# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

**WASHINGTON, D.C. 20549** 

## **SCHEDULE 14A**

## Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant x
Filed by a Party other than the Registrant o

Check the appropriate box:

- o Preliminary Proxy Statement
- x Definitive Proxy Statement
- o Definitive Additional Materials
- o Soliciting Material Pursuant to Rule 14a-12

o Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

## Neose Technologies, Inc.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

<ul> <li>No fee requ</li> </ul>	ired.	
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o Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

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0	Check box if	restrictions with preliminary materials.  Figure 7 part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filling for which the offsetting viously. Identify the previous filling by registration statement number, or the form or schedule and the date of its filling	
	(1)	Amount Previously Paid:	
	(2)	Form, Schedule or Registration Statement No.:	
	(3)	Filing Party:	
	(4)	Date Filed:	

Neose Technologies, Inc.

### 102 Witmer Road Horsham, Pennsylvania 19044

April 2, 2004

Dear Stockholder:

You are invited to attend the Annual Meeting of Stockholders of Neose Technologies, Inc. on May 6, 2004 at our offices at 102 Witmer Road, Horsham, Pennsylvania. You will have the opportunity to ask questions and make comments. Enclosed with this letter are your Notice of Annual Meeting of Stockholders, Proxy Statement, Proxy voting card, and 2003 Annual Report to Stockholders.

At this year s meeting, you will be asked to elect nine directors to serve a term of one year each, to ratify the appointment of KPMG LLP as our independent auditors for fiscal 2004, to increase the number of shares of common stock authorized for issuance under our certificate of incorporation, and to approve our 2004 Equity Incentive Plan.

I hope that you attend the meeting. Whether or not you plan to be with us, please sign, date, and return your voting card promptly in the enclosed envelope.

Sincerely,

#### Neose Technologies, Inc.

### 102 Witmer Road Horsham, Pennsylvania 19044

## Notice of Annual Meeting of Stockholders to be held May 6, 2004

To the Stockholders of Neose Technologies, Inc.:

The 2004 Annual Meeting of Stockholders will be held at our offices at 102 Witmer Road, Horsham, Pennsylvania on Thursday, May 6, 2004 at 9:00 a.m. (Eastern Daylight Time). During the Annual Meeting, stockholders will be asked to:

- 1. Elect nine directors to serve for a term of one year or until the election and qualification of their successors;
- 2. Ratify the appointment of our independent auditors for fiscal 2004;
- 3. Approve an amendment of our certificate of incorporation to increase the number of shares of common stock authorized for issuance by the Company from 30 million shares to 50 million shares;
- 4. Approve the adoption of our 2004 Equity Incentive Plan; and
- 5. Transact any other business properly brought before the Annual Meeting.

  If you are a stockholder as of March 15, 2004, you may vote at the meeting. The date of mailing this Notice of Meeting and Proxy Statement is on or about April 2, 2004.

By order of the Board of Directors

Debra J. Poul Secretary

## **Proxy Statement**

This Proxy Statement and the accompanying proxy card are being mailed, beginning on or about April 2, 2004, to owners of shares of common stock of Neose Technologies, Inc. in connection with the solicitation of proxies by the Board of Directors for our Annual Meeting of Stockholders. This proxy procedure is necessary to permit all stockholders, many of whom are unable to attend the Annual Meeting, to vote. The Board of Directors encourages you to read this document thoroughly and to take this opportunity to vote on the matters to be decided at the Annual Meeting.

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#### **About the Meeting: Questions and Answers**

#### What am I voting on?

- 1. The election of nine directors for a one-year term or until the election and qualification of their successors.
- The ratification of the appointment of KPMG LLP, certified public accountants, as independent auditors to audit and report on our financial statements for fiscal 2004.
- An amendment to our certificate of incorporation to increase the number of shares of common stock authorized to be issued by the Company from 30 million to 50 million.
- 4. The adoption of our 2004 Equity Incentive Plan.
- 5. Any other business that properly comes before the meeting for a vote.

## Who is entitled to vote at the Annual Meeting, and how many votes do they have?

Common stockholders of record at the close of business on March 15, 2004 may vote at the Annual Meeting. Each share has one vote. There were 19,948,171 shares of common stock outstanding on March 15, 2004. From April 21, 2004 through May 5, 2004, you may inspect a list of stockholders eligible to vote. If you would like to inspect the list, please call Debra J. Poul, our Corporate Secretary, at (215) 315-9000 to arrange a visit to our offices.

#### How do I vote?

The Company encourages you to use the electronic means available to you to vote your shares. How you vote will depend on how you hold your shares of Neose Technologies stock.

## Stockholders of Record

If your shares are registered directly in your name with our transfer agent, American Stock Transfer & Trust Company, you are considered a stockholder of record with respect to those shares, and these proxy materials are being sent directly to you. As a stockholder of record, you have the right to vote in person at the Annual Meeting or by proxy. There are two ways you can vote by proxy:

#### Vote by internet <u>www.proxyvote.com</u>

Use the internet to transmit your voting instructions and for electronic delivery of information. Have your proxy card in hand when you access the website. You will be prompted to enter your 12-digit Control Number, which is located below the voting instructions on your proxy card, to obtain your records and create an electronic voting instruction form.

#### Vote by mail

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided, or return it to Neose Technologies, Inc., c/o ADP, 51 Mercedes Way, Edgewood, NY 11717. By doing this, you will be designating C. Boyd Clarke, our President and Chief Executive Officer, Robert I. Kriebel, our Senior Vice President and Chief Financial Officer, and A. Brian Davis, our Vice President, Finance, as your proxies. They may act together or individually on your behalf, and will have the authority to appoint a substitute to act as proxy.

Voting by either of these methods will not affect your right to attend the Annual Meeting and vote in person.

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#### Beneficial Owners

Most stockholders of the Company hold their shares in street name through a stockbroker, bank or other nominee, rather than directly in their own name. If you hold your shares in one of these ways, you are considered the beneficial owner of shares held in street name, and these proxy materials are being forwarded to you by your broker or nominee who is considered, with respect to those shares, the stockholder of record. As the beneficial owner, you have the right to direct your broker or nominee on how to vote your shares. If you hold your shares in street name, your broker or nominee has enclosed a voting instruction form for you to use in directing the broker or nominee in how to vote your shares.

#### What is a proxy?

A proxy is a person you appoint to vote on your behalf. If you are unable to attend the Annual Meeting, please use the means available to you to vote by proxy so that your shares of common stock may be voted.

#### How will my proxy vote my shares?

Your proxy will vote according to your instructions. If you complete and return the enclosed proxy card but do not indicate your vote, your proxy will vote FOR the election of the nominated slate of directors (see Proposal 1) and FOR Proposals 2, 3, and 4. We do not intend to bring any other matter for a vote at the Annual Meeting, and we do not know of anyone else who intends to do so. Your proxies are authorized to vote on your behalf, however, using their best judgment, on any other business that properly comes before the Annual Meeting.

#### How do I revoke my proxy?

You may revoke your proxy at any time before your shares are voted at the Annual Meeting by:

Notifying our Corporate Secretary, Debra J. Poul, in writing at 102 Witmer Road, Horsham, PA 19044, that you are revoking your proxy;

Signing a new proxy card and sending it to us; or

Attending and voting by ballot at the Annual Meeting.

#### Who will count the votes?

An officer of Neose Technologies, Inc. will act as the inspector of election and count the votes.

#### What constitutes a quorum?

A majority of the 19,948,171 shares outstanding as of the record date, either present or represented by proxy, constitutes a quorum. A quorum is necessary in order to conduct the Annual Meeting. If you choose to have your shares represented by proxy at the Annual Meeting, you will be considered part of the quorum. If a quorum is not present at the Annual Meeting, the stockholders present in person or by proxy may adjourn the meeting to a date when a quorum is present. If an adjournment is for more than 30 days or a new record date is fixed for the adjourned meeting, we will provide notice of the adjourned meeting to each stockholder of record entitled to vote at the meeting.

#### What vote is required to approve each proposal?

*Election of Directors*. For Proposal 1, the election of directors, the nominees will be elected by plurality of the votes cast at the Annual Meeting. This means that the nine nominees with the most votes for election will be elected. You may choose to vote, or withhold your vote, separately for each nominee. A properly executed proxy marked WITHHOLD AUTHORITY with respect to the election of one or

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more directors will not be voted with respect to the director or directors indicated, although it will be counted for the purposes of determining the number of shares of common stock represented in person or by proxy and entitled to vote.

**Ratification of the Appointment of Auditors.** For Proposal 2, ratification of the appointment of auditors, the affirmative vote of the holders of a majority of the shares of common stock represented in person or by proxy and entitled to vote on the item will be required for approval. A properly executed proxy marked Abstain with respect to this matter will not be voted, although it will be counted for purposes of determining the number of shares of common stock represented in person or by proxy and entitled to vote. Accordingly, an abstention will have the effect of a negative vote.

Amendment to Certificate of Incorporation. For Proposal 3, the amendment to our certificate of incorporation, the affirmative vote of a majority of the outstanding shares of common stock entitled to vote thereon will be required for approval. A properly executed proxy marked Abstain with respect to this matter will not be voted, although it will be counted for purposes of determining the number of shares of common stock represented in person or by proxy and entitled to vote. Accordingly, an abstention will have the effect of a negative vote.

Adoption of 2004 Equity Incentive Plan. For Proposal 4, the adoption of our 2004 equity incentive plan, affirmative vote of the holders of a majority of the shares of common stock represented in person or by proxy and entitled to vote on the item will be required for approval. A properly executed proxy marked Abstain with respect to this matter will not be voted, although it will be counted for purposes of determining the number of shares of common stock represented in person or by proxy and entitled to vote. Accordingly, an abstention will have the effect of a negative vote.

*Other Proposals.* Any other proposal that might properly come before the meeting will require the affirmative vote of the holders of a majority of the shares of common stock present in person or by proxy at the meeting in order to be approved. On any such proposal, abstentions would be counted in the tabulation of the votes cast by stockholders as negative votes. Broker non-votes would not be counted in the tabulation of the votes cast on the proposal.

If you hold your shares in street name through a broker or other nominee, your broker or nominee may not be permitted to exercise voting discretion with respect to some of the matters to be acted on. Thus, if you do not give your broker specific instructions, your shares may not be voted on those matters (so-called broker non-votes) and will not be counted in determining the number of shares necessary for approval. Any broker non-votes have no effect on the outcome of the vote on a matter, although the shares represented by broker non-votes will be counted in determining the number of shares of common stock represented in person or by proxy and entitled to vote.

#### What percentage of our common shares do the directors and officers own?

As of March 15, 2004, our current directors and executive officers beneficially owned approximately 17.2% of our common shares. See the discussion under the heading Stock Ownership of our Directors, Executive Officers, and 5% Beneficial Owners on page 13 for more details.

#### Who is soliciting proxies, how are they being solicited, and who pays the cost?

Neose Technologies, Inc., on behalf of the Board of Directors, through its directors, officers, and employees, is soliciting proxies primarily by mail. In addition, proxies may also be solicited in person, by telephone, or facsimile. We will pay the cost of soliciting proxies. We will also reimburse stockbrokers and other custodians, nominees, and fiduciaries for their reasonable out-of-pocket expenses for forwarding proxy and solicitation material to the owners of our common stock.

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#### When are stockholder proposals for next year s Annual Meeting due?

To be included in the mailing of the Notice of Annual Meeting of Stockholders, Proxy Statement, and Proxy voting card for next year s annual meeting, proposed stockholder proposals must be received between November 3, 2004 and December 3, 2004 by our Corporate Secretary, at 102

Witmer Road, Horsham, PA 19044. You should submit any proposal by a method that permits you to prove the date of delivery to us. See the discussion under the heading Requirements for Advance Notification of Nominations and Stockholder Proposals beginning on page 38 for information regarding certain procedures provided by our By-Laws with respect to stockholder proposals and nominations of directors.

## Who are Neose s independent auditors, and will they be represented at the Annual Meeting?

KMPG LLP served as the independent accounting firm auditing our financial statements for 2003, and has been appointed to audit and report on our financial statements for 2004. We expect that representatives of KPMG LLP will be present at the Annual Meeting. They will have an opportunity to make a statement, if they desire, and will be available to answer appropriate questions after the meeting.

#### Will the directors be in attendance at the meeting?

We currently expect all of our directors to be in attendance at the Annual Meeting. It has been customary for our directors to attend our annual meetings of stockholders. All of the directors attended the 2003 Annual Meeting of Stockholders, except Dr. Rachesky.

#### How may I obtain a copy of Neose s Form 10-K?

You may request a copy of our Annual Report on Form 10-K for the year ended December 31, 2003, by writing to our Corporate Secretary at 102 Witmer Road, Horsham, Pennsylvania, 19044 or via e-mail at info@neose.com. We will send you a copy of this document without charge, upon request.

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#### **Governance of the Company**

Our business, property and affairs are managed by, or under the direction of, our Board of Directors, in accordance with the General Corporation Law of the State of Delaware and our By-laws. Members of the Board of Directors are kept informed of the Company's business through discussions with the President and Chief Executive Officer and key members of management, by reviewing materials provided to them by management, and by participating in meetings of the Board of Directors and its Committees.

Our President, Mr. Clarke, has also served as Chairman of our Board of Directors since May 6, 2003, when he succeeded Dr. Roth, who had served as Chairman of the Board since 1994. Prior to appointing Mr. Clarke as Chairman and earlier in 2004, the Corporate Governance Committee considered whether the positions of Chairman and Chief Executive Officer should be held by different people. The Committee concluded, on each occasion, that it was appropriate at this stage of the Company s development to have Mr. Clarke hold both of these positions, while recognizing the need to reevaluate this decision over time. As noted below, the Chairman of the Corporate Governance Committee performs several important independent functions relating to the governance of the Company.

During 2003, the Board of Directors held six meetings and the Committees held a total of 20 meetings. All of the Board members attended at least 80% of the meetings of the Board of Directors held during 2003. All of the Board members attended at least 80% of the meetings of Committees of the Board on which they served during 2003, except Dr. Rachesky, who served as a member of the Audit Committee until he resigned from this position in the middle of the year.

The Board of Directors has provided two methods for stockholders to communicate with the Board. Stockholder communications may be sent to the Board by email to boardofdirectors@neose.com or by mail addressed to: Board of Directors, Neose Technologies, Inc., 102 Witmer Road, Horsham, PA 19044.

We continue to review our corporate governance policies and practices by comparing our policies and practices with those suggested by various groups or authorities active in evaluating or setting best practices for corporate governance of public companies. Based on this review, we have adopted, and will continue to adopt, changes that the Board of Directors believes are the best corporate governance policies and practices for the Company. We have adopted changes and will continue to adopt changes, as appropriate, to comply with the Sarbanes-Oxley Act of 2002 and subsequent rule changes made by the Securities and Exchange Commission (SEC) and NASDAQ.

## **Independence of Directors**

In December 2002, the Board of Directors adopted a set of *Corporate Governance Principles*, addressing, among other things, standards for evaluating the independence of the Company s directors. The full text of these *Principles* can be found on our website at www.neose.com (under the section entitled About Neose).

According to these *Principles*, no director is considered independent unless the Board has affirmatively determined that the director has no material relationship with the Company (either directly, or as a partner, stockholder or officer of an organization that has such a relationship with the Company). These *Principles* comply with the applicable rules of the SEC and NASDAQ. Pursuant to these *Principles*, the Board undertook its annual review of director independence in February 2004. After considering all relevant facts and circumstances, the Board affirmatively determined that all of the directors nominated for election at the Annual Meeting are independent of the Company under the standards set forth in the *Corporate Governance Principles* and applicable SEC and NASDAQ rules, with the exception of Mr. Clarke and Dr. Roth.

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#### **Committees of the Board of Directors**

The Board of Directors has four Committees: the Audit Committee (which was established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended), the Compensation Committee, the Corporate Governance Committee, and the Scientific Review Committee. Lowell E. Sears (Chairman), Brian H. Dovey and William F. Hamilton, Ph.D. are the current members of the Audit Committee. Douglas J. MacMaster, Jr. (Chairman), L. Patrick Gage, Ph.D., and Elizabeth H. S. Wyatt are the current members of the Compensation Committee. William F. Hamilton, Ph.D. (Chairman), Douglas J. MacMaster, Jr., Lowell E. Sears, and Elizabeth H. S. Wyatt are the current members of the Corporate Governance Committee. L. Patrick Gage, Ph.D. (Chairman) and Stephen A. Roth, Ph.D. are the current members of the Scientific Review Committee.

All members of the Audit, Compensation and Corporate Governance Committees are required to be independent as that term is defined in the *Corporate Governance Principles* adopted by the Board of Directors in December 2002.

#### Audit Committee

The Audit Committee consists of three directors, all of whom are independent as defined in our *Corporate Governance Principles* and under the rules of the SEC and NASDAQ. In addition, the Board of Directors has determined that Mr. Sears, the Chairman of our Audit Committee, qualifies as an audit committee financial expert as defined in the rules of the Securities and Exchange Commission. The Audit Committee operates pursuant to a charter, which is attached as Appendix A to this Proxy Statement and which can be viewed on our website at www.neose.com (under About Neose). The charter gives the Audit Committee the authority and responsibility for the appointment, retention, compensation and oversight of our independent auditors, including pre-approval of all audit and non-audit services to be performed by our independent auditors. The charter also gives the Audit Committee broader authority to fulfill its obligations under SEC and NASDAQ requirements. The Report of the Audit Committee is set forth on page 12 of this Proxy Statement.

#### **Compensation Committee**

The Compensation Committee consists of three non-employee directors, all of whom are independent, as defined in our *Corporate Governance Principles*, and are also Non-Employee Directors as defined in SEC Rule 16(b)-3 and Outside Directors as defined under the treasury regulations promulgated under Section 162(m) of the Internal Revenue Code. The Compensation Committee determines the compensation of the Chief Executive Officer, and reviews and takes action on the recommendation of the Chief Executive Officer as to the appropriate compensation of other officers. The Compensation Committee is primarily responsible for the administration of our Amended and Restated 1995 Stock Option/Stock Issuance Plan, under which option grants and stock issuances have been made to all employees, including executive officers, as well as non-employee directors and consultants. Subject to approval by the stockholders of the Company s 2004 Equity Incentive Plan at the Annual Meeting, the Compensation Committee will be responsible for the administration of the 2004 Equity Incentive Plan, under which equity awards are expected to be made to employees, including executive officers, non-employee directors and consultants. There are no compensation committee interlocks between our Company and any other entity involving our Company s or such other entity s executive officers or board members. The Report of the Compensation Committee is set forth on page 25 of this Proxy Statement.

