present in person or by proxy at the meeting. The Secretary of the Corporation, or in the Secretary's absence an Assistant Secretary, shall act as secretary of every meeting, but if neither the Secretary nor an Assistant Secretary is present, the presiding officer of the meeting shall appoint any person present to act as secretary of the meeting.

SECTION 8. Voting; Proxies; Required Vote. (a) At each meeting of

stockholders, every stockholder shall be entitled to vote in person or by proxy appointed by instrument in writing, subscribed by such stockholder or by such stockholder's duly authorized attorney-in-fact (but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period), and, unless the Certificate of Incorporation provides otherwise, shall have one vote for each share of stock entitled to vote registered in the name of such stockholder on the books of the Corporation on the applicable record date fixed pursuant to these Bylaws. At all elections of directors the voting may, but need not be by ballot and a plurality of the votes cast there shall elect. Except as otherwise required by law or the Certificate of Incorporation, any other action shall be authorized by a majority of the votes cast.

- (b) Any action required or permitted to be taken at any meeting of stockholders may, except as otherwise required by law or the Certificate of Incorporation, be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the holders of record of the issued and outstanding capital stock of the Corporation having a majority of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted, and the writing or writings are filed with the permanent records of the Corporation. Prompt notice of the taking of corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.
- (c) Where a separate vote by a class or classes, present in person or represented by proxy, shall constitute a quorum entitled to vote on a matter, the affirmative vote of the majority of shares of such class or classes present in person or represented by proxy at the meeting shall be the act of such class, unless otherwise provided in the Corporation's Certificate of Incorporation.

SECTION 9. Inspectors. Unless otherwise required by law, the Board of

Directors, in advance of any meeting, may, but need not, appoint one or more inspectors of election to act at the meeting or any adjournment thereof. If an inspector or inspectors are not so appointed, the person presiding at the meeting may, but need not, appoint one or more inspectors. In case any person who may be appointed as an inspector fails to appear or act, the vacancy may be filled by appointment made by the directors in advance of the meeting or at the meeting by the person presiding thereat. Each inspector, if any, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector at such meeting with strict impartiality and according to the best of his ability. The inspectors, if any, shall determine the number of shares of stock outstanding and the voting power of each, the shares of

stock represented at the meeting, the existence of a quorum, and the validity and effect of proxies, and shall receive votes, ballot or consents, hear and determine all challenges and questions arising in connection with the right to vote, count and tabulate all votes, ballots or consents, determine the result, and do such acts as are proper to conduct the election or vote with fairness to all stockholders. On request of the person presiding at the meeting, the inspector or inspectors, if any, shall make a report in writing of any challenge, question or matter determined by such inspector or inspectors and execute a certificate of any fact found by such inspector or inspectors.

#### ARTICLE II

# Board of Directors

SECTION 1. General Powers. The business, property and affairs of the Corporation shall be managed by, or under the direction of, the Board of Directors.

SECTION 2. Qualification; Number; Term; Remuneration. (a) Each director shall be at least 18 years of age. A director need not be a stockholder, a citizen of the United States, or a resident of the State of Delaware. The number of directors constituting the entire Board shall be such number as may be fixed from time to time by action of the stockholders or Board of Directors, but in no event less than one, one of whom may be selected by the Board of Directors to be its Chairman. The use of the phrase "entire Board" herein refers to the total number of directors which the Corporation would have if there were no vacancies.

- (b) Directors who are elected at an annual meeting of stockholders, and directors who are elected in the interim to fill vacancies and newly created directorships, shall hold office until the next annual meeting of stockholders and until their successors are elected and qualified or until their earlier resignation or removal.
- (c) Directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and may be paid a fixed sum for attendance at each meeting of the Board of Directors or a stated salary as director. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for attending committee meetings.

SECTION 3. Quorum and Manner of Voting. Except as otherwise provided by

law, a majority of the entire Board shall constitute a quorum. A majority of the directors present, whether or not a quorum is present, may adjourn a meeting from time to time to another time and place without notice. The vote of the majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors.

SECTION 4. Places of Meetings. Meetings of the Board of Directors may be

held at any place within the State of Delaware, as may from time to time be fixed by resolution of the Board of Directors, or as may be specified in the notice of meeting.

SECTION 5. Annual Meeting. Following the annual meeting of stockholders,

the newly elected Board of Directors shall meet for the purpose of the election of officers and the transaction of such other business as may properly come before the meeting. Such meeting may be held without notice immediately after the annual meeting of stockholders at the same place at which such stockholders' meeting is held.

SECTION 6. Regular Meetings. Regular meetings of the Board of Directors

shall be held at such times and places as the Board of Directors shall from time to time by resolution determine. Notice need not be given of regular meetings of the Board of Directors held at times and places fixed by resolution of the Board of Directors. Where appropriate communication facilities are reasonably available, any or all Directors shall have the right to participate in all or any part of a meeting of the Board of Directors, or any Committee thereof, by means of conference telephone or any means of communication by which all persons participating in the meeting are able to hear each other.

SECTION 7. Special Meetings. Special meetings of the Board of Directors

shall be held whenever called by the Chairman of the Board, Chief Executive Officer, President, Vice-Chairman or by a majority of the directors then in office.

 ${\tt SECTION}$  8. Notice of Special Meetings. A notice of the place, date and time

and the purpose or purposes of each special meeting of the Board of Directors shall be given to each director by mailing the same at least two days before the special meeting, or by telegraphing or telephoning the same or by delivering the same personally not later than the day before the day of the meeting.