#### Corporate Governance Committee

The Corporate Governance Committee consists of four independent directors, as that term is defined in our *Corporate Governance Principles* and under applicable rules of the SEC and NASDAQ. The

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Company s Corporate Governance Committee operates pursuant to a charter, which was filed with the SEC and can be viewed on our website at www.neose.com (under About Neose). The purpose of the Corporate Governance Committee is to: (1) identify individuals qualified to become

Board members and recommend to the Board the director nominees for each annual meeting of the stockholders; (2) recommend to the Board any changes in the Company s *Corporate Governance Principles*; (3) lead the Board in its annual review of the Board s performance, and make recommendations to the Board regarding Board organization, membership, function and effectiveness, as well as committee structure, membership, function and effectiveness; (4) recommend to the Board director nominees for each Board Committee; (5) review the Company s efforts to promote diversity among directors, officers, employees and contractors; (6) ensure an orientation for all directors; and (7) perform such other functions as are allocated to it under the *Corporate Governance Principles*. The Chairman of our Corporate Governance Committee, now Dr. Hamilton, chairs the executive sessions of the Board and otherwise functions as our lead independent director.

Generally, the Board seeks diverse members who possess the background, skills and expertise to make a significant contribution to the Board, to the Company and its stockholders. The Corporate Governance Committee looks for relevant experience, such as high-level leadership experience in business or administrative activities, breadth of knowledge about issues affecting the Company, and the ability and willingness to contribute special competencies to Board activities. The Committee also looks for certain personal attributes, such as integrity; ability and willingness to apply sound and independent business judgment, comprehensive understanding of a director s role in corporate governance, availability for meetings and consultation on Company matters, and the willingness to assume and carry out fiduciary responsibility. Qualified candidates for membership on the Board will be considered without regard to race, color, religion, sex, ancestry, national origin or disability.

The Committee s process for identifying and evaluating nominees is as follows. First, to establish a context for its nominations, it reviews the size, composition, organization and operational structure of the Board, and identifies missing skills and expertise. The Committee then reviews the incumbent directors—overall service to the Company during their term, including the number of meetings attended, level of participation, quality of performance, and any other relevant factors, including independence as defined by the *Corporate Governance Principles* and applicable SEC and NASDAQ rules. In part this review is based on the Board and Committee evaluations completed by each director. If the Committee concludes new candidates are appropriate, it will review appropriate biographical information about the proposed candidates consistent with the standards applied to the incumbent directors. In seeking candidates, the Committee will seek suggestions from other Board members and may also engage the services a professional search firm. The Committee will discuss and consider the potential candidates and choose those candidates to recommend to the Board.

Before recommending director candidates to the Board, the Corporate Governance Committee also will consider director candidates that have been recommended by stockholders. Stockholder recommendations of potential candidates may be sent to the Corporate Governance Committee by email at boardofdirectors@neose.com or by mail addressed to: Corporate Governance Committee, Neose Technologies, Inc., 102 Witmer Road, Horsham, PA 19044. Submissions must include sufficient biographical information concerning the recommended individual, including age, ten-year employment history with employer names and a description of the employer s business, whether such individual can read and understand basic financial statements and board memberships (if any), for the Committee to consider.

In addition, our By-laws provide that nominations for director may be made by a stockholder entitled to vote who delivers notice along with the additional information and materials required by the By-laws to our Corporate Secretary not less than 120 nor more than 150 days prior to the first anniversary of the date of the proxy statement mailed to stockholders in connection with the preceding year s annual meeting. For our annual meeting in the year 2005, we must receive this notice on or after November 3, 2004 and on or before December 3, 2004. You can obtain a copy of the By-law provision by writing to our Corporate

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Secretary, 102 Witmer Road, Horsham, PA 19044. A copy of our By-laws has been filed with the SEC as an exhibit to our Quarterly Report on Form 10-Q filed on November 13, 2002.

#### Scientific Review Committee

The Scientific Review Committee consists of one independent director, as that term is defined in our *Corporate Governance Principles*, and our founder, Dr. Roth, who is not independent. The Scientific Review Committee reviews and evaluates the major research and development programs being conducted by the Company and determines whether these research and development activities prudently support our overall business objectives and strategies. The Scientific Review Committee also reviews major trends in the marketplace and assesses technologies that we may seek to acquire.

### **Compensation of Directors**

Directors who are also Neose employees receive no additional compensation for serving as a director or as a member of any Committee of the Board. Under our current arrangements, each non-employee director other than Dr. Roth receives annually a retainer of \$14,000, which may be applied, in whole or in part, toward the acquisition of an option to purchase shares of our common stock. Upon initial election or appointment to the Board of Directors, each non-employee director receives an option to purchase 30,000 shares of our common stock, and upon

re-election to the Board, each non-employee director other than Dr. Roth receives an option to purchase 10,000 shares of our common stock. Each automatic option grant has an exercise price equal to the fair market value on the date of grant. Each automatic grant is immediately exercisable, and has a term of ten years, subject to earlier termination, following the director s cessation of service on the Board of Directors. Any shares purchased upon exercise of the option are subject to repurchase should the director s service as a non-employee director cease prior to vesting of the shares. The initial automatic option grant of 30,000 shares vests in successive equal, annual installments over the director s initial four-year period of Board service. Each annual automatic option grant vests upon the director s completion of one year of service on the Board of Directors, as measured from the grant date. Each outstanding option vests immediately, however, upon certain changes in the ownership or control of the Company.

Non-employee directors, other than Dr. Roth, are compensated for their services at each meeting of the Board which they attend, at the following rates: \$2,500 for Board meetings attended in person, and \$1,000 for telephonic meetings of the Board. Non-employee directors, other than Dr. Roth, are also paid an annual retainer for service on Board Committees and are compensated for their services at each meeting of a Board Committee which they attend, at the following rates:

Committee/Position	Retainer	Meeting Fee
Audit Committee		
Chair	\$ 8,000	\$ 3,000
Member	\$ 4,000	\$ 1,500
Corporate Governance, Compensation and Scientific Review Committees		
Chair	\$ 4,000	\$ 2,000
Member	\$ 2,000	\$ 1,000

Dr. Roth is compensated under his Separation and Consulting Agreement, which is described on page 24.

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All Board members are reimbursed for their reasonable travel expenses incurred to attend meetings of the Board or Committees of the Board on which they serve.

#### **Continuing Education of Directors**

The Company is committed to supporting the continuing education of our directors on relevant matters. During 2003, our new director, Dr. Gage, attended the Directors Summit presented by the State of Wisconsin Investment Board at our expense. This annual conference, which is sponsored by institutional investors, focuses on current corporate governance issues.

#### **Code of Conduct**

We have a *Code of Business Conduct and Ethics*, which can be viewed on our website at www.neose.com (under About Neose). We require all employees to adhere to this *Code* in addressing the legal and ethical issues encountered in conducting their work. The *Code of Business Conduct and Ethics* requires that our employees avoid conflicts of interest, comply with all laws and other legal requirements, conduct business in an honest and ethical manner, and otherwise act with integrity and in the Company s best interest. During 2003, all of our employees were required to certify that they reviewed and understood this *Code*.

The *Code of Business Conduct and Ethics* includes procedures for reporting violations of the *Code*, which are applicable to all employees. The Sarbanes-Oxley Act of 2002 requires companies to have procedures to receive, retain and treat complaints received regarding accounting, internal accounting controls or auditing matters and to allow for the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters. The *Code of Business Conduct and Ethics* also includes these required procedures, and complies with applicable rules of the SEC and NASDAQ.

#### **Copies of Referenced Documents.**

Copies of the documents referred to above that appear on our website are also available upon request by any stockholder addressed to our Corporate Secretary, 102 Witmer Road, Horsham, PA 19044.

The Audit Committee has reappointed KMPG LLP, certified public accountants, to audit and report on our financial statements for 2004.

In making its recommendation to ratify the appointment of KPMG LLP as the Company s independent auditors for the fiscal year beginning January 1, 2004, the Audit Committee considered whether KPMG LLP s provision of services other than audit services are compatible with maintaining independence of our public accountants and auditors. The Audit Committee pre-approved the fees described below for audit fees, audit-related fees, tax fees and all other fees in accordance with our pre-approval policy as described below and believes such fees are compatible with the independence of KPMG LLP.

**Audit Fees.** The aggregate fees billed by KPMG LLP for each of the last two fiscal years for professional services rendered for the audit of the Company s annual financial statements and for the review of our interim financial statements, which are included in our Quarterly Reports on Form 10-Q, and services that are normally provided by KPMG LLP in connection with statutory and regulatory filings or engagements, were approximately \$120,000 for 2003 and \$67,000 for 2002. Our audit fees for 2003 included approximately \$49,000 related to preparation of a comfort letter for our resale registration statement on Form S-3, as well as consents to use of KPMG s audit opinion in other registration statement filings, which \$49,000 was previously reported as audit-related fees. We have reclassified this amount as audit fees, consistent with current guidance from the SEC.

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**Audit-Related Fees.** The aggregate fees billed during 2003 for assurance and related services by KPMG LLP that are reasonably related to the performance of the audit or review of the Company s financial statements and are not reported under Audit Fees above were approximately \$4,000. These included fees associated with the interpretation of accounting matters. We were not billed for any such services in 2002. Our audit fees for 2003 included approximately \$49,000 that was previously reported as audit-related fees. We have reclassified this amount as audit fees, as discussed in the preceding paragraph.

**Tax Fees.** The aggregate fees billed in each of the last two fiscal years for professional services rendered by KPMG LLP for tax compliance, tax advice, and tax planning were: \$29,350 for 2003 and \$17,000 for 2002.

**All Other Fees.** There were no fees billed in 2003 or 2002 for products and services provided by KPMG LLP, other than services reported above under Audit Fees, Audit-Related Fees or Tax Fees.

**Pre-approval Policies and Procedures.** Our Audit Committee is required to pre-approve the engagement of accountants to render audit services for the Company, and any changes to the terms of the engagement are required to be pre-approved by the Audit Committee or its Chairman. Our pre-approval policies and procedures with respect to audit- and tax-related services were amended on November 4, 2003. Prior to that date, the Audit Committee was required to pre-approve all audit- and tax-related services proposed to be provided by the Company s independent auditors, other than services for which the fees would not exceed \$5,000 in any instance or 50% of the approved annual audit fees in the aggregate. The Audit Committee is now required, annually, to pre-approve the terms of the audit engagement and a description of, and budget for, the non-audit services management proposes to be provided by the Company s independent auditors during the fiscal year. Any changes or additions to the approved list or budget for non-audit services must be pre-approved by the Audit Committee or its Chairman. The required pre-approval policies and procedures were complied with during 2003, with one exception. During first quarter of 2003, the Audit Committee Chairman pre-approved the provision by KPMG LLP of tax-related services relating to compensation matters for an estimated fee of \$2,000, and the final bill for such services, in the amount of \$13,000, was approved by the Audit Committee after the services were rendered.

## **KPMG Representatives at Annual Meeting**

We expect that representatives of KPMG LLP will be present at the Annual Meeting. They will be given the opportunity to make a statement if they desire to do so, and they will be available to respond to appropriate questions after the meeting.

#### Information Relating to Arthur Andersen LLP

On April 29, 2002, the Board of Directors decided to no longer engage Arthur Andersen LLP as our independent auditors and engaged KPMG LLP to serve as our independent auditors to audit our financial statements for the fiscal year 2002.

Arthur Andersen's reports on the Company's consolidated financial statements for each of the years ended 2001 and 2000 did not contain an adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope or accounting principles.

During the years ended December 31, 2001 and 2000 and through the date of this proxy statement, there were no disagreements with Arthur Andersen on any matter of accounting principle or practice, financial statement disclosure, or auditing scope or procedure which, if not resolved to Arthur Andersen s satisfaction, would have caused them to make reference to the subject matter in connection with their report on our consolidated financial statements for such years; and there were no reportable events as defined in Item 304(a)(l)(v) of Regulation S-K.

During the years ended December 31, 2001 and 2000 and through the date of the Board s decision, we did not consult KPMG LLP with respect to the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on our consolidated financial statements, or any other matters or reportable events as set forth in Items 304(a)(2)(i) and (ii) of Regulation S-K.

The following additional information is provided as required by the Securities and Exchange Commission.

Audit Fees. The aggregate fees billed by Arthur Andersen LLP for professional services for the 2001 audit and for review of the Company's financial statements included in our Quarterly Reports on Form 10-Q for 2001 totaled \$45,000.

Financial Information Systems Design and Implementation Fees. We did not engage Arthur Andersen LLP during 2001 to provide professional services with respect to financial information systems design and implementation as described in Paragraph (c)(4)(ii) of Rule 2-01 of Regulation S-X.

All Other Fees. The aggregate fees billed by Arthur Andersen LLP for all other services with respect to 2001, including tax related services, totaled \$18,000.

After consideration, the Audit Committee determined that the provision by Arthur Andersen LLP of professional services not related to the audit of the financial statements referred to above and not related to the reviews of the interim financial statements referred to above was compatible with maintaining the independence of Arthur Andersen LLP.

#### **Report of the Audit Committee**

The following Report of the Audit Committee shall not be deemed incorporated by reference into any other Company filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent specifically incorporated by reference therein by the Company.

The Audit Committee of the Board of Directors is comprised of directors who meet the existing NASDAQ independence standards as well as the heightened standards for independence included in the rules of the Securities and Exchange Commission (SEC) and the Company s Corporate Governance Principles. The Board of Directors has determined that the Chairman of the Audit Committee, Mr. Sears, qualifies as an audit committee financial expert—as defined in the rules of the Securities and Exchange Commission. The Audit Committee operates under a written charter adopted by the Board of Directors, which was reviewed and revised in November 2003 and which is attached as Appendix A to this Proxy Statement.

The Audit Committee met with management during the year to consider the adequacy of the Company s internal controls and the objectivity of its financial reporting. The Audit Committee discussed these matters with the Company s independent auditors and with appropriate Company financial personnel. The Audit Committee also discussed with the Company s senior management and independent auditors the process used for certifications by the Company s Chief Executive Officer and Chief Financial Officer, which is required by the SEC for certain of the Company s filings with the SEC.

The Audit Committee met ten times during 2003. The Committee schedules its meetings with a view to ensuring that it devotes appropriate attention to all of its responsibilities and promptly reports to the

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Board thereon. The Committee s meetings include, whenever appropriate, executive sessions with the Company s independent auditors without the presence of the Company s management.

Management is responsible for the financial reporting process, including the system of internal controls, and for the preparation of financial statements in accordance with generally accepted accounting principles. KPMG LLP, the Company s independent auditors, audited the annual financial statements prepared by management, expressed an opinion as to whether those financial statements fairly present the financial position, results of operations and cash flows of the Company in conformity with generally accepted accounting principles, and discussed with the Audit Committee any issues they believe should be raised with the Audit Committee. Our responsibility is to monitor and review these processes. We are not professionally engaged in the practice of accounting or auditing. We rely, without independent verification, on the information provided to us and on the representations made by management and the independent auditors.

As part of its oversight of the Company s financial statements, the Committee reviewed and discussed the Company s audited financial statements with its independent auditors for the relevant periods with and without management present. During fiscal 2003, management advised the Committee that each set of financial statements presented to the Committee for review had been prepared in accordance with generally accepted accounting principles, and management reviewed with the Committee significant accounting and disclosure issues regarding such statements. These reviews included discussion with the outside auditors of matters required to be discussed by Statement on Auditing Standards No. 61, Communication with Audit Committees, as amended by the Auditing Standards Board of the American Institute of Certified Public Auditors. The Audit Committee has also received the written disclosures and letter from KPMG LLP required by Independence Standards Board No. 1, Independence discussions with Audit Committees, and has discussed with KPMG LLP matters relating to its independence.

Based on the reviews and discussions referred to above, we recommended to the Board that the financial statements referred to above be included in our Annual Report on Form 10-K for the year ended December 31, 2003.

Audit Committee of the Board of Directors

Lowell E. Sears, Chairman Brian H. Dovey William F. Hamilton, Ph.D.

## Stock Ownership of our Directors, Executive Officers, and 5% Beneficial Owners

The following table shows information known to us about beneficial ownership (as defined under the regulations of the Securities and Exchange Commission) of our common stock by:

Each person we know to be the beneficial owner of at least five percent of our common stock;

Each current director (all of whom are nominees for re-election);

Each executive officer named in our Summary Compensation Table; and

All directors and executive officers as a group.

Unless otherwise indicated, the information is as of March 15, 2004.

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On March 15, 2004, there were 19,948,171 shares of our common stock outstanding. To calculate a stockholder s percentage of beneficial ownership, we must include in the numerator and denominator those shares underlying options that a person has the right to acquire upon the exercise of stock options within 60 days after March 15, 2004. Options held by other stockholders are disregarded in this calculation. Therefore, the denominator used in calculating beneficial ownership among our stockholders may differ. Unless we have indicated otherwise, each person named in the table below has sole voting power and investment power for the shares listed opposite such person s name.

Name of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Percent of Shares Outstanding
Eastbourne Capital Management, LLC (1)		
1101 Fifth Avenue		
Suite 160		
San Rafael, CA 94901	3,490,159	17.5%
Kopp Investment Advisors, Inc. (2)		
7701 France Avenue South		
Suite 500		
Edina, MN 55455	3,063,669	15.4%
George W. Haywood (3)		
c/o Cronin & Vris, LLP		
380 Madison Avenue, 24th Floor		
New York, NY 10017	1,588,662	8.0%

1,053,144

5.3%

Lindsay A. Rosenwald, M.D. (4) c/o Paramount Capital, Inc. 787 7<sup>th</sup> Avenue New York, NY 10019

Domain Partners V, L.P.(5)		
DP V Associates, L.P.		
One Palmer Square		
Princeton NI 08542	981 913	4 9%

#### **Directors and Named Executive Officers**

Mark H. Rachesky, M.D. (6)(7) c/o MHR Fund Management LLC 40 West 57 <sup>th</sup> Street, 33 <sup>rd</sup> Floor New York, NY 10019		815,814	4.1%
		/-	
Stephen A. Roth, Ph.D. (6)(8)		644,724	3.2%
C. Boyd Clarke (6)		353,604	1.7%
Douglas J. MacMaster, Jr. (6)		120,990	*
David A. Zopf, M.D. (6)		115,631	*
William F. Hamilton, Ph.D. (6)(9)		107,647	*
Lowell E. Sears (6)(10)		85,956	*
Joseph J. Villafranca (6)		85,049	*
Robert I. Kriebel (6)		49,693	*
Debra J. Poul (6)		49,355	*
Patrick L. Gage, Ph.D. (6)		45,647	*
Elizabeth Wyatt (6)		34,152	*
Brian H. Dovey (11)		0	*
All current directors and executive officers as a group (16 persons) (6)	14	3,698,904	17.2%

<sup>\*</sup> Less than one percent.

<sup>(1)</sup> According to a Schedule 13G/A filed February 12, 2004: (i) Eastbourne Capital Management, LLC ( Eastbourne ), is a registered investment advisor whose clients (including Black Bear Offshore Master Fund, L.P. ( Black Bear Offshore ) and Black Bear Fund I, L.P. ( Black Bear ), have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the reported shares; (ii) Eastbourne filed the Schedule 13G/A with Richard Jon Barry ( Mr. Barry ), Black Bear Offshore, Black Bear Offshore Master Fund Limited ( Old BBO ), and Black Bear, (iii) Eastbourne and Mr. Barry comprise a group, but they disclaim membership in a group with Black Bear Offshore, Old BBO, Black Bear or any other person or entity; (iv) Black Bear Offshore, Old BBO and Black Bear each filed the Schedule 13G/A jointly with the other filers but not as a member of a group, and each expressly disclaim membership in a group with the other filers or any other person or entity; (v) each of Eastbourne and Mr. Barry disclaim beneficial ownership of the reported shares except to the extent of their pecuniary interest therein; (vi) each of Eastbourne and Mr. Barry reported shared voting and dispositive power over 3,490,159 shares; (vii) Black Bear Offshore reported shared voting and dispositive power over 2,291,323 shares; (viii) Old BBO reported no beneficial ownership of any shares; (ix) Black Bear reported shared voting and dispositive power over 1,056,344 shares; and (x) except for Black Bear Offshore and Black Bear, no individual client sholdings were more than 5% of the outstanding shares of the Company.

<sup>(2)</sup> According to a Schedule 13G/A filed February 2, 2004: (i) Kopp Investment Advisors, LLC (KIA) is an investment adviser registered under the Investment Advisers Act of 1940; (ii) KIA is wholly owned by Kopp Holding Company LLC (KHC LLC), which is controlled by Mr. Leroy C. Kopp (Mr. Kopp) through Kopp Holding Company (KHC); (iii) Kopp Emerging Growth Fund (KEGF) is a registered investment company that has an investment advisor agreement with KIA; (iv) KIA reported sole voting power over 2,537,638 shares, sole dispositive power over 1,120,120 shares and shared dispositive power over 1,773,549 shares; (v) KHC LLC reported beneficial ownership of 3,063,669 shares; (vi) KHC reported beneficial ownership of 3,241,169 shares, of which Mr. Kopp reported sole voting and dispositive power over 347,500 shares; (viii) KEGF reported beneficial ownership of 1,120,120 shares and (ix) of the shares beneficially owned by the reporting persons, 2,953,669 are held in a fiduciary or representative capacity.

- (3) In a Schedule 13G/A filed on February 13, 2004, Mr. Haywood reported (i) sole voting and dispositive power over 1,534,462 shares, including 3,545 shares are owned by his minor children; and (ii) shared voting and dispositive power over 24,200 shares, including 8,200 shares owned by his spouse and 16,000 shares owned jointly with his mother.
- (4) According to a Schedule 13G/A filed on February 12, 2004: (i) Dr. Rosenwald is an investment banker, venture capitalist, fund manager and sole stockholder and chairman of Paramount Capital Asset Management, Inc., a Delaware corporation (Paramount); (ii) Paramount is the managing member of Aries Select, Ltd. (Aries Select), Aries Select I LLC (Aries I), and Aries Select II LLC (Aries II); (iii) Paramount may be deemed to own 508,841 shares, which includes the shares owned by Aries Select, Aries I and Aries II; (iv) Aries Select may be deemed the beneficial owner of 329,928 shares; (v) Aries I may be deemed the beneficial owner of 31,177 shares, (vi) Dr. Rosenwald reported sole voting and dispositive power over 501,985 shares and shared voting and dispositive power over 508,841 shares; and (vii) Dr. Rosenwald may be deemed the beneficial owner of 1,010,826 shares, as follows: (A) all shares described in (ii) (v) above, (B) 364,326 shares and options to purchase 31,785 shares owned directly by Dr. Rosenwald, and (C) 105,874 shares owned by Dr. Rosenwald s wife and children. Dr. Rosenwald has the right to purchase 42,318 shares under options exercisable within 60 days.

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- (5) According to a Schedule 13D filed on February 24, 2003: (i) each of Domain Partners V, L.P., a Delaware limited partnership (DPV), and DP V Associates, a Delaware limited partnership (DPVA), are limited partnerships whose principal business is that of a private investment partnership; (ii) the sole general partner of DPV and DPVA is One Palmer Square Associates V, L.L.C., a Delaware limited liability company (OPSAV), whose principal business is that of acting as the general partner of DPV and DPVA; (iii) James C. Blair, Brian H. Dovey, Jesse I. Treu, Kathleen K. Schoemaker, Arthur J. Klausner and Robert J. More are the managing members of OPSAV (the Managing Members); (iv) the Managing Members may be deemed to share the power to vote or direct the voting of and to dispose or to direct the disposition of the shares owned by DPV and DPVA; (v) the Managing Members disclaim beneficial ownership of the shares owned by DPV and DPVA other than the shares he or she may own directly, if any, or by virtue of his or her indirect pro rata interest, as a Managing Member of OPSAV, in the shares owned by DPV and/or DPVA; (vi) DPV reported sole voting and dispositive power over 927,848 shares; (vii) DPVA reported sole voting and dispositive power over 21,918 shares; and (viii) DPV and DPVA may constitute a group within the meaning of Section 13(d)(3) of the Securities Act of 1934, as amended.
- (6) Includes the following shares of common stock issuable under stock options that are exercisable within 60 days after March 15, 2004:

  Domain Associates, L.L.C. 32,147 shares; Rachesky 60,424 shares; Roth 430,833 shares; Clarke 318,404 shares; MacMaster 71,140 shares; Zopf 111,666 shares; Hamilton 48,897 shares; Sears 64,632 shares; Villafranca 80,000 shares; Kriebel 41,250 shares; Poul 42,500 shares; Gage 42,147 shares; Wyatt 29,152 shares; and all current directors and executive officers as a group 1,611,026 shares.
- (7) Includes (i) 210,526 shares of common stock held by MHR Capital Partners LP, (ii) 502,759 shares of common stock held by MRL Partners LP, and (iii) 42,105 shares of common stock held by OTT LLC. Dr. Rachesky is the managing member of MHR Advisors LLC, which is the General Partner of MHR Capital Partners and MRL Partners. Dr. Rachesky is the managing member of OTT LLC. Dr. Rachesky may be deemed to have voting and investment control over the shares held by MHR Capital Partners, MRL Partners, and OTT LLC. Dr. Rachesky disclaims beneficial ownership of the shares held by MHR Capital Partners, MRL Partners, and OTT LLC, except to the extent of his pecuniary interest in the funds.
- (8) Includes 100,000 shares of common stock owned by Dr. Roth s wife and 15,758 shares of common stock owned by Dr. Roth s daughter. Dr. Roth disclaims beneficial ownership of the shares held by his wife and daughter.
- (9) Excludes 42,089 shares of common stock which are exercisable within 60 days under options that were transferred by Dr. Hamilton in December 2002 pursuant to a domestic relations order. Dr. Hamilton disclaims beneficial interest in these transferred options.
- (10) Includes 21,324 shares of common stock owned by the Sears Family Living Trust, of which Mr. Sears is trustee.
- (11) Mr. Dovey is a Managing Member of One Palmer Square Associates V, L.L.C., which is the general partner of Domain Partners V, L.P. (DPV) and DPV Associates, L.P. (DPVA), and is nominated for election as a director of the Company. Mr. Dovey disclaims beneficial ownership of the shares held by DPV and DPVA, except to the extent of his pecuniary interest in such shares. See note (6) above for additional information about the beneficial ownership of shares held by DPV and DPVA.

#### Section 16(a) Beneficial Ownership Reporting Compliance

Based solely upon a review of reports of stock ownership (and changes in stock ownership) and written representations received by us, we believe that our directors and executive officers met all of their filing requirements under Section 16(a) of the Securities and Exchange Act of 1934 during the year ended December 31, 2003, except for the late filing of one Form 4, which was made by Mr. MacMaster on April 24, 2003 in respect of his exercise of a stock option for cash on April 17, 2003.

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#### **Proposal 1** Election of Directors

#### **Nominees for Election**

The Board of Directors currently has nine members. Upon the recommendation of the Corporate Governance Committee, each member has been nominated for re-election, and has agreed, if elected, to serve a one-year term or until the election and qualification of his or her successor. If any nominee is unable to stand for election, which circumstance we do not anticipate, the Board may provide for a lesser number of directors or designate a substitute. In the latter event, shares represented by proxies may be voted for a substitute nominee.

If a quorum is present at the Annual Meeting, then a plurality of all votes cast at the meeting will be sufficient to elect a director. There is no cumulative voting in the election of directors.

#### The Board of Directors recommends a vote FOR each of the nominees.

C. Boyd Clarke, 55, has served on our Board, and as President and Chief Executive Officer, since March 2002, and became Chairman of our Board in May 2003. From December 1999 through March 2002, Mr. Clarke was President and Chief Executive Officer of Aviron, a biotechnology company developing vaccines, which was acquired by MedImmune, and was also Chairman from January 2001 through March 2002. From 1998 through 1999, Mr. Clarke was Chief Executive Officer and President of U.S. Bioscience, Inc., a biotechnology company focused on products to treat cancer, which also was acquired by MedImmune. Mr. Clarke served as President and Chief Operating Officer of U.S. Bioscience, Inc. from 1996 to 1998. From 1977 to 1996, Mr. Clarke held a number of positions at Merck & Co., Inc., including being the first President of Pasteur-Merieux MSD, and most recently as Vice President of Merck Vaccines. Mr. Clarke serves as a director of QLT Inc., a global pharmaceutical company, and the Biotechnology Industry Organization. Mr. Clarke has a B.S. in biochemistry, and an M.A. in history from the University of Calgary. Mr. Clarke also serves on the Board of Trustees to the Textile Museum in Washington, D.C.

**Brian H. Dovey**, 62, has served on our Board since May 2003. He is a Managing Member of Domain Associates, L.L.C., a private venture capital management firm focused on life sciences, and has served in this capacity with the firm since 1988. He has served as Chairman of three companies and on the Board of Directors of some 20 additional companies, including Align Technology, Inc. and Cardiac Science, Inc. Prior to joining Domain, Mr. Dovey spent six years at Rorer Group, Inc. (now Aventis) and as President (1986 to 1988) was the primary architect of this Fortune 500 company s strategic shift to pharmaceuticals resulting in a doubling of annual sales to approximately \$1 billion. Previously, he was President of Survival Technology, Inc., a start-up medical products company whose sales growth placed it in the top ten of the Inc 100. He also held management positions with Howmedica, Inc., Howmet Corporation, and New York Telephone. Mr. Dovey has served as both President and Chairman of the National Venture Capital Association and is on the Board of Trustees of the Wistar Institute and the Burnham Institute. Mr. Dovey received his B.A. from Colgate University and an M.B.A. degree from the Harvard Business School.

L. Patrick Gage, Ph.D., 61, has served on our Board since October 2002. Dr. Gage serves as Chairman of Compound Therapeutics, a private biotechnology company, and as Chairman of the Dublin (Ie) Molecular Medicine Centre. He has held these positions since 2003 and 2001, respectively. Dr. Gage was appointed as Chairman of Acceleron Pharma, a private biopharmaceutical company, in February 2004. Dr. Gage has been appointed Venture Partner at Flagship Ventures and is an advisor to Perkin Elmer, Inc. and Warburg Pincus LLC. Dr. Gage served as Senior Vice President, Science and Technology, at Wyeth, from 2001 to 2002, and as President of Wyeth Research from 1998 to 2002. Prior to Wyeth, Dr. Gage held positions of increasing responsibility at Genetics Institute, Inc. from 1989 to 1998, culminating with his service as President after the company was acquired by Wyeth. He also spent 18 years at Hoffmann-La Roche, Inc. in various scientific and management positions. Dr. Gage serves as a director of Protein Design

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Labs, Inc., a company focused on the discovery and development of humanized monoclonal antibodies for the treatment of disease. He is also a director of the Biotechnology Institute and the Philadelphia Orchestra Association. Dr. Gage has a B.S. in physics from Massachusetts Institute of Technology and a Ph.D. from The University of Chicago.

William F. Hamilton, Ph.D., 64, has served on our Board since 1991. Dr. Hamilton has served on the University of Pennsylvania faculty since 1967, and is the Landau Professor of Management and Technology, and Director of the Jerome Fisher Program in Management and Technology at The Wharton School and the School of Engineering and Applied Science. He serves as a director of NovaDel Pharmaceuticals, Inc., a healthcare company engaged in the development of novel drug delivery technologies. Dr. Hamilton received his B.S. and M.S. in chemical engineering and his M.B.A. from the University of Pennsylvania, and his Ph.D. in applied economics from the London School of

Economics.

**Douglas J. MacMaster**, Jr., 73, has served on our Board since 1993. Mr. MacMaster served as Senior Vice President of Merck & Co., Inc. from 1988 until his retirement in 1992, where he was responsible for worldwide chemical and pharmaceutical manufacturing, the Agvet Division, and the Specialty Chemicals Group. From 1985 to 1988, Mr. MacMaster was President of the Merck Sharp Dohme Division of Merck. Mr. MacMaster serves as a director of the following publicly-held companies: Stratton Mutual Funds, and Martek Biosciences Corp., a biological products manufacturing company. He received his B.A. from St. Francis Xavier University, and his J.D. from Boston College Law School.

Mark H. Rachesky, M.D., 44, has served on our Board since 1999. Dr. Rachesky is the founder and President of MHR Fund Management LLC and affiliates, investment managers of various private investment funds that invest in inefficient market sectors, including special situation equities and distressed investments. From 1990 through June 1996, Dr. Rachesky was employed by Carl C. Icahn, initially as a senior investment officer and for the last three years as sole Managing Director of Icahn Holding Corporation, and acting chief investment advisor. Dr. Rachesky is currently on the Board of Directors of Keryx Biopharmaceuticals, Inc. and Novadel Pharma Inc. Dr. Rachesky is a graduate of Stanford University School of Medicine, and Stanford University School of Business. Dr. Rachesky graduated from the University of Pennsylvania with a major in Molecular Aspects of Cancer.

Stephen A. Roth, Ph.D., 61, has served on our Board since 1989, and was Chairman from 1994 until May 2003. Dr. Roth is President and Chief Executive Officer of Immune Control Inc. He co-founded Neose, served as Chief Executive Officer from August 1994 until March 2002, and now serves as a consultant. From 1992 until August 1994, he served as Senior Vice President, Research and Development and Chief Scientific Officer of Neose. Dr. Roth was on the faculty of the University of Pennsylvania from 1980 to 1994, and was Chairman of Biology from 1982 to 1987. Dr. Roth serves as a director of Chiral Quest. Dr. Roth received his A.B. in biology from The Johns Hopkins University, and his Ph.D. in developmental biology from the Case Western Reserve University. He completed his post-doctorate training in carbohydrate chemistry at The Johns Hopkins University.

Lowell E. Sears, 52, has served on our Board since 1994. He has been a private investor involved in portfolio management and life sciences venture capital since April 1994. From 1988 until April 1994, Mr. Sears was Chief Financial Officer of Amgen Inc., a pharmaceutical company, and from 1992 until 1994, he also served as Senior Vice President responsible for the Asia-Pacific region. Mr. Sears is a director of Peninsula Pharmaceuticals. Mr. Sears received his B.A. in economics from Claremont McKenna College, and his M.B.A. from Stanford University.

Elizabeth H.S. Wyatt, 56, has served on our Board since May 2002. From 1980 through December 2000, Ms. Wyatt held a variety of positions at Merck & Co., Inc., most recently as Merck s Vice President, Corporate Licensing, heading Merck s worldwide product and technology acquisition activities. Prior to joining Merck in 1980, Ms. Wyatt was a consultant and an academic administrator, responsible for the

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Harvard Business School s first formal marketing of its executive education programs. She currently serves on the Boards of Directors of MedImmune, Inc. and ARIAD Pharmaceuticals, and on the Board of Trustees of Randolph-Macon College. Ms. Wyatt received her B.A., magna cum laude, from Sweet Briar College, an M. Ed. in counseling psychology from Boston University, and an M.B.A. with honors from Harvard University.

#### How are directors nominated?

The Board of Directors has nominated each current director to stand for re-election based upon the recommendations of the Corporate Governance Committee, which is comprised solely of non-management, independent directors. One of our directors, Dr. Rachesky, was nominated in accordance with an agreement by the Company to use its best efforts to cause the Board to nominate the nominee of MHR Capital Partners for election as a Board member, as long as MHR Capital Partners or its affiliates own at least 200,000 shares of Neose common stock. See the discussions under the headings Corporate Governance Committee and Requirements for Advance Notification of Nominations and Stockholder Proposals beginning on pages 7 and 38, respectively, for information about procedures for stockholder nomination of directors.

#### How many Board and Committee Meetings were held during 2003?

During 2003, the Board of Directors held six meetings, the Audit Committee held ten meetings, the Compensation Committee held two meetings, the Corporate Governance Committee held five meetings, and the Scientific Review Committee held three meetings. Each director attended at least 75 percent of the total number of meetings of the Board and Committees on which he or she served, except Dr. Rachesky.

#### **Executive Compensation**

#### **Summary Compensation Table**

The following table provides information about all compensation earned in 2003, 2002, and 2001, by the individual who served as Chief Executive Officer during 2003, and the four other most highly compensated executive officers during 2003.

							Long-term Compensation			
			A	Annual Co	mpensa	tion	Shares	A	.ll Other	
Name and	Name and Principal Position		me and Principal Position Year Salary		ary	Bonus		Options (#)	Compensation	
C. Boyd Clarke (1)	Desident and Chief	2003		50,000	\$	315,000	750,000	\$	7,300(2)	
	man, President and Chief ative Officer	2002	33	39,231		254,423	750,000		397,346(3)	
Joseph J. Villafranca (	· *	2003		80,000		140,000			7,300(5)	
	ntive Vice President, dopment Operations	2002	(	70,000		74,500	190,000		56(5)	
David A. Zopf	ative Vice President and	2003	24	46,167		113,477	35,000		6,734(6)	
Chief		2002	24	40,413		96,065	30,000		5,836(6)	
	tific Officer	2001		00,136		45,021	25,000		5,646(6)	
Robert I. Kriebel (7)		2003	2.5	50,000		125,000			6,830(8)	
Senio	r Vice President and Financial Officer	2002		94,712		73,678	165,000		112(8)	
Debra J. Poul (9)		2003	23	30,625		118,125	35,000		6,367(10)	
	r Vice President and	2002		13,333		67,500	85,000		5,180(10)	
Gene	ral Counsel	2001	14	14,933		20,925	7,500		4,460(10)	

<sup>(1)</sup> Mr. Clarke joined Neose in March 2002.

- (4) Dr. Villafranca joined Neose in October 2002.
- (5) Includes \$7,000 matching contributions in 2003 to Dr. Villafranca s account in our 401(k) plan. Also includes \$300 and \$56 in 2003 and 2002, respectively, in premiums paid by us for group term life insurance.
- (6) Includes \$6,434, \$5,500, and \$5,214 of matching contributions in 2003, 2002, and 2001, respectively, to Dr. Zopf s account in our 401(k) Plan. Also includes \$300, \$336, and \$432, in 2003, 2002, and 2001, respectively, in premiums paid by us for group term life insurance.
- (7) Mr. Kriebel joined Neose in August 2002.
- (8) Includes \$6,530 of matching contributions in 2003 to Mr. Kriebel s account in our 401(k) plan. Also includes \$300 and \$112 in 2003 and 2002, respectively, in premiums paid by us for group term life insurance.
- (9) Ms. Poul joined Neose in January 2000 and served on a part-time basis until May 2002.