SECTION 9. Organization. At all meetings of the Board of Directors, the

Chairman, if any, or if none or in the Chairman's absence or inability to act the Chief Executive Officer or President, or in the Chief Executive Officer or President's absence or inability to act, a chairman chosen by the directors, shall preside. The Secretary of the Corporation shall act as secretary at all meetings of the Board of Directors when present, and, in the Secretary's absence, the presiding officer may appoint any person to act as secretary.

SECTION 10. Resignation; Removal. Any director may resign at any time upon

written notice to the Corporation and such resignation shall take effect upon receipt thereof by the Chief Executive Officer, President or Secretary, unless otherwise specified in the resignation. Unless otherwise provided in the Certificate of Incorporation, any or all of the directors may be

removed, with cause, only by the holders of a majority of the shares of stock outstanding and entitled to vote for the election of directors.

SECTION 11. Vacancies. Unless otherwise provided in these Bylaws, vacancies

Board of Directors, whether caused by resignation, disqualification, removal, an increase in the authorized number of directors or otherwise, may be filled by the affirmative vote of a majority of the remaining directors, although less than a quorum, or by a sole remaining director, or at a special meeting of the stockholders, by the holders of shares entitled to vote for the election of directors.

SECTION 12. Action by Written Consent. Any action required or permitted to

be taken at any meeting of the Board of Directors may be taken without a meeting if all the directors consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the Board of Directors.

ARTICLE III

Committees

SECTION 1. Appointment. From time to time the Board of Directors by a

resolution adopted by a majority of the entire Board may appoint any committee or committees for any purpose or purposes, to the extent lawful, which shall have powers as shall be determined and specified by the Board of Directors in the resolution of appointment.

SECTION 2. Procedures, Quorum and Manner of Acting. Each committee shall

fix its own rules of procedure, and shall meet where and as provided by such rules or by resolution of the Board of Directors. Except as otherwise provided by law, the presence of a majority of the then appointed members of a committee shall constitute a quorum for the transaction of business by that committee, and in every case where a quorum is present the affirmative vote of a majority of the members of the committee present shall be the act of the committee. Each committee shall keep minutes of its proceedings, and actions taken by a committee shall be reported to the Board of Directors.

SECTION 3. Action by Written Consent. Any action required or permitted to

be taken at any meeting of any committee of the Board of Directors may be taken without a meeting if all the members of the committee consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the committee.

SECTION 4. Term; Termination. In the event any person shall cease to be a

director of the Corporation, such person shall simultaneously therewith cease to be a member of any committee appointed by the Board of Directors.

#### ARTICLE IV

Officers

SECTION 1. Officers. The Corporation shall have as officers, a Chairman of

the Board, a Chief Executive Officer, a President, a Secretary and a Treasurer. The Corporation may also have, at the discretion of the Board of Directors, a Chief Operating Officer, a Chief Financial Officer, one or more Vice Presidents, one or more assistant secretaries, one or more assistant treasurers and such other officers as the Board may from time to time deem proper. Any two or more offices may be held by the same person except the offices of the President and Secretary.

SECTION 3. Term of Office and Remuneration. The term of office of all

officers shall be one year and until their respective successors have been elected and qualified, but any officer may be removed from office, either with or without cause, at any time by the Board of Directors. Any vacancy in any office arising from any cause may be filled for the unexpired portion of the term by the Board of Directors. The remuneration of all officers of the Corporation may be fixed by the Board of Directors or in such manner as the Board of Directors shall provide.

SECTION 4. Resignation; Removal. Any officer may resign at any time upon

written notice to the Corporation and such resignation shall take effect upon receipt thereof by the Chief Executive Officer, President or Secretary, unless otherwise specified in the resignation. Any officer shall be subject to removal, with or without cause, at any time by vote of a majority of the entire Board.

SECTION 5. Chief Executive Officer. In the absence of any designation to

the contrary by the Board, the President shall be the Chief Executive Officer. The Chief Executive Officer shall, in the absence of the chairperson of the Board, if any, preside at all meetings of the shareholders and of the Board at which he or she is present in committee with the President, if the Chief Executive Officer shall be someone other than the President, and shall exercise his or her authority in committee with the President. Subject to the control of the Board and, within the scope of their authority, any committees thereof, the President and the Chief Executive Officer, whether such offices are held by the same individual or otherwise, shall (a) have general and active management of all the business, property and affairs of the Corporation, (b) see that all orders and resolutions of the Board and the committees thereof are carried into effect, (c) have custody of the corporate seal, or entrust the same to the Secretary, (e) act as the duly authorized representative of the Board in all matters, except where the board has formally designated some other person or group to act, and (f) in general perform all the usual duties incident to the office(s) and such other duties as may be assigned to such person(s) by the Board of Directors.

SECTION 6. President. The President shall, in the absence of the

chairperson of the Board, if any, preside at all meetings of the shareholders and of the Board at which he or she is present in committee with the Chief Executive Officer, if the President shall be someone other than the Chief Executive Officer, and the President shall have the same authority as the Chief Executive Officer as set forth above and, if the President shall be someone other than the Chief Executive Officer, shall exercise such authority in committee with the Chief Executive Officer. In addition, the President shall perform such other duties as the Board of Directors may from time to time designate.

SECTION 7. Vice-President. A Vice-President may execute and deliver in the

name of the Corporation contracts and other obligations and instruments pertaining to the regular course of the duties of said office as assigned by the Board of Directors, the Chief Executive Officer or the President, and shall have such other authority as from time to time may be assigned by the Board of Directors, the Chief Executive Officer or the President.

SECTION 8. Treasurer.