<sup>(2)</sup> Includes \$7,000 of matching contributions in 2003 to Mr. Clarke s account in our 401(k) Plan. Also includes \$300 in 2003 in premiums paid by us for group term life insurance.

<sup>(3)</sup> Includes \$397,094 during 2002 of reimbursement of relocation expenses to Mr. Clarke, and \$252 in premiums paid by us for group term life insurance.

(10) Includes \$6,067, \$4,844, and \$4,028 of matching contributions in 2003, 2002, and 2001, respectively, to Ms. Poul s account in our 401(k) Plan. Also includes \$300, \$336, and \$432 in 2003, 2002, and 2001, respectively in premiums paid by us for group term life insurance.

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#### **Employment Agreements**

In March 2002, we entered into an employment agreement with C. Boyd Clarke when he joined the Company as our President and Chief Executive Officer. Under this agreement, which includes non-competition and confidentiality covenants:

The Company agreed that Mr. Clarke would receive a minimum base salary of \$450,000 per year, and an annual performance incentive bonus, with a target amount of 75% of base salary, based upon the achievement of annual goals established by the Board of Directors and Mr. Clarke, which were established soon after his arrival at the Company with respect to 2002.

The Board of Directors granted Mr. Clarke options to purchase 500,000 shares of common stock at an exercise price of \$32.05 per share, the fair market value on the date of grant, as follows:

an incentive stock option to purchase 12,480 shares, which option vests totally in four years from the date of grant, with 3,120 shares vested on March 29, 2003, 260 shares vesting on the last day of each of the 24 months in 2004 and 2005, and an additional 1,040 shares vesting on the last day of each of the first three months of 2006; and

a non-qualified stock option to purchase 487,520 shares, which option vests totally in four years from the date of grant, with 121,880 shares vested on March 29, 2003, and shares vesting on a monthly basis thereafter such that an aggregate of 93,750 vested during the remainder of 2003 and an aggregate of 121,880, 121,880 and 28,130 options vest 2004, 2005, and the first three months of 2006, respectively.

The Company agreed to reimburse Mr. Clarke for job-related expenses and reasonable costs related to the relocation of his residence to Pennsylvania, including travel expenses, temporary housing costs, realtor fees not to exceed \$180,000, moving costs, closing costs in connection with the purchase of a new home, and \$25,000 to defray additional miscellaneous expenses. Each of these payments is subject to partial repayment by Mr. Clarke in the event he resigns from Neose, prior to the second anniversary of his employment, other than for good reason, as defined in the agreement.

In the event that Mr. Clarke is involuntarily terminated without cause or resigns for good reason (each as defined in the agreement), provided that Mr. Clarke and Neose enter into a mutual release of claims, Mr. Clarke would receive on the date of such termination a cash payment equal to one year of base salary, target annual bonus for the year in which the termination occurs, and any unpaid bonus amounts from prior years. Additionally, all outstanding options that would have vested in the 12 months following termination would immediately vest and remain exercisable for 12 months following termination.

In the event that Mr. Clarke is involuntarily terminated without cause or resigns for good reason (each as defined in the agreement) within 18 months following certain changes of control of Neose or a sale of all or substantially all of our assets in a complete liquidation or dissolution, provided that Mr. Clarke and Neose enter into a mutual release of claims, Mr. Clarke would receive on the date of such termination a cash payment equal to two years of base salary, two times the target annual bonus for the year in which termination occurs, and any unpaid bonus amounts from prior years. Additionally, all outstanding options would immediately vest and remain exercisable for 12 months following termination.

In the event that payments to Mr. Clarke under the employment agreement would result in

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the imposition of a parachute excise tax under Internal Revenue Code Section 4999, Mr. Clarke would be entitled to receive an additional gross-up payment to insulate him from the effect of that tax.

In August 2002, we entered into an employment agreement with Robert I. Kriebel when he joined the Company as our Senior Vice President and Chief Financial Officer. Under this agreement:

The Company agreed that Mr. Kriebel would receive an annual salary of \$250,000, a bonus of 25% of base compensation actually received for the period from August 15, 2002 through December 31, 2002, and, for succeeding years, a bonus as

approved by the Compensation Committee, with a target amount of 50% of base compensation.

The Company awarded Mr. Kriebel a sign-on bonus of \$50,000, which was subject to repayment if he voluntarily terminated employment with the Company or if he were terminated for cause during the first year of employment.

The Company granted Mr. Kriebel options to purchase 165,000 shares of common stock (of which 52,356 shares may be purchased through the exercise of an incentive stock option and 112,644 shares may be purchased through the exercise of a non-qualified stock option) at an exercise price of \$7.64 per share, the fair market value on the date of grant.

The Company and Mr. Kriebel agreed to certain severance arrangements, which have been superseded by his change of control agreement described below.

In September 2002, we entered into an employment agreement with Joseph J. Villafranca when he joined the Company as our Senior Vice President, Pharmaceutical Development and Operations. Under this agreement, which includes non-competition and confidentiality covenants:

The Company agreed that Dr. Villafranca would receive an initial annual salary of \$280,000, a bonus of \$24,500 for the remainder of 2002, and, for succeeding years, a bonus with a target amount of 50% of base salary.

The Company paid Dr. Villafranca \$50,000 in recognition of his foregoing certain payments from his prior employer.

The Company awarded Dr. Villafranca options to purchase 190,000 shares of common stock at an exercise price of \$7.50 per share, the fair market value on the date of grant, as follows:

an incentive stock option to purchase 53,332 shares, which option became vested and exercisable with respect to 25% of the shares on each of October 1, 2002 and October 1, 2003 and will become vested and exercisable with respect to 25% of the shares on each of October 1, 2004 and October 1, 2005;

a non-qualified stock option to purchase 106,668 shares, which option became vested and exercisable with respect to 25% of the shares on each of October 1, 2002 and October 1, 2003 and will become vested and exercisable with respect to 25% of the shares on each of October 1, 2004 and October 1, 2005; and

a non-qualified stock option to purchase 30,000 shares, which option will become vested and first exercisable on the earlier of (i) the first filing with the FDA of an IND for the Company s own proprietary drug candidate that allows the Company to commence clinical trials and (ii) October 1, 2007.

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In the event that Dr. Villafranca is involuntarily terminated without cause (as defined in the agreement) or due to death or disability, Dr. Villafranca would receive a cash payment equal to six months of base salary. In addition, the Company would arrange for outplacement services for Dr. Villafranca and provide medical benefits to him (and his spouse and dependents, if they were covered immediately prior to such termination) for six months, at a monthly cost to him equal to the monthly cost of such coverage, if any, immediately prior to such termination. If the Company s obligations result from Dr. Villafranca s termination as a result of death or disability, the cash payment under the agreement would be offset by the amount of any payments paid under life insurance or disability benefits funded by the Company.

In the event that Dr. Villafranca is involuntarily terminated without cause or resigns for good reason (each as defined in the agreement) within 12 months following certain changes of control of Neose or a sale of all or substantially all of our assets in a complete liquidation or dissolution, Dr. Villafranca would receive a cash payment equal to one year of base salary and his annual bonus for the calendar year in which the termination occurs. The Company would also arrange for outplacement services for Dr. Villafranca and provide medical benefits to him (and his spouse and dependents, if they were covered immediately prior to such termination) for 12 months, at a cost to him equal to the monthly cost of such coverage, if any immediately prior to such termination. Additionally, all outstanding options then held by Dr. Villafranca would immediately vest and remain exercisable for 12 months following termination.

In the event that payments to Dr. Villafranca under the employment agreement would result in the imposition of a parachute excise tax under Internal Revenue Code Section 4999, Dr. Villafranca would be entitled to receive an additional gross-up payment to insulate him from the effect of that tax.

**Change of Control Agreements** 

During the third quarter of 2002, we entered into change of control agreements with Dr. Zopf, Mr. Kriebel, and Ms. Poul. In the event any of these executive officers is involuntarily terminated without cause (as defined in the agreement), the executive would receive on the date of termination a cash payment equal to six months base salary. We also would arrange for outplacement services for the employee and provide medical benefits to the employee (and his or her spouse and dependents, if they were covered immediately prior to such termination) for six months, at a monthly cost to the employee equal to the monthly cost of such coverage, if any, to the employee immediately prior to such termination.

In the event that any of these executive officers is involuntarily terminated without cause or resigns for good reason within 12 months following a change of control (each as defined in the agreement), the executive would receive on the date of termination a cash payment equal to one year of base salary and the employee s target annual bonus for the year in which the termination occurs. Additionally, all outstanding options that would have vested in the 12 months following termination would immediately vest and remain exercisable for 12 months following termination. We also would arrange for outplacement services for the employee and provide medical benefits to the employee (and his or her spouse and dependents, if they were covered immediately prior to such termination) for 12 months, at a monthly cost to the employee equal to the monthly cost of such coverage, if any, to the employee immediately prior to such termination. In the event payments to any executive under the change of control agreement would result in the imposition of a parachute excise tax under Section 280(G) of the Internal Revenue Code, the executive would be entitled to receive an additional gross-up payment to insulate the executive from the effect of that tax.

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The change of control agreements require these executives to release us from certain claims and to comply with certain restrictive covenants. We have similar change of control agreements with our Vice Presidents.

#### **Separation and Consulting Agreement**

In March 2002, we entered into a Separation and Consulting Agreement with Stephen A. Roth, Ph.D., our former Chief Executive Officer, who continues to serve on our Board of Directors. Under this agreement, Dr. Roth provided consulting services to the Chief Executive Officer and the Board of Directors for a period of 12 months, and we paid him \$39,622 per month for 12 months. Dr. Roth also released us from any obligations we may have incurred in connection with his employment with us. In March 2003, Dr. Roth extended his non-competition and non-solicitation commitments for two additional years, and we will, therefore, pay him \$39,622 per month for 24 additional months and his stock options will continue to vest and remain exercisable during this period. During the quarter ended March 31, 2003, we recorded a liability of \$882,000, which represented the present value of the future payments, and a corresponding asset for the value of the non-competition commitment. The asset will be amortized to marketing, general and administrative expense in our statements of operations over the two-year term of the agreement.

#### **Option Grant Table**

The following table provides information about grants of stock options made during 2003 to each of the executive officers named in our Summary Compensation Table.

		Individual				
	Number of Shares Underlying	Percentage of Total Options		F	Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term (3)	
Name	Options Granted (1)	Granted to Employees (2)	Exercise Price	Expiration Date	5%	10%
C. Boyd Clarke		<del></del>	<u> </u>		\$	
Joseph J. Villafranca			·			
David A. Zopf	35,000	6.1	7.45	02/12/14	163,984	415,568
Robert I. Kriebel						
Debra J. Poul	35,000	6.1	7.45	02/12/14	163,984	415,568

Each option has a term of ten years from the date of grant and vests ratably over a four-year period, beginning on the first anniversary of the date of grant.

<sup>(2)</sup> Based on the total options granted during 2003 to employees to purchase common stock.

(3) The potential realizable value of each grant is calculated assuming that the market price per share of common stock appreciates at annualized rates of 5% and 10% over the ten-year option term. The results of these calculations are based on rates set forth by the Securities and Exchange Commission and are not intended to forecast possible future appreciation of the price of our common stock.

## **Aggregated Fiscal Year-End Option Values**

The following table provides information about the exercise of stock options during 2003 and the value of stock options unexercised at the end of 2003 for the executive officers named in our Summary Compensation Table. The value of unexercised stock options is calculated by multiplying the number of option shares by the differences between the option exercise price and the year-end stock price.

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	Number of Shares		Underlying	of Shares Unexercised tions		Unexercised oney Options
Name	Acquired On Exercise	Value Realized	Exercisable	Unexercisable	Exercisable	Unexercisable
C. Boyd Clarke		\$	281,250	468,750	\$ 28,125	\$ 84,375
Joseph J. Villafranca			80,000	110,000	136,000	187,000
David A. Zopf			102,916	76,250	1,333	61,250
Robert I. Kriebel			41,250	123,750	64,350	193,050
Debra J. Poul			32,500	105,000		61,250

**Report of the Compensation Committee** 

The following Report of the Compensation Committee shall not be deemed incorporated by reference into any other Company filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent specifically incorporated by reference therein by the Company.

## What is our compensation philosophy?

The goal of our compensation program is to attract, motivate and retain experienced, specialized employees to develop proprietary products and provide services to our customers. We compete with large pharmaceutical companies and biotechnology companies for employees skilled in process development, fermentation, quality control, quality assurance, manufacturing, analytics, and other areas relevant to drug and technology development. We aim to provide fixed compensation for most employees in the range of 50<sup>th</sup> percentile of industry benchmarks, and to tie compensation, particularly variable cash compensation, to individual and company performance. We have established both corporate objectives, and individual objectives, against which we can measure performance and determine appropriate compensation levels. We believe in leveraging compensation by increasing the variable component, particularly for senior executives, so any bonus will be based on the achievement of corporate and individual goals. We also believe that all employees should participate in some equity-based compensation program.

## What are the components of our executive compensation?

The elements of our executive compensation are:

Base salary;

Variable compensation, consisting of annual cash bonuses based on individual and corporate performance to objectives; and Equity compensation, consisting of annual grants of long-term stock options.

We have included these three components to attract and retain senior management, to encourage senior management to achieve our corporate objectives, and to align their interests with the interests of our stockholders.

#### How do we determine base salaries?

We determine base salaries by each individual s experience and personal performance, and by comparisons to similar positions within the biotechnology industry. In general, base salaries are reviewed annually based on these criteria. Increases are based on performance ratings,

taking into account general survey data and survey data for the biotechnology industry.

As a cost-saving measure, our chief executive officer received no increase in salary for 2003, and salaries were frozen for officers for the first six months of 2003.

#### How do we determine annual bonuses?

Annual bonuses are tied to the achievement of both individual and corporate objectives. At the end of each year, performance objectives are established for both the company and each individual employee as

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a way to communicate our expectations to our employees and to measure their performance. We set target bonus percentages for different levels of employees, to be applied depending on the performance to individual and corporate objectives. For 2003, our chief executive officer s bonus was based on the achievement of the corporate objectives agreed to by the Board and Mr. Clarke, and for our other senior executives, bonuses were based 50% on each senior executive s performance to individual objectives, and 50% on the company s performance. The Compensation Committee reviews and approves the recommended performance rating of officers, and approves bonuses based on the rating and target bonus. The Committee approved bonuses payable to our executive officers based on performance in 2003 totaling \$984,000, which were paid in 2004.

#### How is equity compensation used to ensure senior management is focused on long-term results?

We use stock options to provide long-term incentives to our executive officers. In this way, we seek to align their interests with those of our stockholders, and to retain our senior management.

We have adopted guidelines for stock option grants based on job level. In addition, when determining the number of options to grant, we look at the individual s and the company s performance to objectives, as well as comparable information of other biotechnology companies. Options granted to our executive officers were based on our guidelines, as well as performance.

The Compensation Committee approves all grants of stock options to executive officers. Generally, each option is exercisable over a ten-year period at the market price on the date of grant and vests in annual installments over a four-year period. In connection with the recruitment of key executives, we have made exceptions to the vesting schedules of certain grants. This was the case for the options granted to Mr. Clarke and Dr. Villafranca when they were hired.

Our stock options will provide a benefit to the executive officer only if he or she remains employed (or is deemed employed) by Neose during the vesting period, and then only if the market price of our common stock increases. During 2003, the Compensation Committee approved grants to purchase 145,000 shares of common stock to our executive officers.

#### How do we determine the compensation of our Chief Executive Officer?

We hired Mr. Clarke in March 2002. His compensation was designed to attract him to Neose, to be competitive with the compensation packages offered by comparable companies, and to make a significant percentage contingent on his and our performance. We agreed to pay him a minimum base salary of \$450,000 per year and a performance incentive bonus, with a target amount of 75% of base salary, based upon the achievement of goals established by the Board of Directors and Mr. Clarke. Mr. Clarke was paid a base salary of \$450,000 and a bonus of \$315,000 for 2003. His bonus for 2003 was 70% of his base salary, based on the Company's performance under his leadership in reference to specific corporate objectives established by the Board at the beginning of 2003, specifically: the achievement of milestones in the Company's proprietary protein development and emerging technologies programs; the completion of business development transactions; the completion of equity offerings; the achievement of manufacturing milestones; the achievement of organizational development objectives; and management to budget. Mr. Clarke was not granted any options during 2003.

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## What is the impact of Internal Revenue Code Section 162(m)?

Under Section 162(m) of the Internal Revenue Code, we will not be allowed a federal income tax deduction for compensation paid to certain executive officers, to the extent that compensation exceeds \$1 million per executive officer in any one year. Compensation that qualifies as performance-based compensation is not taken into account for purposes of the limitation. The definition of performance-based compensation

includes compensation deemed paid in connection with the exercise of certain stock options. The exercised stock options must have an exercise price equal to the fair market value of the option shares on the grant date to qualify as performance-based compensation. Our Amended and Restated 1995 Stock Option/Stock Issuance Plan and our 2004 Equity Incentive Plan, which is being submitted for stockholder approval at the Annual Meeting, are intended to assure that the exercise of stock options issued under these plans will qualify as performance-based compensation. The non-qualified option to purchase 487,520 shares of common stock, which was granted to Mr. Clarke in 2002 upon commencement of his employment, was not granted under the 1995 Stock Option/Stock Issuance Plan and is not intended to qualify for the performance-based exemption under Section 162(m).

The Compensation Committee has not taken any action to limit or restructure the elements of cash compensation payable to our executive officers. The Compensation Committee will reconsider this decision should the individual compensation of any executive officer approach the \$1 million level.

Compensation Committee of the Board of Directors

Douglas J. MacMaster, Jr., Chairman L. Patrick Gage, Ph.D. Elizabeth H.S. Wyatt

#### **Certain Relationships and Related Transaction**

In May 2001, we entered into a tuition reimbursement agreement with A. Brian Davis, who serves as our Vice President, Finance. Under the agreement, we agreed to lend Mr. Davis the amounts necessary to pay for tuition payments and related costs and fees for an MBA degree. Interest accrues on the loan at 4.71% per year, and is payable annually beginning in May 2002. The agreement provides that we will forgive repayment of the principal amount outstanding in four equal, annual installments commencing in May 2004 if he remains employed by us on each forgiveness date. The agreement also provides that we will forgive the accrued interest on its annual due date and, if Mr. Davis is terminated without cause, we will forgive all outstanding principal and interest. As of December 31, 2003, the amount outstanding under the agreement, including accrued interest, was \$118,000.

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#### **Common Stock Performance Graph**

The following Stock Performance Graph shall not be deemed incorporated by reference into any other Company filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent specifically incorporated by reference therein by the Company.

The following graph assumes that \$100 was invested on December 31, 1998, in our common stock. The graph compares the cumulative return, which includes the reinvestment of dividends, of this investment with an equivalent investment on that date in the Nasdaq Stock Market U.S. Index (the Nasdaq Composite) and the Nasdaq Stock Market Biotech Index (the Nasdaq Biotech Index).

## Proposal 2 Ratification of Appointment of Independent Auditors

The Audit Committee of the Board of Directors has appointed KPMG LLP as the Company s independent auditors to audit its financial statements for the year ending December 31, 2004. KPMG LLP has served as the Company s auditors since April 2002. Services provided to the Company by KPMG LLP during 2003 are described under Relationship with Independent Auditors on page 10.

Representatives of KPMG LLP are expected to be present at the Annual Meeting to respond to appropriate questions and to make such statements as they may desire.

#### **Vote Required and Recommendation**

The affirmative vote of the holders of a majority of the shares represented in person or by proxy and entitled to vote on this proposal is required for approval of this proposal.

The Board of Directors recommends that stockholders vote FOR ratification of the appointment of KPMG LLP as the Company s auditors for fiscal 2004.

In the event that the stockholders do not ratify the appointment, the appointment will be reconsidered by the Audit Committee.

## Proposal 3 Approval of Amendment to Our Certificate of Incorporation to Increase the Number of Authorized Shares of Common Stock

#### **Proposed Amendment**

Our Board of Directors believes that it is in the Company s best interest to amend our certificate of incorporation to increase the number of shares of common stock the Company is authorized to issue from 30 million to 50 million (the Authorized Shares Amendment). If the Authorized Shares Amendment is approved, the additional 20 million shares of common stock will be available for issuance from time to time as may be deemed advisable or required for various purposes, principally in connection with financing transactions and the reservation of common stock for equity awards to employees, officers, directors and consultants. We do not have any present plan, understanding, arrangement, commitment or agreement regarding the issuance of our common stock after the proposed increase in our authorized shares, except as described in our shelf registration statement no. 333-106327, as filed with the SEC, or as described in the next paragraph.

As of March 15, 2004, 19,948,171 of the 30 million shares authorized under our certificate of incorporation were issued and outstanding. Of the remaining authorized shares, 5,081,945 shares were reserved for issuance upon the exercise of outstanding options that were granted under our 1995 Amended and Restated Stock Option/Stock Issuance Plan, and 499,186 shares were reserved for issuance upon the exercise of outstanding options that were granted outside of the 1995 Plan. In addition, if Proposal 4 is approved by the stockholders, an additional 997,408 shares will be reserved for issuance in connection with grants of stock-based awards under our 2004 Equity Incentive Plan.

As of March 15, 2004, we may sell from time to time shares of common stock under our shelf registration statement no. 333-106327 having a total offering price, in the aggregate, of up to \$51,099, 987.

The Authorized Shares Amendment will permit the Company s Board of Directors to authorize the issuance of shares without the necessity and related costs and delays of either calling a special stockholders meeting or waiting for the regularly scheduled annual meeting of stockholders in order to increase the authorized capital. The Board believes that the proposed increase in the number of authorized shares is desirable to maintain the Company s flexibility in connection with offerings of common stock to raise capital and to provide for grants of options and restricted stock under our 2004 Equity Incentive Plan. The Board will determine the terms of any issuance of the additional shares.

If this proposal is approved, all or any of the authorized shares may be issued without further stockholder action (unless such approval is required by applicable law or regulatory authorities) and without first offering those shares to the stockholders for subscription. The issuance of shares in any manner other than on a pro-rata basis to all stockholders would reduce the proportionate interest in the Company of each stockholder. Our stockholders have no preemptive rights to subscribe for additional shares of common stock when issued.

We have not proposed the increase in the authorized number of shares with the intention of using the additional shares for anti-takeover purposes, although we could, theoretically, use the additional shares to make more difficult or discourage an attempt to acquire control of the Company.

If the Authorized Shares Amendment is approved, Article IV(A) of our certificate of incorporation will be amended to read as follows.

## ARTICLE IV.

A. This corporation is authorized to issue two classes of stock to be designated, respectively, Common Stock and Preferred Stock. The total number of shares which the corporation is authorized to issue is 55,000,000. 50,000,000 shares, par value \$0.01

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 $per \ share, \ shall \ be \ Common \ Stock \ and \ 5,000,000 \ shares, \ par \ value \ \$0.01 \ per \ share, \ shall \ be \ Preferred \ Stock.$ 

If this proposal is approved, the Authorized Shares Amendment will be implemented by filing the Company s Third Amended and Restated Certificate of Incorporation (the Third Amended and Restated Certificate ) with the Secretary of State of the State of Delaware. On March 15, 2004, the Company s certificate of incorporation was set forth in two documents filed with the Secretary of State of the State of Delaware: its Second Amended and Restated Certificate of Incorporation (the Second Amended and Restated Certificate of Designations establishing and designating the Series A Junior Participating Preferred Shares as a series of the Preferred Stock (the Certificate of

Designations ). The form of the Third Amended and Restated Certificate is attached as Appendix B to this proxy statement. Appendix B restates the provisions of the Second Amended and Restated Certificate and the Certificate of Designations, amended only by the Authorized Shares Amendment. Except for the amendment to Article IV(A) increasing the number of authorized shares of common stock, as set forth above and included in Appendix B, the Third Amended and Restated Certificate does not change the Company s certificate of incorporation in any respect.

#### **Vote and Recommendation**

The affirmative vote of a majority of the outstanding shares of common stock entitled to vote thereon is required for approval of this proposal.

The Board of Directors unanimously recommends a vote FOR the approval of the proposed amendment to the Company s certificate of incorporation.

#### Proposal 4 Approval of the Company s 2004 Equity Incentive Plan

At the Annual Meeting, a proposal will be presented to the stockholders to approve and adopt our 2004 Equity Incentive Plan. If this Proposal is approved by the stockholders, 997,408 shares of common stock will be available for grant under the plan, in addition to the shares remaining in our existing plan, as described in the next paragraph. As of the record date for the Annual Meeting, 997,408 shares represented 5% of the outstanding shares of our common stock.

The equity incentive plan will replace our 1995 Stock Option/Stock Issuance Plan, which will expire before the 2005 annual meeting of our stockholders. Of the 5,876,666 shares currently authorized under the 1995 plan, 794,721 shares have been issued pursuant to option exercises and are no longer available for grant. Of the remaining 5,081,945 shares available for grant under the 1995 plan, options to purchase 4,617,742 shares of common stock were outstanding as of March 15, 2004, and 464,203 shares remained available for future option grants or stock issuances as of that date. If our stockholders approve the 2004 Equity Incentive Plan, any shares then available for future grants under the 1995 plan will be available for issuance, instead, under the 2004 Equity Incentive Plan (along with the additional 997,408 shares described in the preceding paragraph), and no additional options or other awards would be issued under the 1995 plan.

In February, 2004, the Board adopted the plan, subject to approval by our stockholders. We believe our ability to grant equity-based awards is a valuable and necessary compensation tool that aligns the long-term financial interests of the employees and directors with the financial interests of our stockholders. In addition, we believe that our ability to grant options and other equity-based awards helps us to attract, retain and motivate qualified employees, and encourages them to devote their best efforts to our business and financial success. The approval of a new plan is necessary to meet these objectives. The Board of Directors believes that approval of Proposal 4 is in the best interests of Neose and our stockholders.

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The material features of the 2004 Equity Incentive Plan are described below. Approval of the proposal to approve and adopt the plan requires the affirmative vote of the holders of a majority of shares present in person or represented by proxy at the Annual Meeting.

### **Description of the 2004 Equity Incentive Plan**

The equity incentive plan requires the Board of Directors to designate a committee of two or more non-employee directors as the plan administrator. Our Compensation Committee has been designated the plan administrator and will initially administer the plan. The equity incentive plan incorporates our three predecessor stock option plans, the 1991 Stock Option Plan, the 1992 Stock Option Plan and the 1995 Stock Option/Stock Issuance Plan. The following types of awards are available under the equity incentive plan: incentive stock options, non-qualified stock options, stock appreciation rights, restricted shares and restricted share units.

Subject to the approval of our stockholders, our Board of Directors has authorized 997,408 shares of stock to be available to be subject to awards under the plan. Any of those shares may be subject to incentive stock options, non-qualified stock options, stock appreciation rights, restricted shares, restricted shares units or any combination of any of them. Shares of common stock issuable under the 2004 Equity Incentive Plan will be covered by a registration statement on Form S-8, which we will file with the Securities and Exchange Commission following approval of this proposal.

Eligibility

All employees, non-employee directors, and consultants are eligible to receive awards under the equity incentive plan. In addition to being eligible to receive awards under the plan generally, non-employee directors are eligible to receive automatic grants of options upon the occurrence of each Annual Meeting at which they serve as a director, including the first Annual Meeting at which they are first elected to our Board of Directors, and to receive grants of options in lieu of a portion of their fees for serving as directors. As of March 15, 2004, there were approximately 147 employees and 8 non-employee directors who would be eligible to participate in the equity incentive option plan. In any given year, no person may be granted awards with respect to more than 1,000,000 shares of common stock under the equity incentive plan.

Generally, the Compensation Committee determines which eligible employees, directors and consultants will receive awards under the plan. However, the Board of Directors may delegate the authority to grant awards to Neose employees who are not subject to Section 16 of the Securities Exchange Act of 1934 to a committee of one or more officers of Neose and/or one or more members of the Board of Directors.

Stock Options and Stock Appreciation Rights

The Compensation Committee may grant stock options and stock appreciation rights to eligible employees and directors under the equity incentive plan. The Compensation Committee has complete discretion to determine:

Which eligible individuals are to receive option grants or stock appreciation rights;

The time or times when option and stock appreciation rights grants are to be made;

The number of shares subject to, and the vesting schedule for, each option grant and stock appreciation right;

The designation of each stock option as either an incentive or a non-qualified stock option;

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The maximum term for which each option grant and stock appreciation right is to remain outstanding, which term, for an incentive stock option, may not exceed ten years, and for an incentive stock option granted to a person who owns more than 10% of the voting power of Neose may not exceed five years; and

The exercise price for each option and stock appreciation right, which for a non-qualified stock option may not be less than 85% of the fair market value of the stock on the date of grant. If the recipient of an incentive stock option owns more than 10% of the voting power of Neose, the exercise price must be at least 110% of the fair market value on the date of grant. For all other recipients, the exercise price of an incentive stock option must be at least 100% of the fair market value on the date of grant.

The Internal Revenue Code allows an optionee to receive incentive stock options only to the extent that the aggregate amount of incentive stock options exercisable for the first time by an optionee during any calendar year does not exceed \$100,000. Any stock option that is granted to an optionee who fails to meet the criteria for an incentive stock option must be treated as a non-qualified stock option.

For purposes of the equity incentive plan, the fair market value of the common stock is the closing sale price per share on the grant date as such price is reported on The Nasdaq Stock Market. If there is no reported closing sale price on such date, the fair market value is the closing sale price on the last preceding date for which a quotation exists. The closing sale price per share of common stock on March 15, 2004 was \$10.05.

Under the Company s bylaws, the Compensation Committee may not cancel outstanding options under the equity incentive plan in return for the grant of new options for the same or different number of option shares unless such repricing is approved by our stockholders.

Stock appreciation rights may be issued under the equity incentive plan. Each stock appreciation right will entitle the holder to surrender the stock appreciation right for a distribution from Neose equal to the fair market value of a share of common stock less the exercise price of the stock appreciation right. The distribution may be made in cash or in shares of common stock, as determined by Neose.

Automatic Non-Employee Director Option Grants

Under the equity incentive plan, each non-employee director, on the date he or she is first elected or appointed to the Board of Directors, will automatically be granted an option to purchase 30,000 shares of common stock, provided that such individual has not been previously employed by us. In addition, upon each annual re-election to the Board, each non-employee director with at least six months of Board service will automatically be granted an option to purchase an additional 10,000 shares of common stock.

All automatic non-employee director option grants will be made in strict compliance with the provisions of the equity incentive plan. Accordingly, the Compensation Committee does not exercise any administrative discretion with respect to these automatic option grants. Each automatic option is immediately exercisable and has a term of 10 years, subject to earlier termination following the director s cessation of service on the Board. Any shares purchased upon exercise of the option, however, are subject to repurchase if the director s service as a non-employee director ceases prior to vesting of the shares. The 30,000 shares subject to an initial automatic option grant will vest in successive equal, annual

installments over the director s initial four-year period of Board service. The shares subject to each additional automatic option grant vest upon the director s completion of one year of service on the Board of Directors, as measured from the grant date. In addition, shares subject to each outstanding option will vest immediately upon certain changes in the ownership or control of Neose.

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#### Director Fee Option Grants

Under the equity incentive plan, each non-employee director may elect to receive all, or part, of his or her annual retainer fee otherwise payable in cash in the form of a special option grant. An election to receive an option grant in lieu of annual retainer fees must be filed with us prior to the start of the calendar year of participation. If an election is filed, the option grant is automatically made on the first trading day in January of the applicable year, and the option has an exercise price per share equal to one-third of the fair market value of the common stock on the grant date. The number of shares subject to the option is determined by dividing the amount of the retainer fee applied to the program by two-thirds of the fair market value of common stock on the grant date. As a result, the total spread on the option (the fair market value of the option shares on the grant date less the aggregate exercise price payable for those shares) is equal to the portion of the retainer fee subject to the director's election.

All grants made in respect of director fees will be made in strict compliance with the provisions of such programs. Accordingly, the Compensation Committee does not exercise any administrative discretion with respect to these options. The options become exercisable in a series of twelve successive equal, monthly installments upon the director s completion of each month of Board service during the calendar year for which the option grant is made or, if earlier, upon certain changes in the ownership or control of Neose. The options remain exercisable for such shares until the earlier of the expiration of the ten-year option term or the end of the three-year period measured from the date of the director s cessation of Board service.

#### Restricted Shares and Restricted Share Units

The Compensation Committee may grant restricted shares and restricted share units to eligible employees and directors under the equity incentive plan. A restricted share is a share of Neose common stock that is subject to restrictions as determined by the Compensation Committee. A restricted share unit entitles the holder to a distribution from Neose equal to the fair market value of a share of Neose common stock subject to restrictions as determined by the Compensation Committee. The Compensation Committee also has complete discretion to determine:

Which eligible individuals are to receive restricted shares and restricted share units;

The time or times when grants of restricted shares and restricted share units are to be made;

The consideration, if any, to be paid for the restricted shares;

The number of shares subject to restricted shares and restricted share units; and

When the restrictions applicable to each restricted share and restricted share unit will lapse.

The restrictions applicable to restricted shares and restricted share units may lapse in one or more installments over a period of service, may lapse upon the attainment by the Company and or the holder of certain performance milestones determined by the Compensation Committee or upon some combination of the holder s serving for some period and the attainment of established performance goals.

## Corporate Transactions

If we are a party to certain corporate transactions, including certain mergers or asset sales, the Board may, in its sole and absolute discretion and without the need for the consent of any optionee or other award holder, take one or more of the following actions contingent upon the occurrence of the transaction:

cause any or all outstanding stock options and stock appreciation rights held by plan participants affected by the transaction to become fully vested and immediately exercisable;

cause the restrictions on any or all outstanding restricted shares and restricted share units held by participants affected by the transaction to lapse and for the restricted shares and restricted

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share units to become non-forfeitable;

cancel any award held by a participant affected by the transaction in exchange for a similar award related to the common stock of any successor corporation; and

cancel or redeem any or all awards held by participants affected by the transaction for cash and/or other substitute consideration. Options currently outstanding under our predecessor stock option plans contain different provisions for acceleration of vesting in connection with a change in control and other corporate transactions of Neose. Under the 1995 Stock Option/Stock Issuance Plan, each outstanding option and unvested stock issuance will, under certain circumstances, automatically vest in full upon certain corporate transactions. Options and stock issuances that do not vest in full at the time of any such transaction will vest in full if the individual service is terminated, whether involuntarily or through a resignation for good reason within 18 months following the transaction. Under the 1995 plan, the Compensation Committee may also accelerate the vesting of options and unvested stock issuances upon a change in control of Neose (as defined in the 1995 plan) or the termination of the individual service, whether involuntarily or through a resignation for good reason, within a specified period following the change in control. Options outstanding under the 1992 Stock Option Plan may, under certain circumstances, vest in full upon a change in control (as defined in the 1992 plan). Options outstanding under the 1991 Stock Option Plan do not contain any acceleration of vesting provisions in connection with a corporate transaction. The Compensation Committee has the discretion, however, to accelerate vesting of stock options under any of our predecessor stock option plans.

Amendment and Termination of the Equity Incentive Plan

The Board has complete and exclusive power and authority to amend or modify the equity incentive plan in any, or all, respects. No amendment, however, may adversely affect the rights and obligations of awards outstanding under the plan at the time, without the consent of the award holder. In addition, the Board may not, without stockholder approval, amend the equity incentive plan to:

Increase the maximum number of shares issuable under the equity incentive plan, or the maximum amount of shares for which any one individual participating in the equity incentive plan may be granted stock options, stock appreciation rights, restricted shares or restricted share units for any given year;

Materially modify the eligibility requirements for participation; or

Otherwise materially increase the benefits accruing to participants.

The equity incentive plan will terminate on the date on which all shares available for issuance under the stock option plan have been issued. However, no incentive stock options and no automatic non-employee director options may be granted after May 6, 2014 (or, if the stockholders later approve an amendment that increases the number of shares subject to the equity incentive plan, the 10<sup>th</sup> anniversary of the date of such approval).

#### Federal income tax consequences of the stock option plan

The following discussion summarizes the principal federal income tax consequences of the stock option plan based on the Internal Revenue Code and its regulations, and administrative and judicial interpretations. The summary does not address any foreign, state, or local income tax consequences of participation in the stock option plan.

Non-Qualified Stock Options

There generally are no federal income tax consequences to an optionee or to Neose upon the grant of a non-qualified stock option. Upon the exercise of a non-qualified stock option, an optionee will recognize ordinary compensation income in an amount equal to the fair market value of the shares at the time of

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exercise less the exercise price of the non-qualified stock option. We generally will be entitled to a corresponding federal income tax deduction. Upon the sale of shares of common stock that were acquired by the exercise of a non-qualified stock option, an optionee will recognize a capital gain or loss. The amount of the capital gain or loss will be equal to the difference between the amount realized upon the sale of the shares and the optionee s adjusted tax basis in the shares of common stock. The optionee s adjusted tax basis in the shares of common stock is equal to the exercise price plus the amount of ordinary income recognized by the optionee at the time of exercise of the non-qualified stock option. The tax rate for the capital gain will depend on the length of time the shares were held by the optionee and other factors.