- (a) The Treasurer shall keep, or cause to be kept, the books and records of account of the Corporation.
- (b) The Treasurer shall deposit all monies and other valuables in the name and to the credit of the Corporation with such depositories as may be designated from time to time by resolution of the Board of Directors. He or she shall disburse the funds of the Corporation as may be ordered by the Board of Directors, shall render to the Chief Executive Officer, the President and the Board, whenever they request it, an account of all of his transactions as Treasurer and of the financial condition of the Corporation, and shall have such other powers and perform such other duties as may be prescribed from time to time by the Board, the Chief Executive Officer or as the President may from time to time delegate.
- (c) The Treasurer shall also in general have all other duties incident to the position of Treasurer and such other duties as may be assigned by the Board of Directors, the Chief Executive Officer or President.
- SECTION 9. Secretary. The Secretary shall in general have all the duties ------incident to the office of Secretary and such other duties as may be assigned by the Board of Directors, the Chief Executive Officer or the President.

SECTION 10. Chief Financial Officer. The Chief Financial Officer, if there

shall be one, shall keep, or cause to be kept, the books and records of account of the Corporation. The Chief Financial Officer shall deposit all monies and other valuables in the name and to the credit of the Corporation with such depositories as may be designated from time to time by resolution of the Board of Directors. He or she shall disburse the funds of the Corporation as may be ordered by the Board of Directors, shall render to the President and the Board, whenever they request it, an account of all of his transactions as Chief Financial Officer and of the financial condition of the Corporation, and shall have such other powers and perform such other duties as may be prescribed from time to time by the Board or as the President may from time to time delegate.

SECTION 11. Assistant Officers. Any assistant officer shall have such

powers and duties of the officer such assistant officer assists as such officer or the Board of Directors shall from time to time prescribe.

#### ARTICLE V

## Books and Records

SECTION 1. Location. The books and records of the Corporation may be kept

at such place or places within or outside the State of Delaware as the Board of Directors or the respective officers in charge thereof may from time to time determine. The record books containing the names and addresses of all stockholders, the number and class of shares of stock held by each and the dates when they respectively became the owners of record thereof shall be kept by the Secretary as prescribed in the Bylaws and by such officer or agent as shall be designated by the Board of Directors.

SECTION 2. Addresses of Stockholders. Notices of meetings and all other

corporate notices may be delivered personally or mailed to each stockholder at the stockholder's address as it appears on the records of the Corporation.

#### ARTICLE VI

# Certificates Representing Stock

SECTION 1. Certificates; Signatures. The shares of the Corporation shall be

represented by certificates, provided that the Board of Directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation. Notwithstanding the adoption of such a resolution by the Board of Directors, every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate, signed by or in the name of the Corporation by the Chief Executive Officer or President, and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary of the Corporation, representing the number of shares registered in certificate form. Any and all signatures on any such certificate may be facsimiles. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue. The name of the holder of record of the shares represented thereby, with the number of such shares and the date of issue, shall be entered on the books of the Corporation.

 ${\tt SECTION~2.~Transfers~of~Stock.~Upon~compliance~with~provisions~restricting}\\$ 

the transfer or registration of transfer of shares of stock, if any, shares of capital stock shall be transferable on the books of the Corporation only by the holder of record thereof in person, or by duly authorized attorney, upon surrender and cancellation of certificates for a like number of shares, properly endorsed, and the payment of all taxes due thereon.

SECTION 3. Fractional Shares. The Corporation may, but shall not be

required to, issue certificates for fractions of a share where necessary to effect authorized transactions, or the Corporation may pay in cash the fair value of fractions of a share as of the time when those entitled to receive such fractions are determined, or it may issue scrip in registered or bearer form over the manual or facsimile signature of an officer of the Corporation or of its agent, exchangeable as therein provided for full shares, but such scrip shall not entitle the holder to any rights of a stockholder except as therein provided.

The Board of Directors shall have power and authority to make all such rules and regulations as it may deem expedient concerning the issue, transfer and registration of certificates representing shares of the Corporation.

SECTION 4. Lost, Stolen or Destroyed Certificates. The Corporation may

issue a new certificate of stock in place of any certificate, theretofore issued by it, alleged to have been lost, stolen or destroyed, and the Board of Directors may require the owner of any lost, stolen or destroyed certificate, or his legal representative, to give the Corporation a bond sufficient to indemnify the Corporation against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of any such new certificate.

ARTICLE VII

Dividends

Subject always to the provisions of law and the Certificate of Incorporation, the Board of Directors shall have full power to determine whether any, and, if any, what part of any, funds legally available for the payment of dividends shall be declared as dividends and paid to stockholders; the division of the whole or any part of such funds of the Corporation shall rest wholly within the lawful discretion of the Board of Directors, and it shall not be required at any time, against such discretion, to divide or pay any part of such funds among or to the stockholders as dividends or otherwise; and before payment of any dividend, there may be set aside out of any funds of the Corporation available for dividends such sum or sums as the Board of Directors from time to time, in its absolute discretion, thinks proper as a reserve or reserves to meet contingencies, or for repairing or maintaining any property of the Corporation, or for such other purpose as the Board of Directors shall think conducive to the interest of the Corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

### ARTICLE VIII

# Ratification

Any transaction, questioned in any law suit on the ground of lack of authority, defective or irregular execution, adverse interest of director, officer or stockholder, non-disclosure, miscomputation, or the application of improper principles of practices of accounting, may be ratified before or after judgment, by the Board of Directors or by the stockholders, and if so ratified shall have the same force and effect as if the questioned transaction had been originally duly authorized. Such ratification shall be binding upon the Corporation and its stockholders and shall constitute a bar to any claim or execution of any judgment in respect of such questioned transaction.

### ARTICLE IX

# Indemnification

SECTION 1. Right to Indemnification. The Corporation shall indemnify and

hold harmless, to the fullest extent permitted by law as it presently exists or may hereafter be amended, any person who was or is made or is threatened to be made a party or is otherwise involved in any action or suit, whether or not by or in the right of the Corporation, or proceeding, whether civil, criminal, administrative or investigative (collectively, a "proceeding") by reason of the fact that he, or a person for whom he is the legal representative, is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss, including judgments, fines, ERISA excise taxes or penalties and amounts paid or to be paid in settlement, incurred, suffered or paid by or on behalf of such person, and expenses (including attorneys' fees) reasonably incurred by such person.

SECTION 2. Prepayment of Expenses. The Corporation shall pay the expenses

(including attorneys' fees) incurred in defending any proceeding in advance of its final disposition, provided, however, that the payment of expenses incurred  $\frac{1}{2}$ 

by a director or officer in advance of the final disposition of the proceeding shall be made only upon receipt of an undertaking by the director or officer to repay all amounts advanced if it should be ultimately determined that the director or officer is not entitled to be indemnified under this Article or otherwise

SECTION 3. Claims. The right to indemnification and payment of expenses

under the Certificate of Incorporation, these Bylaws or otherwise shall be a contract right. If a claim for indemnification or payment of expenses under this Article is not paid in full within sixty days after a written claim therefor has been received by the Corporation, the claimant may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the Corporation shall have the burden of proving that the claimant was not entitled to the requested indemnification or payment of expenses under applicable law.

 ${\tt SECTION~4.~Non-Exclusivity~of~Rights.~The~rights~conferred~on~any~person~by}\\$ 

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this Article shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, these Bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

SECTION 5. Other Indemnification. The Corporation's obligation, if any, to

indemnify any person who was or is serving at its request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, enterprise or nonprofit entity shall be reduced by any amount such person may collect as indemnification from such other corporation, partnership, joint venture, trust, enterprise or nonprofit enterprise.

SECTION 6. Amendment or Repeal. Any repeal or modification of the foregoing

provisions of this Article IX shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification.

ARTICLE X

Corporate Seal

The corporate seal shall have inscribed thereon the name of the Corporation and the year of its incorporation, and shall be in such form and contain such other words and/or figures as the Board of Directors shall determine. The corporate seal may be used by printing, engraving, lithographing, stamping or otherwise making, placing or affixing, or causing to be printed, engraved, lithographed, stamped or otherwise made, placed or affixed, upon any paper or document, by any process whatsoever, an impression, facsimile or other reproduction of said corporate seal.

ARTICLE XI

Fiscal Year

The fiscal year of the Corporation shall be that which is determined by the Board of Directors, and is subject to change by the Board of Directors.

ARTICLE XII

Waiver of Notice

Whenever notice is required to be given by these Bylaws or by the Certificate of Incorporation or by law, a written waiver thereof, signed by the person or persons entitled to said notice, whether before or after the time stated therein, shall be deemed equivalent to notice.

#### ARTICLE XIII

Bank Accounts, Drafts, Contracts, Etc.

SECTION 1. Bank Accounts and Drafts. In addition to such bank accounts as

may be authorized by the Board of Directors, the primary financial officer or any person designated by said primary financial officer, whether or not an employee of the Corporation, may authorize such bank accounts to be opened or maintained in the name and on behalf of the Corporation as he may deem necessary or appropriate, payments from such bank accounts to be made upon and according to the check of the Corporation in accordance with the written instructions of said primary financial officer, or other person so designated by the Treasurer.

SECTION 2. Contracts. The Board of Directors may authorize any person or

persons, in the name and on behalf of the Corporation, to enter into or execute and deliver any and all deeds, bonds, mortgages, contracts and other obligations or instruments, and such authority may be general or confined to specific instances.

SECTION 3. Proxies; Powers of Attorney; Other Instruments. The Chairman,

Chief Executive Officer, President or any other person designated by either of them shall have the power and authority to execute and deliver proxies, powers of attorney and other instruments on behalf of the Corporation in connection with the rights and powers incident to the ownership of stock by the Corporation. The Chairman, Chief Executive Officer, President or any other person authorized by proxy or power of attorney executed and delivered by either of them on behalf of the Corporation may attend and vote at any meeting of stockholders of any company in which the Corporation may hold stock, and may exercise on behalf of the Corporation any and all of the rights and powers incident to the ownership of such stock at any such meeting, or otherwise as specified in the proxy or power of attorney so authorizing any such person. The Board of Directors, from time to time, may confer like powers upon any other nerson.

SECTION 4. Financial Reports. The Board of Directors may appoint the

primary financial officer or other fiscal officer and/or the Secretary or any other officer to cause to be prepared and furnished to stockholders entitled thereto any special financial notice and/or financial statement, as the case may be, which may be required by any provision of law.

ARTICLE XIV

Amendments

The Board of Directors shall have the power to adopt, amend or repeal these Bylaws. Bylaws adopted by the Board of Directors may be repealed or amended, and new Bylaws may be made by the stockholders, and the stockholders may prescribe that any Bylaw made by them shall not be altered, amended or repealed by the Board of Directors. The Board of Directors of the Corporation is expressly authorized to adopt, amend or repeal the Bylaws of the Corporation by a vote of the majority of directors, subject, however, to any limitation thereof contained in these Bylaws.

Adopted by the Board of Directors on October 2, 2000.