Incentive Stock Options

A recipient of an incentive stock option will not recognize taxable income, for purposes of the regular income tax, upon either the grant or exercise of the incentive stock option. Under the regulations of the Internal Revenue Code governing the alternative minimum tax, however, the exercise of an incentive stock option generally increases the recipient s alternative minimum taxable income in the year in which an incentive stock option is exercised. The amount of the increase is equal to the fair market value of the shares of common stock acquired upon exercise

less the stock option exercise price. Upon a qualifying disposition of shares acquired upon exercise of an incentive stock option, an optionee will recognize long-term capital gain or loss, and we will not be entitled to a corresponding federal income tax deduction. For these purposes, a qualifying disposition is defined as a disposition of shares at least two years after the incentive stock option is granted and at least one year after exercise of the incentive stock option. As a general rule, if an optionee disposes of the shares acquired upon exercise of an incentive stock option before satisfying both holding period requirements, the gain recognized on such a disposition will be taxed to the optionee as ordinary income, and we generally will be entitled to a corresponding federal income tax deduction. The amount of ordinary income is the difference between the fair market value of the shares on the date of exercise and the option exercise price. The gain, if any, in excess of the amount recognized as ordinary income on such a disqualifying disposition will be long-term or short-term capital gain, depending upon the length of time the optionee held the shares prior to the disposition.

#### Stock Appreciation Rights

A recipient of a stock appreciation right will not recognize any income upon the grant of a stock appreciation right. Upon the exercise of a stock appreciation right, the recipient will recognize ordinary compensation income in the amount of both the cash and the fair market value of the shares of common stock received upon such exercise, and we generally will be entitled to a corresponding federal income tax deduction. When the recipient sells shares acquired upon the exercise of a stock appreciation right, he or she will recognize a capital gain or loss. The amount of the capital gain or loss will be equal to the difference between the amount realized on the sale and the amount of ordinary income recognized at the time of exercise of the stock appreciation right.

#### Restricted Shares

A recipient of restricted shares normally will not recognize taxable income upon the grant of the shares, and we will not be entitled to a corresponding federal income tax deduction. When the shares either are transferable or are no longer subject to a substantial risk of forfeiture, the recipient will recognize ordinary compensation income, and we generally will be entitled to a corresponding federal income tax deduction. The amount of the ordinary compensation income will be equal to the difference between the fair market value of the common stock at that time and any amount paid by the recipient for the shares. Upon the recipient sale of shares of common stock that were issued as restricted shares, the recipient will recognize a capital gain or loss. The amount of the capital gain or loss will be equal to the difference between the amount realized upon the sale of the shares and the recipient sadjusted tax basis in the shares of common stock. The recipient sadjusted tax basis in the shares of common stock is equal to the amount, if any, paid by the recipient for the shares, plus the amount of ordinary income recognized by the recipient upon the

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lapse of the restrictions applicable to the shares. The tax rate for the capital gain will depend on the length of time the shares were held by the recipient and other factors.

A recipient may elect to recognize ordinary compensation income in the year the restricted shares are awarded to him or her, despite the restrictions on the shares, and, if such an election is made, we generally will be entitled to a corresponding federal income tax deduction at that time. The amount of ordinary compensation income recognized in connection with such an election will be equal to the difference between the fair market value of the common stock at the time of grant and any amount paid for the shares. If such an election is made, there generally are no federal income tax consequences to the restricted share recipient or to Neose upon the lapse of restrictions on the restricted shares.

#### Restricted Share Units

A recipient of a restricted share unit will not recognize any income upon the grant of a restricted share unit. When payment in respect of a restricted share unit is made, the recipient will recognize ordinary compensation income in the amount of both the cash and the fair market value of the shares of common stock received, and we generally will be entitled to a corresponding federal income tax deduction. When the recipient sells any shares acquired as payment in respect of restricted share units, he or she will recognize a capital gain or loss. The amount of the capital gain or loss will be equal to the difference between the amount realized on the sale and the amount of ordinary income recognized in connection with the initial receipt of the shares.

#### Payment of Withholding Taxes

Our obligation to deliver shares of common stock in respect of any the exercise of any stock option or stock appreciation right or any restricted share or restricted share unit grant and our obligation to pay any other amounts under the equity incentive plan is subject to the satisfaction of all applicable income and employment tax withholding requirements. In some circumstances, we permit plan participants to remit directly to the appropriate taxing authority the amount of his or her withholding tax obligations.

#### Plan benefits

Option grants to our current executive officers and directors to purchase the following number of shares of common stock have been made under our1991 Stock Option Plan, the 1992 Stock Option Plan and the 1995 Stock Option/Stock Issuance Plan from the adoption of the 1991 Stock Option Plan through March 15, 2004: C. Boyd Clarke 462,480; Joseph J. Villafranca 235,000; David A. Zopf 257,498; Robert I. Kriebel 200,000; Debra J. Poul 172,500; George J. Vergis 310,000; A. Brian Davis 111,166; Marjorie A. Hurley 137,833; current executive officers as a group 1,886,477; current non-employee directors as a group 889,070; and all other employees and consultants as a group 3,811,597.

The benefits and amounts that may be received in the future by persons eligible to participate in the equity incentive plan are not currently determinable, except as to those future automatic grants to be awarded to non-employee directors as automatic option grants.

#### **Vote Required and Recommendation**

The affirmative vote of the holders of a majority of the shares represented in person or by proxy and entitled to vote on this proposal is required for approval of this proposal.

The Board of Directors unanimously recommends a vote FOR the approval of the Company s 2004 Equity Incentive Plan.

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#### **Equity Compensation Plan Information**

The following table gives information about our common stock that may be issued upon the exercise of options, warrants and rights under all of our existing equity compensation plans as of March 15, 2004, including the Amended and Restated 1995 Stock Option/Stock Issuance Plan. The table does not include the additional shares requested for issuance under the 2004 Equity Incentive Plan proposed for approval by the Stockholders in this Proposal 4.

Plan Category	Number of Securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options warrants and rights	Number of Securities remaining available for future issuance under equity compensation plans (excluding securities reflected in second column)
Equity compensation plans			
approved by securityholders	4,617,742(1)	\$ 15.59(1)	464,203(1)
Equity compensation plans not approved by			
securityholders	499,186(2)	\$ 31.62	
Total	5,116,928	\$ 17.15	464,203

- (1) Does not include rights granted under the Employee Stock Purchase Plan. The next scheduled purchase date under the Employee Stock Purchase Plan is July 31, 2004, for which rights were granted in connection with the 24-month offering period that commenced in February 2004.
- (2) Includes option grant to C. Boyd Clarke and options to two consultants, each as described in the text below. Option Grants Under Plans Not Approved by Stockholders

On March 29, 2002, the Company s board of directors approved a grant to C. Boyd Clarke in connection with his appointment as President and Chief Executive officer of a non-qualified stock option to purchase 487,520 shares of common stock. The option grant to Mr. Clarke is not

pursuant to the stock option plan and has not been submitted to, and is not required to be submitted to, the stockholders for approval. The option is exercisable for a period of ten years at a price of \$32.05 per share, which was the fair market value of the underlying stock on the date of grant. The option is subject to a vesting schedule pursuant to which the options will vest and become exercisable with respect to 121,880 shares on March 29, 2003, and on a monthly basis thereafter such that the option will vest and become exercisable with respect to an aggregate of 93,750, 121,880 and 28,130 shares in each of the remainder of 2003, 2004, 2005 and the first three months of 2006, respectively.

On December 6, 1995, the Company granted options to two consultants in connection with services provided to the Company. These options are now fully vested and exercisable at a price of \$13.80 per share with respect to 8,333 shares for one consultant and 3,333 for the other. These options expire on December 6, 2005.

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## Requirements for Advance Notification of Nominations and Stockholder Proposals

Advance Notice Requirements for next year s Annual Meeting

Under Section 11 of Article II of our By-Laws, you may nominate a person for election as a director or propose business to be considered at next year s Annual Meeting if you:

Are a holder of record at the time of giving the notice described below;

Are entitled to vote at next year s Annual Meeting; and

Deliver a written notice of intent to make a nomination or proposal to our Corporate Secretary at our offices. You must deliver the written notice of intent, which must contain the relevant information described below, between November 3, 2004 and December 3, 2004. If the date of next year s Annual Meeting is earlier than March 3, 2005 or later than June 1, 2005, however, your written notice of intent must be delivered between the 90th day before next year s Annual Meeting and the later of:

The 60th day before next year s Annual Meeting; or

The 10th day after our first public announcement of next year s Annual Meeting date.

If the Board of Directors decides to propose, for next year s Annual Meeting, an increase in the number of directors, the advance notice requirements will differ from those described above if we fail to make a timely public announcement of the proposal. Our public announcement must be made as described in our By-Laws, and must either name all of the nominees for director or specify the new size of the Board of Directors. To be considered timely, our first public announcement of such a proposal must be made:

By February 24, 2005, if the date of next year s Annual Meeting is between April 6, 2005 and July 5, 2005; or

By 70 days before next year s Annual Meeting, if the date of next year s Annual Meeting is earlier than April 6, 2005 or later than July 5, 2005.

If we fail to meet the applicable deadline for making a timely public announcement, and you would like to nominate individuals for the new position(s) created by the increase, you must deliver your written notice of intent by no later than the 10th day after our first public announcement. Your written notice of intent may nominate individuals only for new position(s) created by the increase, and must contain the information described below.

Requirements for a Written Notice of Intent

Your written notice of intent to make a nomination or proposal must contain your name, address, and the number of each class of our shares you own beneficially and of record. If you are delivering the written notice of intent on behalf of a beneficial owner of our shares, the written notice of intent also must contain the beneficial owner s name, address, and the number of each class of our shares held beneficially and of record. Your written notice of intent also must include:

As to each person you propose to nominate for election or re-election as a director, the nominee s written consent to be named in the proxy statement as a nominee and to serve as a director if elected.

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A brief description of the business;

The reasons for conducting the business at the meeting; and

Your material interest in the business, or the material interest in the business of the beneficial owner, if any, on whose behalf the proposal is made.

Other Requirements

You also must comply with all applicable requirements of the Securities Exchange Act of 1934 for nominations of directors and proposals of business to be conducted at stockholder meetings. If you have not complied with the procedures described above, the chairman of a meeting may refuse to acknowledge your nomination or proposal. These procedures will not be deemed to affect any of your rights under Rule 14a-8 under the Securities Exchange Act of 1934 to request inclusion of proposals in our proxy statements.

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APPENDIX A

## CHARTER OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS OF NEOSE TECHNOLOGIES, INC.

The Board of Directors (the Board ) of Neose Technologies, Inc. (the Company ) hereby adopts this Charter to establish the new governing principles of the Audit Committee.

#### 1. Role of the Audit Committee. The role of the Audit Committee is:

1.1	To act, directly, to fulfill the responsibilities that are required of audit committees under the regulations of the Securities and Exchange Commission (SEC) and Nasdaq;
1.2	To oversee all material aspects of the Company s reporting, control and audit functions;
1.3	To oversee the independence and performance of the registered public accounting firm which acts as the Company s independent auditors; and
1.4	To provide a means for open communication between and among the Company s independent auditors, financial and senior management, the Audit Committee and the Board

While the Audit Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Audit Committee to plan or conduct audits, or to determine that the Company s financial statements are complete and accurate, or that they are in accordance with generally accepted accounting principles. The responsibility to plan and conduct audits is that of the Company s independent auditors. The Company s management has the responsibility to determine that the Company s financial statements are complete and accurate and in accordance with generally accepted accounting principles. It is also not the duty of the Audit Committee to ensure the Company s compliance with laws and regulations. The primary responsibility for these matters also rests with the Company s management.

## 2. Composition of the Audit Committee

2.1	The Board shall designate the members of the Audit Committee at each annual organizational meeting of the Board, and the members shall serve until the next such meeting or until their successors are designated by the Board.
2.2	All members of the Audit Committee shall satisfy the requirements for independence of a member of an audit committee under the regulations of the SEC and Nasdaq. Each member of the Audit Committee shall be free of any relationship that, in the opinion of the Board, would interfere  A-1

with his or her exercise of independent judgment as an Audit Committee member. All Audit Committee members shall have a basic understanding of finance and accounting, and shall be able to read and understand

financial statements at the time of their appointment. One member of the Committee shall have accounting or related financial management experience, and the Board shall use best efforts to assure that one member of the Audit Committee is an audit committee financial expert as that term is defined by SEC rules. In addition, the members of the Audit Committee shall meet any other requirements of the applicable regulations of the SEC and Nasdaq.

- 3. Meetings of the Audit Committee. The Audit Committee shall meet at least four times annually, and more frequently as circumstances require. The Audit Committee, or the Chair of the Audit Committee, shall be responsible for meeting with the independent auditors to discuss the interim financial statements.
- 4. Responsibilities of the Audit Committee. The Audit Committee shall have the responsibilities set forth below with respect to:

4.1	The Company s Independent A	uditors
	4.1.1	To appoint, oversee, and authorize the compensation of the registered public accounting firm which serves as the Company s independent auditors (referred to herein as the independent auditors );
	4.1.2	To have sole authority to hire and fire the Company s independent auditors;
	4.1.3	To approve in advance any audit or non-audit services provided by the Company s independent auditors;
	4.1.4	To actively engage in a dialogue with the independent auditors about any matter that may impact upon that firm s objectivity and independence, and to take any appropriate action to oversee the independence of the independent auditors;
	4.1.5	On an annual basis, review and discuss all relationships the registered public accounting firm serving as independent auditors has with the Company in order to consider and evaluate the firm s continued independence. In connection with its review and discussions, the Committee shall: (i) ensure that the registered public accounting firm submits to the Committee a formal written statement (consistent with the PCAOB independence standards as then in effect) delineating all relationships and services that may impact the objectivity and independence of the firm; (ii) discuss with the registered public accounting firm any disclosed relationship, services or fees (audit and non-audit related) that may

impact its objectivity and independence; and (iii) satisfy itself as to the registered public accounting firm s independence;

- 4.1.6 To maintain a constructive and positive working relationship with the Company s independent auditors because of the ultimate responsibility of the independent auditors to the Audit Committee, as representatives of the shareholders;
- 4.1.7 To make itself reasonably available to the independent auditors for discussion, and to provide sufficient opportunity for the independent auditors to meet with members of the Audit Committee without members of management present, to discuss, among other things, the independent auditors evaluation of the Company's financial and accounting personnel, and the cooperation that the independent auditors received during the course of each audit;
- 4.1.8 To ensure that the Audit Committee receives annually from the registered public accounting firm which serves as the Company s independent auditors the information about all of the relationships between firm and the Company that independent auditors are required to provide to the Audit Committee;
- 4.1.9 To obtain and review all reports required under the Exchange Act to be provided to the Audit Committee by the independent auditor, including, without limitation, reports on (i) all critical accounting policies and practices used by the Company, (ii) all alternative treatments of financial information within generally accepted accounting principles

that have been discussed with management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the independent auditor, and (iii) all other material written communications between the independent auditor and management, such as any management letter or schedule of unadjusted differences;

- 4.1.10 To discuss with the independent auditors their qualitative judgments about the appropriateness, not just the acceptability, of the accounting principles and financial disclosure practices used or proposed to be adopted by the Company, particularly about the degree of aggressiveness or conservatism of the Company s accounting principles and underlying estimates; and
- 4.1.11 To evaluate annually the effectiveness and objectivity of the Company s independent auditors.

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4.2	The Company s Risk and Control Environment		
	4.2.1	To discuss with the Company s management, independent auditors and financial management the integrity of the Company s financial reporting processes and controls, particularly the controls in areas representing significant financial and business risks;	
	4.2.2	In consultation with management and the independent auditors, to review and assess the adequacy of the Company s internal control over financial reporting and the procedures designed to ensure compliance with applicable laws;	
	4.2.3	To review management s report on internal control over financial reporting that is required to be included in the Company s Annual Report of Form 10-K (or Form 10-KSB);	
	4.2.4	To review the independent auditor s attestation to management s report on internal control over financial reporting when required to be included in the Annual Report on Form 10-K (or Form 10-KSB) evaluating the Company s internal control over financial reporting;	
	4.2.5	Review and discuss any disclosures made by the Company s CEO and CFO to the Committee, as a result of their evaluation as of the end of each fiscal quarter of the effectiveness of the Company s disclosure controls and procedures and its internal control over financial reporting, indicating (i) any significant deficiencies in the design or operation of internal control and any material weaknesses in the Company s internal control, and (ii) any fraud, whether or not material, involving management or other employees who have a significant role in the Company s internal control over financial reporting; and	
	4.2.6	To investigate any matter brought to its attention within the scope of its role and responsibilities.	
4.3	The Company s Financial Reporting Proce	<u>es</u> s	
	4.3.1	To oversee the Company s selection of and changes to its accounting policies;	
	4.3.2	To establish the Company s policies with respect to the use of non-GAAP financial measures in financial reporting or public dissemination of financial information;	
	4.3.3	To establish the company s policies with respect to engaging in and disclosure of off-balance sheet transactions;  A-4	

4.3.4

To meet with the Company s independent auditors and financial management, both to discuss the proposed scope of the audit and to discuss the conclusions of the audit, including any items that the independent auditors are required by generally accepted

		auditing standards to discuss with the Audit Committee, such as any significant changes to the Company s accounting policies, the integrity of the Company s financial reporting processes, and any proposed changes or improvements in financial, accounting or auditing practices;
	4.3.5	To review with the independent auditors and the Company s financial management and internal audit function the adequacy and effectiveness of the accounting and financial controls of the Company, and to elicit any recommendations for the improvement of such internal control procedures or particular areas where new or more detailed controls or procedures may be desirable;
	4.3.6	To discuss with the Company s financial management and independent auditors the Company s annual results and interim results before they are made public;
	4.3.7	To review and discuss with the Company s financial management and independent auditors the Company s audited financial statements and interim financial statements before they are made public; and
	4.3.8	To issue for public disclosure by the Company the report required by the rules of the SEC.
4.4	Other Matters	
	4.4.1	To establish and review adherence to the Company s cash management and investment policies;
	4.4.2	To review and approve all of the Company s related-party transactions;
	4.4.3	To establish and maintain in place a mechanism for the confidential and anonymous submission by Company employees of complaints or concerns regarding accounting, internal accounting controls or auditing matters, and procedures for the receipt and treatment of such complaints or concerns;
	4.4.4	To adopt clear guidelines for the Company s hiring of any employees of the independent auditors who were previously engaged on the Company s account;  A-5

4.4.5	To establish and review procedures within the time period required by applicable law for (i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting control or auditing matters, and (ii) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters;
4.4.6	To review and reassess the adequacy of this Charter on an annual basis;
4.4.7	To report to the Board the matters discussed at each meeting of the Audit Committee; and
4.4.8	To retain, at the Company s expense, special legal, accounting or other consultants or experts that the Audit Committee deems necessary in the

performance of its duties.

## 5. Compensation of Audit Committee

- Each member of the Audit Committee shall be compensated by the Company for his or her Board and Committee service, in the manner and at the rates established from time to time by the Board.
- The Company shall not provide any direct compensation for Audit Committee members except for their Board and Committee service, as authorized in Section 5.1.

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APPENDIX B

#### THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

#### NEOSE TECHNOLOGIES, INC.

(Pursuant to Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware)

Neose Technologies, Inc. a corporation organized under the General Corporation Law of the State of Delaware (the General Corporation Law ).

#### DOES HEREBY CERTIFY:

FIRST: That the name of this corporation is Neose Technologies, Inc., and that this corporation was originally incorporated in Delaware under the name Neose Merger Corporation, Inc., on May 21, 1991, pursuant to the General Corporation Law.