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NO SALE OR TRANSFER OF THIS WARRANT OR THE SECURITIES UNDERLYING THIS WARRANT MAY BE MADE UNTIL THE EFFECTIVENESS OF A REGISTRATION STATEMENT OR OF A POST-EFFECTIVE AMENDMENT THERETO UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), COVERING THIS WARRANT OR THE SECURITIES UNDERLYING THIS WARRANT, OR UNTIL THE COMPANY RECEIVES AN OPINION OF COUNSEL TO THE EFFECT THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION REQUIREMENTS OF THE ACT. TRANSFER OF THIS WARRANT IS RESTRICTED UNDER PARAGRAPH 2 BELOW.

WARRANT TO PURCHASE COMMON STOCK

SENESCO TECHNOLOGIES, INC. (a Delaware corporation)

Dated: October 2, 2000

THIS CERTIFIES THAT, for value received, Fahnestock & Co. Inc. ("Fahnestock") or its registered assigns (Fahnestock and any such registered assign, a "Holder") is the owner of this warrant (this "Warrant") to purchase from Senesco Technologies, Inc., a Delaware corporation (the "Company"), during the Exercise Period (as defined below) and at the exercise price of \$3.1875 per share, as adjusted from time to time as provided in paragraph 5 of this Warrant (the "Warrant Price"), 30,000 shares of the Company's common stock, par value \$0.01 per share (the "Common Stock").

## Exercise of the Warrant.

(a) The rights represented by this Warrant shall be exercisable at the Warrant Price and during the period from the date hereof through the fifth anniversary of the date hereof, ("the Exercise Period") upon the terms and subject to the conditions as set forth herein.

(b) The rights represented by this Warrant may be exercised at any time within the Exercise Period, in whole or in part (but not as to a fractional share of Common Stock), by (i) the surrender of this Warrant (with a purchase form properly executed in the form attached as Exhibit A the ("Purchase") Form")) at the principal executive office of the Company or such other office or agency of the Company as it may designate by notice in writing to the Holder at the address of the Holder appearing on the books of the Company (a "Designated Office"); and (ii) payment to the Company of the Warrant Price then in effect for the number of shares of Common Stock specified in the above-mentioned purchase form together with applicable stock transfer taxes, if any, and in the manner specified in such purchase form, which payment shall be (A) in cash or by bank check for all shares of Common Stock purchased upon such exercise, or (B) through a "cashless" or "net-issue" exercise ("Cashless Exercise"); the Holder shall exchange this Warrant subject to a Cashless Exercise for that number of shares of Common Stock determined by multiplying the number of such shares as to which this Warrant is then exercised by a fraction, the numerator of which shall be the difference between (x) the Market Price (as defined in Paragraph 1(d) hereof) and (y) the Warrant Price (as defined in on the face of this Warrant) and the denominator of which shall be the Market Price; such purchase form shall set forth the calculation upon which the Cashless Exercise is based, or (C) a combination of (A) and (B) above; and (iii) delivery to the Company of a duly executed agreement signed by the person(s) designated in the purchase form to the effect that such

person(s) agree(s) to be bound by the provisions of the Registration Rights Agreement referred to in Paragraph 2(a) hereof applicable to the Holder of this Warrant. If such person is not the Holder exercising this Warrant, the transfer to such person shall comply with paragraph 2 hereof. This Warrant shall be deemed to have been exercised, in whole or in part to the extent specified, immediately prior to the close of business on the date this Warrant (with a properly executed Purchase Form) is surrendered and payment is made in accordance with the foregoing provisions of this Paragraph 1, and the person or persons in whose name or names the certificates for the Common Stock shall be issuable upon such exercise shall become the Holder or Holders of record of such Common Stock at that time and date. The Common Stock so purchased shall be delivered to the Holder within a reasonable time, not exceeding ten business days, after the rights represented by this Warrant shall have been so exercised.

- (c) If this Warrant is exercised in part, the Company shall promptly execute and return to the exercising Holder a Warrant registered in the name of such Holder evidencing the right to purchase the number of shares of Common Stock as to which this Warrant shall not have been exercised and otherwise with the same terms as the surrendered Warrant.
- (d) For the sole purpose of determining the number of shares issued upon a Cashless Exercise, Market Price means, as of any date, the value of Common Stock determined as follows:
- (i) If the Common Stock is listed on any established stock exchange or a national market system, including the National Association of Securities Dealers, Inc. ("NASD") Automated Quotation System ("Nasdaq") National Market, or Nasdaq SmallCap market, or NASD OTC Bulletin Board, its Market Price shall be the closing sales price for such stock on the last trading day prior to the Company's receipt of the Warrant and Purchase Form

(the "Market Closing Date"), or if no closing sales price is reported, it shall be the average of the highest reported bid and lowest reported ask price, as reported or quoted on such exchange or such system on the Market Closing Date; or

(ii) In the absence of an established market, or if the Common Stock is not listed on any exchange or quotation system, the Market Price shall be the highest price per share which the Company could obtain from a willing buyer (not a current employee or director) for shares of Common Stock sold by the Company, from authorized but unissued shares, as determined in good faith by its Board of Directors (and promptly upon any request therefore by the Holder).

# 2. Restrictions on Transfer.

- (a) By receipt of this Warrant, by its execution and by its exercise in whole or in part, Holder represents to the Company the following:
- (i) Holder understands that this Warrant and any shares of Common Stock purchased upon its exercise (collectively, the "Securities") are securities, the issuance of which requires compliance with federal and state securities laws, including the Act.
- (ii) Holder is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Holder is acquiring these securities for investment only for Holder's own account and for possible transfers to employees of Fahnestock consistent with Section 2(a)(iii) below and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Act.
- (iii) Holder acknowledges and understands that the securities constitute "restricted securities" under the Act and must be held indefinitely unless they are

subsequently registered under the Act (the Company and Fahnestock having entered into a Registration Rights Agreement of even date herewith with respect to the rights of the Holder to have the underlying Common Stock registered for resale in certain events) or an exemption from such registration is available. Holder understands that this Warrant is, and the certificate evidencing the shares of Common Stock issued upon exercise of this Warrant will be, imprinted with a legend which prohibits the transfer of the applicable Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company and may bear any other legend required under applicable state securities laws.

(iv) Holder is familiar with the provisions of Rule 144, promulgated under the Act, which, in substance, permits limited public resale of "restricted securities" acquired, directly or indirectly, from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 144 requires, among other things: (1) the availability of certain public information about the Company; (2) the resale occurring not earlier than the time period prescribed by Rule 144 after the party has purchased, and made full payment for, within the meaning of Rule 144, the securities to be sold; and (3) in the case of an affiliate, or of a non-affiliate who has held the securities less than the time period prescribed by Rule 144, the sale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Securities Exchange Act of 1934, as amended) and the amount of securities being sold during any three month period not exceeding the specified limitations stated therein, if applicable.

(b) A transfer of this Warrant in compliance with the foregoing may be made by presenting this Warrant accompanied by a Transfer Form in the form of Exhibit B hereto, properly executed, at the principal executive office of the Company or other Designated Office, in exchange for which the Company will promptly issue a Warrant registered in the name of the transferee with the same terms as the presented Warrant.

## 3. Covenants of the Company.

- (a) The Company covenants and agrees that all Common Stock issuable upon the exercise of this Warrant will, upon issuance thereof and payment therefor in accordance with the terms hereof, be duly and validly issued, fully paid and nonassessable and no personal liability will attach to the Holder thereof by reason of being such a Holder, other than as set forth herein.
- (b) The Company covenants and agrees that during the period within which this Warrant may be exercised, the Company will at all times have authorized and reserved a sufficient number of shares of Common Stock to provide for the exercise of this Warrant.
- 4. No Rights as Stockholder. This Warrant shall not entitle the Holder to any voting rights or other rights as a stockholder of the Company, either at law or in equity, and the rights of the Holder are limited to those expressed in this Warrant and are not enforceable against the Company except to the extent set forth herein.

- 5. Adjustments of Warrant Price and Number of Shares of Common Stock.
- (a) Subdivision and Combination. In case the Company shall at any time after the date hereof subdivide or combine the outstanding shares of Common

time after the date hereof subdivide or combine the outstanding shares of Common Stock, the Warrant Price shall forthwith be proportionately decreased in the case of subdivision or increased in the case of combination.

(b) Adjustment in Number of Shares. Upon each  $% \left( \mathbf{b}\right) =\mathbf{b}^{\prime }$  adjustment of the

Warrant Price pursuant to the provisions of this Paragraph 5, the number of shares of Common Stock issuable upon the exercise of the Warrant shall be adjusted to the nearest full whole number by multiplying a number equal to the Warrant Price in effect immediately prior to such adjustment by the number of shares of Common Stock issuable upon exercise of the Warrant immediately prior to such adjustment and dividing the product so obtained by the adjusted Warrant Price.

(c) Reclassification, Consolidation, Merger, etc. In case of any

reclassification or change of the outstanding shares of Common Stock (other than a change in par value to no par value, or from no par value to par value, or as a result of a subdivision or combination), or in the case of any consolidation of the Company with, or merger of the Company into, another corporation (other than a consolidation or merger which does not result in any reclassification or change of the outstanding shares of Common Stock, except a change as a result of a subdivision or combination of such shares or a change in par value, as aforesaid), or in the case of a sale or conveyance to another corporation of the property of the Company as an entirety, the Holder shall thereafter have the right to purchase the kind and number of shares of stock and other securities and property receivable upon such reclassification, change, consolidation, merger, sale or conveyance as if the Holder were the owner of the shares of

Common Stock underlying the Warrant immediately prior to any such events at a price equal to the product of (x) the number of shares issuable upon exercise of the Warrant and (y) the Warrant Price in effect immediately prior to the record date for such reclassification, change, consolidation, merger, sale or conveyance as if such Holder had exercised the Warrant.

(d) Redemption of Warrant. Notwithstanding anything to the contrary contained in this Agreement or elsewhere, the Warrant cannot be redeemed by the Company under any circumstances.

(e) Dividends and Other Distributions with Respect to Outstanding Securities. In the event that the Company shall at any time after the date hereof and prior to the exercise and expiration of the Warrant declare a dividend (other than a dividend consisting solely of shares of Common Stock or a

hereof and prior to the exercise and expiration of the Warrant declare a dividend (other than a dividend consisting solely of shares of Common Stock or a cash dividend or distribution payable out of current or retained earnings) or otherwise distribute to the Holders of Common Stock any monies, assets, property, rights, evidences of indebtedness, securities (other than such a cash dividend or distribution or dividend consisting solely of shares of Common Stock), whether issued by the Company or by another person or entity, or any other thing of value, the Holders of the unexercised Warrant shall thereafter be entitled, in addition to the shares of Common Stock or other securities receivable upon the exercise thereof, to receive, upon the exercise of such Warrant, the same monies, property, assets, rights, evidences of indebtedness, securities or any other thing of value that they would have been entitled to receive at the time of such dividend or distribution as if the Holders were the owners of the shares of Common Stock underlying the Warrant. At the time of and as a condition precedent to any such dividend or distribution, the Company shall make appropriate reserves to ensure the timely performance of the provisions of this Paragraph 5(e).