SECOND: That the Board of Directors duly adopted resolutions proposing to amend and restate the Second Restated Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to submit the proposed amendment and restatement for the approval of the stockholders.

#### ARTICLE I.

The name of this corporation is Neose Technologies, Inc.

#### ARTICLE II.

The address of the registered office of the corporation in the State of Delaware is 1013 Centre Road, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Prentice-Hall Corporation System, Inc.

#### ARTICLE III.

The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law.

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## ARTICLE IV.

- A. This corporation is authorized to issue two classes of stock to be designated, respectively, Common Stock and Preferred Stock. The total number of shares which the corporation is authorized to issue is 55,000,000 shares. 50,000,000 shares, par value \$0.01 per share, shall be Common Stock and 5,000,000 shares, par value \$0.01 per share, shall be Preferred Stock.
- B. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation law of Delaware.

#### ARTICLE V.

### A. Common Stock

- (a) General. All shares of Common Stock will be identical and will entitle the holders thereof to the same rights, powers and privileges. The rights, powers and privileges of the holders of the Common Stock are subject to and qualified by the rights of holders of the Preferred Stock.
- (b) <u>Dividends</u>. Dividends may be declared and paid on the Common Stock from funds lawfully available therefore as and when determined by the Board of Directors and subject to any preferential dividend-rights of any then outstanding Preferred Stock.
- (c) <u>Dissolution, Liquidation or Winding Up.</u> In the event of any dissolution, liquidation or winding up of the affairs of the corporation, whether voluntary or involuntary, each issued and outstanding share of Common Stock shall entitle the holder thereof to receive an equal portion of the net assets of the Corporation available for distribution to the holders of Common Stock, subject to any preferential rights of any then outstanding Preferred Stock.
- (d) <u>Voting Rights</u>. Except as otherwise required by law or this Third Amended and Restated Certificate of Incorporation, each holder of Common Stock shall have one vote in respect to each share of stock held of record by such holder on the books of the corporation for the election of directors and on all matters submitted to a vote of stockholders of the corporation. Except as otherwise required by law or provided herein, holders of Common Stock shall vote together with holders of Common Stock as a single class, subject to any special or preferential voting rights of any then outstanding Preferred Stock. There shall be no cumulative voting.
  - (e) <u>Redemption</u>. The Common Stock is not redeemable.

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B. <u>Preferred Stock</u>. The Board of Directors is authorized, subject to limitations prescribed by law and the provisions of ARTICLE IV, to provide for the issuance of the shares of Preferred Stock in series, and by filing a certificate pursuant to the applicable law of the State of Delaware, to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers, preferences, and rights of the shares of each such series and the qualifications, limitations or restrictions thereof.

The authority of the Board with respect to each series shall include, but not be limited to, determination of the following:

- (a) The number of shares constituting that series and the distinctive designation of that series;
- (b) The dividend rat on the shares of that series, whether dividends shall be cumulative, and, if so, from which date or dates, and the relative rights of priority, if any, of payment of dividends on shares of that series;
- (c) Whether that series shall have voting rights, in addition to the voting rights provided by law, and, if so, the terms of such voting rights;
- (d) Whether that series shall have conversion privileges, and, if so, the terms and conditions of such conversion, including provision for adjustment of the conversion rate in such events as the Board of Directors shall determine;
- (e) Whether or not the shares of that series shall be redeemable, and, if so, the terms and conditions of such redemption, including the date or dates upon or after which they shall be redeemable, and the amount per share payable in case of redemption, which amount may vary under different conditions and at different redemption dates;
- (f) Whether that series shall have a sinking fund for the redemption or purchase of shares of that series, and, if so, the terms and amount of such sinking fund;
- (g) The rights of the shares of that series in the event of voluntary or involuntary liquidation, dissolution or winding up of the corporation, and the relative rights or priority, if any, of payment of shares of that series; and
  - (h) Any other relative rights, preferences and limitations of that series.

Dividends on outstanding shares of Preferred Stock shall be paid or declared and set apart for payment before any dividends shall be paid or declared and set apart for payment on the Common Stock with respect to the same dividend period.

If upon any voluntary or involuntary liquidation, dissolution or winding up of the corporation, the assets available for distribution to holders of shares of Preferred Stock of all series shall be insufficient to pay such holders the full preferential amount to which

they are entitled, then such assets shall be distributed ratably among the shares of all series of Preferred Stock in accordance with the respective preferential amounts (including unpaid cumulative dividends, if any) payable with respect thereto.

#### C. Special Terms of the Series A Preferred Shares

#### Section 1. Dividends and Distributions.

- (a) Dividends shall be payable on the Series A Preferred Shares on such payment date as shall be specified by the Board of Directors (each such date being referred to herein as a Dividend Payment Date ), in an amount per share (rounded to the nearest cent) equal to, subject to the provision for adjustment hereinafter set forth, 100 times the aggregate per share amount of all cash dividends, and 100 times the aggregate per share amount (payable in cash, based upon the fair market value at the time the non-cash dividend or other distribution is declared or paid as determined in good faith by the Board of Directors) of all non-cash dividends or other distributions other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock of the Corporation since the immediately preceding Dividend Payment Date, or, with respect to the first Dividend Payment Date, since the first issuance of any share or fraction of a share of the Series A Preferred Shares. Dividends on the Series A Preferred Shares shall be paid out of funds legally available for such purpose. In the event the Corporation shall at any time after October 6, 1997 (the Rights Declaration Date ) (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding shares of Common Stock, or (iii) combine the outstanding shares of Common Stock into a smaller number of shares, then in each such case the amounts to which holders of Series A Preferred Shares were entitled immediately prior to such event under clause (ii) of the preceding sentence shall be adjusted by multiplying each such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately prior to such event.
- (b) Dividends shall begin to accrue and be cumulative on outstanding Series A Preferred Shares from the Dividend Payment Date next preceding the date of issue of such Series A Preferred Shares, unless the date of issue of such shares is prior to the record date for the first Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Dividend Payment Date or is a date after the record date for the determination of holders of Series A Preferred Shares entitled to receive a dividend and before such Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the Series A Preferred Shares in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding.

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**Section 2**. <u>Voting Rights</u>. In addition to any other voting rights required by law, the holders of Series A Preferred Shares shall have the following voting rights:

- (a) Subject to the provision for adjustment hereinafter set forth, each Series A Preferred Share shall entitle the holder thereof to 100 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding shares of Common Stock, or (iii) combine the outstanding shares of Common Stock into a smaller number of shares, then in each such case the number of votes per share to which holders of Series A Preferred Shares were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of Shares of Common Stock that were outstanding immediately prior to such event.
- (b) In the event that dividends upon the Series A Preferred Shares shall be in arrears for two successive Dividend Payment Dates and such dividends shall not have been paid by the 60th day after the second Dividend Payment Date, the holders of such Series A Preferred Shares shall become entitled to the extent hereinafter provided to vote noncumulatively at all elections of directors of the Corporation, and to receive notice of all stockholders meetings to be held for such purpose. At such meetings, to the extent that directors are being elected, the holders of such Series A Preferred Shares voting as a class shall be entitled solely to elect two members of the Board of Directors of the Corporation; and all other directors of the Corporation shall be elected by the other stockholders of the Corporation entitled to vote in the election of directors. Such voting rights of the holders of such Series A Preferred Shares shall continue until all accumulated and unpaid dividends thereon shall have been paid or funds sufficient therefor set aside, whereupon all such voting rights of the holders of such series shall cease, subject to being again revived from time to time upon the reoccurrence of the conditions above described as giving rise thereto.

At any time when such right to elect directors separately as a class shall have so vested, the Corporation may, and upon the written request of the holders of record of not less than 20% of the then outstanding total number of shares of all the Series A Preferred Shares having the right to elect directors in such circumstances shall, call a special meeting of holders of such Series A Preferred Shares for the election of directors. In the case of such a written request, such special meeting shall be held within 90 days after the delivery of such request, and, in either case, at the place and upon the notice provided by law and in the By-laws of the Corporation; provided, that the Corporation shall not be required to call such a special meeting if such request is received less than 120 days before the date fixed for the next ensuing annual or special meeting of stockholders of the Corporation. Upon the mailing of the notice of such special meeting to the holders of such Series A Preferred Shares, or, if no such meeting be held, then upon the mailing of the notice of the next annual or special meeting of stockholders for the election of directors, the number of directors of the Corporation shall, ipso facto, be increased to the

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extent, but only to the extent, necessary to provide sufficient vacancies to enable the holders of such Series A Preferred Shares to elect the two directors hereinabove provided for, and all such vacancies shall be filled only by vote of the holders of such Series A Preferred Shares as hereinabove provided. Whenever the number of directors of the Corporation shall have been increased, the number as so increased may thereafter be further increased or decreased in such manner as may be permitted by the By-laws and without the vote of the holders of Series A Preferred Shares, provided that no such action shall impair the right of the holders of Series A Preferred Shares to elect and to be represented by two directors as herein provided.

So long as the holders of Series A Preferred Shares are entitled hereunder to voting rights, any vacancy in the Board of Directors caused by the death or resignation of any director elected by the holders of Series A Preferred Shares, shall, until the next meeting of stockholders for the election of directors, in each case be filled by the remaining director elected by the holders of Series A Preferred Shares having the right to elect directors in such circumstances.

Upon termination of the voting rights of the holders of Series A Preferred Shares, the terms of office of all persons who shall have been elected directors of the Corporation by vote of the holders of Series A Preferred Shares or by a director elected by such holders shall forthwith terminate.

- (c) Except as otherwise provided herein, in the Certificate of Incorporation of the Corporation or by law, the holders of Series A Preferred Shares and the holders of Common Stock (and the holders of shares of any other series or class entitled to vote thereon) shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.
- **Section 3**. Reacquired Shares. Any Series A Preferred Shares purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and canceled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors.
- Section 4. <u>Liquidation, Dissolution or Winding Up.</u> In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of Series A Preferred Shares shall be entitled to receive the greater of (a) \$1.00 per share, plus accrued dividends to the date of distribution, whether or not earned or declared, or (b) an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 100 times the aggregate amount to be distributed per share to holders of Common Stock. In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding shares of Common Stock, or (iii) combine the outstanding shares of Common Stock into a smaller number of shares, then in each such case the amount to which holders of Series A Preferred Shares were entitled

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immediately prior to such event pursuant to clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 5. Consolidation, Merger, etc. In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case the Series A Preferred Shares shall at the same time be similarly exchanged or changed in an amount per share (subject to the provision for adjustment hereinafter set forth) equal to 100 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock,

(ii) subdivide the outstanding shares of Common Stock, or (iii) combine the outstanding shares of Common Stock into a smaller number of shares, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Preferred Shares shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

- **Section 6**. No Redemption. The Series A Preferred Shares shall not be redeemable.
- **Section 7**. Ranking. The Series A Preferred Shares shall rank junior to all other series of the Corporation s Preferred Stock as to the payment of dividends and the distribution of assets, unless the terms of any such series shall provide otherwise.
- **Section 8**. <u>Fractional Shares</u>. Series A Preferred Shares may be issued in fractions of a share which shall entitle the holder, in proportion to such holder s fractional shares, to exercise voting rights, receive dividends, participate in distributions and to have the benefit of all other rights of holders of Series A Preferred Shares.

#### ARTICLE VI.

In furtherance of and not in limitation of powers conferred by statute, it is further provided:

- 1. Election of directors need not be by written ballot.
- 2. The Board of Directors is expressly authorized to adopt, amend or repeal the By-Laws of the Corporation.

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#### ARTICLE VII.

Whenever a compromise or arrangement is proposed between this corporation and its creditors or any class of them and/or between this corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this corporation or any creditor or stockholder thereof, or on the application of any receiver or receivers appointed for his corporation under the provisions of section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this corporation under the provisions of section 279 of Title \* of the Delaware Code order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this corporation, as the case may be, agree to ay compromise or arrangement and to any reorganization of this corporation as consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this corporation, as the case may be, and also on this corporation.

## ARTICLE VIII

A director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director s duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the General Corporation Law, or (iv) for any transaction from which the director derived any improper personal benefit. If the General Corporation Law is amended after approval by the stockholders of this Article to authorize corporation action further eliminating or limiting the personal liability of directors, then the liability of a director of the corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware, as so amended.

Any repeal or modification of the foregoing paragraph by the stockholders of the corporation shall not adversely affect any right or protection of a director of the corporation existing at the time of such repeal or modification.

#### ARTICLE IX.

The corporation shall, to the fullest extent permitted by Section 145 of the General Corporation Law of Delaware, as amended from time to time, indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative

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or investigative, by reason of the fact that he is or was, or has agreed to become, a director or officer of the corporation, or is or was serving, or has agreed to serve, at the request of the corporation, as a director, officer or trustee of, or in a similar capacity with another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with such action, suit or proceeding and any appeal therefrom.

Indemnification may include payment by the corporation of expenses in defending an action or proceeding in advance of the final disposition of such action or proceeding upon receipt of an undertaking by the person indemnified to repay such payment if it is ultimately determined that such person is not entitled to indemnification under this Article, which undertaking may be accepted without reference to the financial ability of such person to make such repayment.

The corporation shall not indemnify any such person seeking indemnification in connection with a proceeding (or part thereof) initiated by such person unless the initiation thereof was approved by the Board of Directors of the corporation.

The indemnification rights provided in this Article (i) shall not be deemed exclusive of any other rights to which those indemnified may be entitled under any law, agreement or vote of stockholders or disinterested directors or otherwise, and (ii) shall inure to the benefit of the heirs, executors and administrators of such persons. The corporation may, to the extent authorized from time to time by its Board of Directors, grant indemnification rights to other employees or agents of the corporation or other persons serving the corporation and such rights may be equivalent to, or greater or less than, those set forth in this Article.

#### ARTICLE X.

The corporation reserves the right to amend, alter, change or repeal any provision contained in this Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Restated Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

#### ARTICLE XI.

The number of directors of the corporation shall be fixed from time to time by a bylaw or amendment thereof duly adopted by the Board of Directors or by the stockholders.

#### ARTICLE XII.

Meetings of stockholders may be held within or without the State of Delaware as the Bylaws may provide. The books of the corporation may be kept (subject

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to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the corporation.

The Stockholders of the corporation may not take any action by written consent in lieu of a meeting.

\* \* \*

THIRD: That said amendments were duly adopted in accordance with the provisions of Section 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Third Amended and Restated Certificate of Incorporation has been signed by the President and the Secretary of this corporation this  $\_\_\_$  day of  $\_\_\_\_$ , 2004.

C. Boyd Clarke, President and Chief Executive Officer

Debra J. Poul, Secretary

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APPENDIX C

# NEOSE TECHNOLOGIES, INC. 2004 EQUITY INCENTIVE PLAN

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# NEOSE TECHNOLOGIES, INC. 2004 EQUITY INCENTIVE PLAN

## Section 1. Purpose of the Plan; Effective Date.

- 1.1. Purpose. This 2004 Equity Incentive Plan (the Plan ) is intended to promote the interests of Neose Technologies, Inc., a Delaware corporation (the Company ), by (a) enabling the Company and its affiliated companies to recruit and retain highly qualified employees, directors and consultants; (b) providing those employees, directors and consultants with an incentive for productivity; and (c) providing those employees, directors and consultants with an opportunity to share in the growth and value of the Company.
- **1.2. Effective Date.** The Plan was approved by the Board on February 12, 2004 and will become effective immediately upon its adoption by the stockholders of the Company. The date of its approval by the stockholders is hereby designated the Plan Effective Date.

- Section 2. <u>Definitions</u>. For the purposes of the Plan, the following definitions shall be in effect:
  - 2.1. Award: a grant of Options, SARs, Restricted Shares or Restricted Share Units pursuant to the provisions of the Plan.
  - **2.2.** Award Agreement: with respect to any particular Award, the written document that sets forth the terms of that Award.
  - **2.3. Board:** the Company s Board of Directors.
  - **2.4.** Change in Control: a change in ownership or control of the Company effected through any of the following transactions:
- **2.4.1.** the direct or indirect acquisition by any person or related group of persons (other than the Company or a person that directly or indirectly controls, is controlled by, or is under common control with, the Company) of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than 50% of the total combined voting power of the Company s outstanding securities;
- **2.4.2.** a change in the composition of the Board over a period of 36 months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (a) have been Board members continuously since the beginning of such period, or (b) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (a) who were still in office at the time such election or nomination was approved by the Board;
- **2.4.3.** the consummation of any consolidation, share exchange or merger of the Company (a) in which the stockholders of the Company immediately prior to such transaction do not own at least a majority of the voting power of the entity which survives/results from that transaction, or (b) in which a stockholder of the Company who does not own a majority of the voting stock of the Company immediately prior to such transaction, owns a majority of the Company s voting stock immediately after such transaction; or
- **2.4.4.** the liquidation or dissolution of the Company or any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all or substantially all the assets of the Company, including stock held in subsidiary corporations or interests held in subsidiary ventures.
  - **2.5.** Code: the Internal Revenue Code of 1986, as amended.
  - **2.6.** Committee: the committee appointed by the Board to administer and interpret the Plan in accordance with Section 3.1.
  - **2.7.** Common Stock: shares of the Company s common stock.
- **2.8. Employee:** an individual who performs services while in the employ of the Company or any of its Parents or Subsidiaries, subject to the control and direction of the employer entity not only as to the work to be performed but also as to the manner and method of performance.
- **2.9.** Exercise Date: the date on which all conditions for exercise, including without limitation the giving of written notice to the Company and payment of the exercise price, have been satisfied.
  - 2.10. Fair Market Value: the Fair Market Value per share of Common Stock determined in accordance with the following provisions:
- **2.10.1.** Nasdaq. If the Common Stock is at the time traded on the Nasdaq National Market, the Fair Market Value shall be the closing selling price per share on the date in question, as such price is reported by the National Association of Securities Dealers on the Nasdaq National Market or any successor system. If there is no reported closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.
- **2.10.2.** Other National Securities Exchange. If the Common Stock is at the time listed or admitted to trading on any national securities exchange, then the Fair Market Value shall be the closing selling price per share on the date in question on the exchange determined by the Committee to be the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange. If there is no reported sale of Common Stock on such exchange on the date in question, then the Fair Market Value shall be the closing selling price on the exchange on the last preceding date for which such quotation exists.
- **2.10.3.** <u>Not Publicly Traded</u>. If the Common Stock is on the date in question neither listed nor admitted to trading on any national securities exchange nor traded on the Nasdaq National Market, then the Fair Market Value of the Common Stock on such date shall be determined by the Committee in its sole and absolute discretion.