(f) Subscription Rights for Shares of Common Stock or Other

Securities. In case the Company or an affiliate of the Company shall at any time

after the date hereof and prior to the exercise of the Warrant in full issue any rights to subscribe for shares of Common Stock or any other securities of the Company or of such affiliate to all the holders of Common Stock, the Holders of the unexercised Warrant shall be entitled, in addition to the shares of Common Stock or other securities receivable upon the exercise of the Warrant, to receive such rights at the time such rights are distributed to the other stockholders of the Company but only to the extent of the number of shares of Common Stock, if any, for which the Warrant remains exercisable.

(g) Certain Notice Requirements. (i) If at any time prior to the  $\,$ 

expiration of this Warrant and its exercise, any of the events described in this Paragraph 5 shall occur, then, in each of said events, the Company shall give written notice of such event at least ten (10) days prior to the date fixed as a record date or the date of closing the transfer books for the determination of the stockholders entitled to such dividend, distribution, conversion or exchange of securities or subscription rights, or entitled to vote on such proposed dissolution, liquidation, winding up or sale. Such notice shall specify such record date or the date of the closing of the transfer books, as the case may he.

(ii) The Company shall be required to give the notice described in this Paragraph 5 upon one or more of the following events:

(A) if the Company shall declare a record date to identify the holders of its shares of Common Stock for the purpose of entitling them to receive a dividend or distribution payable otherwise than in cash, or a cash dividend or distribution payable otherwise than out of retained earnings, as

indicated by the accounting  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1$ 

- (B) the Company shall offer to all the holders of its Common Stock any additional shares of capital stock of the Company or securities convertible into or exchangeable for shares of capital stock of the Company, or any option, right or warrant to subscribe therefor; or
- (C) a dissolution, liquidation or winding up of the Company (other than in connection with a consolidation or merger) or a sale of all or substantially all of its property, assets and business shall be proposed; or
  - (D) a merger or consolidation referred to in this
- (iii) The Company shall, promptly after the Board of Directors has determined that an event requiring a change in the Warrant Price has occurred, send notice to the Holder of such event and change. Such notice shall describe the event causing the change and the method of calculating same and shall be certified as being true and accurate by the Company's Chief Executive Officer and Chief Financial Officer.

Paragraph 5.

(h) Computations. The Company may retain a firm of independent public accountants (who may be any such firm regularly employed by the Company) to make any computation required under this Paragraph 5, and any certificate

to make any computation required under this Paragraph 5, and any certificate setting forth such computation signed by such firm shall be conclusive evidence of the correctness of any computation made under this Paragraph 5.

## Fractional Shares.

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- (a) The Company shall not be required to issue fractions of shares of Common Stock or fractional Warrants on the exercise of this Warrant; provided, however, that if the Holder exercises this Warrant, any fractional shares of Common Stock shall be eliminated by rounding any fraction up to the nearest whole number of shares of Common Stock.
- (b) The Holder of this Warrant, by acceptance hereof, expressly waives his right to receive any fractional share of Common Stock or fractional Warrant upon exercise of this Warrant.

#### 7. Miscellaneous.

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- (a) This Warrant shall be governed by and in accordance with the laws of the State of New York without regard to the conflicts of law principles thereof.
- (b) All notices, requests, consents and other communications hereunder shall be made in writing and shall be deemed to have been duly made when delivered, or mailed by registered or certified mail, return receipt requested: (i) if to a Holder, to the address of such Holder as shown on the books of the Company, or (ii) if to the Company as follows:

Senesco Technologies, Inc. 34 Chambers Street Princeton, NJ 08542 Attn: Steven Katz, President Tel. No.: (609) 252-0680 Fax. No. (609) 252-0049

with a copy to:

Hale and Dorr LLP
214 Carnegie Center
3rd Floor
Princeton, NJ 08540
Attn: Emilio Ragosa, Esq.
Tel. No.: (609) 750-7600
Fax. No. (609) 750-7700

or such other address as the Company may notify to the Holder of this Warrant at this time.

- (c) All the covenants and provisions of this Warrant by or for the benefit of the Company and the Holders shall bind and inure to the benefit of their respective successors and assigns hereunder.
- (d) Nothing in this Warrant shall be construed to give to any person or corporation other than the Company and any registered Holder or Holders, any legal or equitable right, and this Warrant shall be for the sole and exclusive benefit of the Company and any Holder or Holders.

\* \* \* \* \* \* \*

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its duly authorized officer and to be dated as of October 2, 2000.

SENESCO TECHNOLOGIES, INC.

By:		
	Name:	
	Title:	

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PURCHASE	FORM	

(To be signed only upon exercise of the Warrant)

The undersigned, the Holder of the foregoing Warrant, hereby irrevocably elects to exercise the purchase rights represented by such Warrant for, and to purchase thereunder, shares of Common Stock of Senesco
Technologies, Inc. and herewith makes payment of \$ therefor and/or in
the form of Cashless Exercise as to such shares and requests that the certificates for Common Stock be issued in the name(s) of, and delivered to whose addresses is (are)
and whose social security or taxpayer
identification number(s) is (are)
Dated:
(Name of Holder)
Address
Telephone

Signature must conform in all respects to name of registered Holder.

EXHIBIT	В

(To be signed only upon transfer of the Warrant)
For value received, the undersigned hereby sells, assigns, and transfers unto the right to purchase shares of Common
Stock of Senesco Technologies, Inc. represented by the foregoing Warrant to the extent of shares of Common Stock, and appoints ,
attorney to transfer such rights on the books of Senesco Technologies, Inc., with full power of substitution in the premises.
Dated:
(Name of Holder)
Address
Telephone
In the presence of:

\_\_\_\_\_

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TRANSFER FORM

FAHNESTOCK & CO. INC. 125 BROAD STREET NEW YORK, NY 10004 (212) 668-8000 (800) 221-5588 (212) 425-2028 FAX

October 2, 2000

CONFIDENTIAL

Senesco Technologies, Inc. 34 Chambers Street Princeton, NJ 08542

Attn: Steven Katz

President and Chief Operating Officer

Ladies and Gentlemen:

This is to confirm our agreement whereby Senesco Technologies, Inc., a Delaware corporation (the "Company"), has requested Fahnestock & Co. Inc. ("Fahnestock") to render investment banking services to it on an exclusive basis as to the terms and conditions as set forth herein, and Fahnestock has agreed to render such services as follows.

- 1. The Company hereby engages Fahnestock for the six (6) month period commencing October 2, 2000 to render advice to the Company as an investment banker relating to financial and similar business matters. During the term of this Agreement, Fahnestock will provide the Company with financial consulting advice as is reasonably requested by the Company primarily with respect to the consideration and implementation of its strategic alternatives, including evaluating financing alternatives.
- 2. In consideration for the services rendered by Fahnestock to the Company pursuant to this Agreement, the Company shall compensate Fahnestock as follows:
  - (a) A monthly fee of \$7,500, of which \$22,500 is payable upon the execution of this Agreement and \$22,500 is payable three (3) months from the date hereof.
  - (b) Five-year Warrants to purchase 30,000 shares of common stock at an exercise price per share of \$3.1875 (average of closing bid price for the prior five trading day period), which shall be issued upon execution of this Agreement. The Warrants are entitled to the same registration rights as the warrants previously received by Fahnestock.
  - (c) If, during the term of this Agreement, the Company enters into an agreement to be acquired, merge, sell all or substantially all of its assets or otherwise effect a corporate reorganization with any other entity, the Company shall engage Fahnestock as its financial advisor and shall pay a transaction fee to Fahnestock to be determined at that time, but in any event such fee shall be reasonable and customary for the size and nature of such a transaction.
  - (d) In the event the Company requests Fahnestock to assist in discussions regarding joint ventures or strategic alliances and an agreement develops, the Company agrees to pay Fahnestock a fee of five percent (5%) of any cash received by the Company from such agreement including any up front payment and any milestone payments. The fee paid to Fahnestock pursuant to paragraph 2(a) hereof shall be credited to any fee due Fahnestock pursuant to this paragraph 2(d).
  - (e) Fahnestock shall have a right of first refusal for any investment banking services of the Company, including merger and acquisition advisory services and the sale or distribution of securities in a private or public offering, until June 30, 2001. In such event, the Company and Fahnestock will enter into a separate agreement at such time and the fee payable to Fahnestock will be determined at such time on terms that are standard and customary.
  - (f) In the event the Company requires a fairness opinion or valuation, the fee payable to Fahnestock will be determined at such time on terms that are standard and customary.
- 3. In addition to the fees payable hereunder, the Company shall reimburse Fahnestock for its reasonable travel and out-of-pocket expenses incurred in connection with the services performed by Fahnestock pursuant to this Agreement.
- 4. The Company acknowledges that all opinions and advice (written or oral)

given by Fahnestock to the Company in connection with Fahnestock's engagement are intended solely for the benefit and use of the Company in considering the transaction to which they relate, and the Company agrees that no such opinion or advice shall be used for any other purpose or reproduced, disseminated, quoted or referred to at any time, in any manner or purpose or reproduced, disseminated, quoted or referred to at any time, in any manner or for any purpose, nor may the Company make any public references to Fahnestock, or use Fahnestock's name in any annual reports or any other reports or releases of the Company without Fahnestock's prior written consent unless otherwise required by law. Fahnestock acknowledges that the Company intends to publicly announce that it has entered into this Agreement; however any press release referring to Fahnestock must be approved by Fahnestock prior to its release.

5. The Company acknowledges and agrees that there will be no claims or payments for services in the nature of a finder's fee with respect to Fahnestock's engagement or any other arrangements, agreements, payments, issuances or understandings that may effect Fahnestock's compensation.

- The Company recognizes and confirms that, in advising the Company and in fulfilling its engagement hereunder, Fahnestock will use and rely on data, material and other information furnished to Fahnestock by the Company. The Company acknowledges and agrees that in performing its services under this engagement, Fahnestock may rely upon the data, material and other information supplied by the Company without independently verifying the accuracy, completeness or veracity of same.
- Since Fahnestock will be acting on behalf of the Company in connection with its engagement hereunder, the Company and Fahnestock have entered into a separate indemnification agreement dated March 30, 2000, providing for the indemnification of Fahnestock by the Company. Fahnestock has entered into this Agreement in reliance on the indemnities set forth in such indemnification agreement.

If the foregoing correctly sets forth the understanding between Fahnestock and the Company with respect to the foregoing, please so indicate your agreement by signing in the place provided below, at which time this letter shall become a binding contract.

Sincerely,

Fahnestock & Co. Inc.

/s/ Henry P. Williams Henry P. Williams Senior Vice President

Accepted and Agreed:

Senesco Technologies, Inc.

By: /s/ Steven Katz

Steven Katz

President and Chief Operating Officer