- **2.11.** <u>Incentive Stock Option</u>: an Option intended to be and designated as an Incentive Stock Option within the meaning of Section 422 of the Code.
- **2.12.** <u>Misconduct</u>: (a) the commission of any act of fraud, embezzlement or dishonesty by the Participant, (b) any unauthorized use or disclosure by such individual of confidential information or trade secrets of the Company or of any Parent or Subsidiary, (c) any failure to perform specific lawful direction of the Company s Board or officers of the Company, (d) any refusal or neglect to perform such individual s duties in connection with his or her employment, (e) any conviction of, or entering of a plea of *nolo contendere* to, a crime which constitutes a felony, or (f) any other misconduct by such individual adversely affecting the business or affairs of the Company, each as determined by the Committee in its sole and absolute discretion; *provided, however* that if a Participant and the Company or any of its Parents or Subsidiaries have entered into an employment agreement, consulting agreement or other similar agreement that specifically defines misconduct, cause or another similar term, then with respect to that Participant, Misconduct shall have the meaning ascribed to such term in that agreement. The foregoing definition shall not be deemed to be inclusive of all the acts or omissions which the Company or any Parent or Subsidiary may consider as grounds for the dismissal or discharge of any Participant or other individual in the Service of the Company.

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- 2.13. 1934 Act: the Securities Exchange Act of 1934, as amended.
- **2.14.** Non-Qualified Option: an Option that is not an Incentive Stock Option.
- 2.15. Non-Section 16(b) Delegate: the delegate or delegates appointed by the Board in accordance with Section 3.2.
- **2.16. Option:** an option to purchase shares of Common Stock (including Restricted Shares, if the Committee so determines) granted pursuant to Section 6, 7 or 8 hereof.
  - **2.17. Optionee**: a person to whom an Option is granted under the Plan.
- **2.18.** Parent: any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, provided each such corporation in the unbroken chain (other than the Company) owns, at the time of the determination, stock possessing 50% or more of the total combined voting power of all classes or stock in one of the other corporations in such chain.
  - **2.19. Participant**: a person who is issued an Award under the Plan.
  - 2.20. Permanent Disability: a permanent and total disability as defined in Section 22(e)(3) of the Code.
  - 2.21. Predecessor Plans: the Company s 1995 Stock Option/Stock Issuance Plan, 1992 Stock Option Plan and 1991 Stock Option Plan.
  - 2.22. Restricted Shares: shares that are granted under and subject to restrictions pursuant to Section 10 of the Plan.
  - 2.23. Restricted Share Unit: a right granted under and subject to restrictions pursuant to Section 11 of the Plan.
  - 2.24. SAR: a stock appreciation right granted under and described in Section 9 of the Plan.
- **2.25.** Service: the performance of services on a periodic basis for the Company (or any Parent or Subsidiary) in the capacity of an Employee, a non-employee member of the Board or an independent consultant, except to the extent otherwise specifically provided in the applicable Award Agreement.
- **2.26.** <u>Subsidiary</u>: each corporation (other than the Company) in an unbroken chain of corporations beginning with the Company, provided each such corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.
- **2.27.** 10% Shareholder: the owner of stock (as determined under Code Section 424(d)) possessing 10% or more of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary.

## Section 3. Administration of the Plan.

**3.1.** The Committee. The Board shall appoint a Committee to administer and interpret the Plan. The Committee shall consist of two or more Board members, each of whom is an outside director as defined under Code Section 162(m) and related Treasury Regulations and may be non-employee directors as defined

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under Rule 16b-3 of the 1934 Act. Members of the Committee shall serve for such period as the Board may decide. The Committee shall have full power and authority (subject to the express provisions of the Plan, including without limitation Sections 3.2, 3.3 and 3.4 below) to establish rules and regulations for the proper administration of the Plan and to make such determinations under, and issue such interpretations of, the provisions of the Plan and any outstanding Award thereunder as it may deem necessary or advisable. Decisions of the Committee shall be final and binding on all parties. No member of the Board, or delegate thereof, will be liable for any good faith determination or act in connection with the Plan or any Award.

- 3.2. Non-Section 16(b) Delegates. The Board may appoint one or more officers of the Company, board members, or a committee of officers and/or board members as Non-Section 16(b) Delegates, to act individually or jointly as set forth in the delegating resolution. To the extent permitted in accordance with Section 157 of the Delaware General Corporation Law and within the limits established by the Board at the time of the delegation, each Non-Section 16(b) Delegate shall have the authority to grant Awards to employees of the Company who are not subject to Section 16 of the 1934 Act, and solely with respect to any Awards so granted, references in the Plan to the Committee will be deemed also to refer to the Non-Section 16(b) Delegates. The Non-Section 16(b) Delegates shall have no powers other than the power to grant Awards to such individuals and to administer those grants in accordance with the terms of the Plan.
- **3.3.** Approval of Discretionary Director Grants. The Board must ratify or approve any grants of Awards under the Plan (other than those made pursuant to Section 7 or 8) to any Board member.
- **3.4.** Administration of Automatic Director Grants. Administration of the grants made pursuant to Sections 7 and 8 of the Plan shall be self-executing, and the Committee shall exercise no discretionary functions with respect to option grants made pursuant to those programs.

#### Section 4. Eligibility.

- **4.1.** Eligible Persons. Subject to the terms of the Plan, the persons eligible to participate in the Plan shall be limited to the following:
  - **4.1.1.** officers and other Employees of the Company (or any Parent or Subsidiary);
- **4.1.2.** non-employee members of the Board and the non-employee members of the board of directors of any Parent or Subsidiary; and
- **4.1.3.** consultants who provide services to the Company (or any Parent or Subsidiary), provided such services are not in connection with the offer or sale of securities in a capital-raising transaction.
- **4.2. Determination of Eligibility**. Subject to the terms of the Plan, the Committee and, to the extent consistent with the Plan and the Board s delegation, the Non-Section 16(b) Delegates shall have full authority to determine which eligible individuals are to receive Awards.

#### Section 5. Stock Subject to the Plan

**5.1.** Number of Shares Available for Grant. The maximum number of shares of Common Stock which may be issued over the term of the Plan shall not exceed [to be inserted: 997,408 plus number of shares remaining for issuance, as of Plan Effective Date, under Predecessor Plans] shares, subject to adjustment from time to time in accordance with the provisions of Section 5.4. Such authorized share reserve is comprised of (a) the number of shares which remained for issuance, as of the Plan Effective Date, under the Predecessor Plans as last approved by the Company s stockholders, plus (b) an additional increase of 997,408 shares authorized by the Board on February 12, 2004.

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**5.2.** Annual Per-Participant Limit. In no event shall the aggregate number of shares of Common Stock for which any one individual participating in the Plan may be granted Awards for any given year exceed 1 million shares.

- **5.3.** Forfeited Awards and Other Shares Again Available for Grant. If and to the extent that an Option, SAR or Restricted Share Unit expires, terminates or is canceled or forfeited for any reason without having been exercised or settled in full, the shares of Common Stock associated with that Option, SAR or Restricted Share Unit will again become available for grant under the Plan. Similarly, if and to the extent any Restricted Share is canceled, forfeited or repurchased for any reason, that share will again be available for grant under the Plan. Further, if any share that would otherwise be issued to a Participant in connection with (a) his or her exercise of an Option or (b) settlement of an SAR or Restricted Share Unit is instead withheld by the Company pursuant to Section 13.2 in settlement of a tax withholding obligation associated with an Option, SAR or Restricted Share Unit or is withheld by the Company in satisfaction of the exercise price payable upon exercise of an Option, that share will again become available for grant under the Plan.
- 5.4. Adjustment. Should any change be made to the Common Stock issuable under the Plan by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Company s receipt of consideration, then appropriate adjustments shall be made to (a) the maximum number and/or class of securities issuable under the Plan, (b) the maximum amount and/or class of securities for which any one individual participating in the Plan may be granted Options, separately exercisable SARs, Restricted Shares and Restricted Share Units for any given year under the Plan, (c) the number and/or class of securities for which automatic Option grants are to be subsequently made per eligible non-employee Board member under Section 7 of the Plan, (d) the number and/or class of securities and price per share in effect under each Option and SAR outstanding under the Plan, and (e) the number of Restricted Share Units outstanding under the Plan and/or the class of securities referenced for determining payment in respect thereof. Such adjustments to outstanding Awards are to be effected in a manner intended to avoid the enlargement or dilution of rights and benefits under such options. The adjustments determined by the Committee shall be final, binding and conclusive.

#### Section 6. Stock Options; In General

- **6.1. Option Grant and Award Agreement**. Subject to the terms of the Plan, the Committee and, subject further to the delegating resolution, the Non-Section 16(b) Delegates are authorized to grant Incentive Stock Options and Non-Qualified Options (including Options to purchase Restricted Shares) to eligible individuals. Each granted Option shall be evidenced by an Award Agreement in the form that is approved by the Committee and that is not inconsistent with the terms and conditions of the Plan.
  - **6.1.1.** No ISOs for Non-Employees. Individuals who are not Employees may only be granted Non-Qualified Options.
- 6.1.2. \$100,000 ISO Limit. The aggregate Fair Market Value (determined as of the respective date or dates of grant) of the Common Stock for which one or more Incentive Stock Options granted to any Employee under the Plan (or any other option plan of the Company or any Parent or Subsidiary) may for the first time become exercisable during any one calendar year shall not exceed the sum of \$100,000. To the extent the Employee holds two or more such options which become exercisable for the first time in the same calendar year, the foregoing limitation on the exercisability of such options as Incentive Stock Options shall be applied on the basis of the order in which such options are granted. Should the number of shares of Common Stock for which any Incentive Stock Option first becomes exercisable in any calendar year exceed the applicable \$100,000 limitation, then that option may nevertheless be exercised in that calendar year (or thereafter in accordance with its terms) for the excess number of shares as a Non-Qualified Option.

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- **6.2.** Exercise Price. The exercise price per share of each option granted under the Plan shall be fixed by the Committee, in accordance with the following provisions:
- **6.2.1.** <u>Incentive Stock Options</u>. The exercise price per share of Common Stock subject to an Incentive Stock Option shall in no event be less than 100% of the Fair Market Value of such Common Stock on the grant date; provided that, if the individual to whom the Incentive Stock Option is granted is a 10% Shareholder, then the exercise price per share shall not be less than 110% of the Fair Market Value per share of Common Stock on the grant date.
- **6.2.2.** <u>Non-Qualified Stock Options</u>. Except as set forth in clause (a) of Section 8.2.1, the exercise price per share of Common Stock subject to a Non-Qualified Option shall in no event be less than 85% of the Fair Market Value of such Common Stock on the grant date.
- **6.3.** Exercisability and Term of Options. Each option granted under the Plan shall be exercisable at such time or times and during such period as is determined by the Committee and set forth in the Award Agreement evidencing the grant. Options granted to non-exempt employees may not vest sooner than six months following the date of grant. No such option, however, shall have a maximum term in excess of 10 years measured from the grant date (five years if the option is an Incentive Stock Option granted to a 10% shareholder).
- **6.4.** Payment of the Exercise Price. The exercise price shall become immediately due upon exercise of the Option and shall be payable in one or more of the forms specified below as permitted by the Committee:

- **6.4.1.** cash or check made payable to the Company,
- **6.4.2.** in shares of Common Stock held by the Optionee,
- **6.4.3.** to the extent the Option is exercised for vested shares, through a special sale and remittance procedure pursuant to which the Optionee shall concurrently provide irrevocable written instructions (a) to a Company-designated brokerage firm to effect the immediate sale of the purchased shares and remit to the Company, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate exercise price payable for the purchased shares plus all applicable federal, state and local income and employment taxes required to be withheld by the Company by reason of such purchase and (b) to the Company to deliver the certificates for the purchased shares directly to such brokerage firm in order to complete the sale transaction, or
  - **6.4.4.** such other forms of consideration as determined by the Committee.

Except to the extent the sale and remittance procedure described in Section 6.4.3 is utilized, payment of the exercise price for the purchased shares must be made on the Exercise Date.

## 6.5. Transfer of an Option.

**6.5.1.** <u>In General; No Transfers</u>. During the lifetime of the Optionee, the Optione, together with any related SAR, shall be exercisable only by the Optionee and shall not be assignable or transferable by the Optionee, except for a transfer of the Option by will or by the laws of descent and distribution following the Optionee s death or, with respect to Options other than Incentive Stock Options, if permitted in any specific case by the Committee, pursuant to a domestic relations order (as defined under the Code or Treasury Regulations).

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- **6.5.2.** Board May Permit Transfer of Non-Qualified Options. Notwithstanding the foregoing provisions of this Section 6.5, the Committee may provide that an Optionee may transfer Non-Qualified Options to family members or other persons or entities according to such terms as the Committee may determine, provided that the Optionee receives no consideration for the transfer of an Option and the transferred Option shall continue to be subject to the same terms and conditions as were applicable to the Option immediately before the transfer.
- **6.6.** No Stockholder Rights. An Optionee shall have no stockholder rights with respect to any shares covered by the Option until such individual shall have exercised the Option and paid the exercise price for the purchased shares.

## 6.7. Exercise and Forfeiture Following Termination of Service.

- **6.7.1.** In General. Except to the extent otherwise provided pursuant to Section 6.7.2, upon a Participant's death or termination of Service, all Options and SARs held by the Participant that are not exercisable immediately prior to the death or termination of Service shall terminate immediately.
- **6.7.2.** Exercise Period Following Termination. In the event of a Participant s death or termination of Service, the following provisions shall govern the exercise period applicable to the portion of Options and SARs held by the Participant that is exercisable immediately prior to the Participant s death or termination of Service:
- (a) <u>Other than Death, Disability or Misconduct</u>. If a Participant terminates Service for any reason other than death, Permanent Disability or Misconduct, then each outstanding Option and SAR held by such Participant shall remain exercisable during the three-month period following the date of such termination of Service.
- (b) <u>Disability</u>. If a Participant terminates Service by reason of his or her Permanent Disability, then each outstanding Option and SAR held by the Participant shall remain exercisable during the 12-month period following the date of such termination of Service.
- (c) <u>Death</u>. If a Participant dies while holding one or more outstanding Options or SARs, then each such Option and SAR shall remain exercisable during the 12-month period following the date of the Participant s death. During such limited period, the Options and SARs may be exercised by the personal representative of the Participant s estate or by the person or persons to whom the Options and SARs are transferred pursuant to the Participant s will or in accordance with the laws of descent and distribution.

- (d) <u>Misconduct</u>. Upon termination of the Participant s Service for Misconduct, all outstanding Options and SARs held by the Participant shall terminate immediately and cease to be outstanding.
- (e) <u>Expiration</u>. Subject to Section 6.7.4, upon the expiration of the applicable exercise period provided for in this Section 6.7.2 or (if earlier) upon the expiration of the term of the Option or SAR, the Option or SAR shall terminate and cease to be exercisable for any shares for which the Option or SAR has not been exercised.
- (f) <u>Change of Control Agreements</u>. Notwithstanding any other provision of this Section 6.7, with respect to a particular participant, if there is any conflict between this Section 6.7 and any employment agreement or change of control agreement between the Participant and the Company, such agreement will control.

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- **6.7.3.** No Exercise After Expiration of Term. Notwithstanding the foregoing or any other provision of this Plan, under no circumstances shall any Option or SAR be exercisable after the specified expiration date of the Option s term.
- **6.7.4.** <u>Committee Discretion</u>. The Committee shall have complete discretion, exercisable either at the time the Option is granted or at any time while the Option remains outstanding:
- (a) to extend the period of time for which the Option or SAR is to remain exercisable following the Participant s cessation of Service or death from the limited period in effect under Section 6.7.2 to such greater period of time as the Committee shall deem appropriate; *provided* that in no event shall such option be exercisable after the specified expiration date of the Option or SAR term; and/or
- (b) to permit one or more Options or SARs held by the Participant (other than Options granted pursuant to Section 7 or 8) to be exercised, during the limited post-Service exercise period applicable under this Section 6.7, not only with respect to the number of vested shares of Common Stock for which each such Option or SAR is exercisable at the time of the Participant s cessation of Service but also with respect to any other shares subject to that Option or SAR.

#### Section 7. Stock Options; Automatic Grants for Non-Employee Directors.

- **7.1.** Eligibility. The individuals eligible to receive automatic option grants pursuant to the provisions of this Section 7 shall be limited to (a) those individuals who are serving as non-employee Board members on the Plan Effective Date, (b) those individuals who are first elected or appointed as non-employee Board members on or after the Plan Effective Date, whether through appointment by the Board or election by the Company s stockholders, and (c) those individuals who are re-elected to serve as non-employee Board members at one or more Annual Stockholders Meetings held after the Plan Effective Date. Each non-employee Board member eligible to receive one or more automatic option grants pursuant to the foregoing criteria shall be designated an Eligible Director for purposes of the Plan.
  - **7.2.** Grant Dates. Option grants shall be made under this Section 7 on the dates specified below:
- **7.2.1.** Initial Grant. Each Eligible Director who is first elected or appointed as a non-employee Board member after the Plan Effective Date shall automatically be granted, on the date of such initial election or appointment (as the case may be), a Non-Qualified Option to purchase 30,000 shares of Common Stock upon terms and conditions of this Section 7.
- **7.2.2.** Annual Grant. On the date of each Annual Stockholders Meeting, beginning with the first Annual Meeting held on the Plan Effective Date, each individual who will continue to serve after such meeting as an Eligible Director shall automatically be granted, whether or not such individual is standing for re-election as a Board member at that Annual Meeting, a Non-Qualified Option to purchase an additional 10,000 shares of Common Stock upon the terms and conditions of this Section 7, provided he or she has served as a non-employee Board member for at least six months prior to the date of such Annual Meeting.
- **7.3. No Limitation.** There shall be no limit on the number of shares for which any one Eligible Director may be granted Options under this Section 7 over his or her period of Board service.
- **7.4.** Exercise Price. The exercise price per share of Common Stock subject to each Option grant made under this Section 7 shall be equal to 100% of the Fair Market Value per share of Common Stock, on the automatic grant date.
- **7.5.** Option Term. Each Option grant under this Section 7 shall have a term of 10 years measured from the automatic grant date, subject to earlier termination in accordance with Section 7.7 below.

- **7.6.** Exercisability and Vesting. Each Option grant under this Section 7 shall be immediately exercisable for any or all of the option shares. However, subject to accelerated vesting pursuant to Section 12, any shares purchased under the Option shall be subject to repurchase by the Company, at the exercise price paid per share, upon the Optionee s cessation of Board service prior to vesting in those shares in accordance with the applicable schedule below:
- **7.6.1.** Initial Grant. The shares subject to each Option granted pursuant to Section 7.2.1 shall vest, and the Company s repurchase right shall lapse, in a series of four successive and equal annual installments over the Optionees speriod of continued service as a Board member, with the first such installment to vest upon Optionees scompletion of one year of Board service measured from the Option signated state.
- **7.6.2.** Annual Grant. The shares subject to each Option granted pursuant to Section 7.2.2 shall vest, and the Company s repurchase right shall lapse, upon the Optione s completion of one year of Board service measured from the Option s grant date.
- **7.7.** Effect of Termination of Board Service. Upon termination of an Optionee s Service, any Option granted to the Optionee pursuant to this Section 7 then held by the Optionee shall terminate to the extent the shares subject to that Option are not vested at the time of the Optionee s termination of Service. All other Options granted under this Section 7 then held by the Optionee shall remain exercisable in accordance with the provisions of Section 6.7; provided, however, that the three-month period described in clause (a) of Section 6.7.2. shall be a six-month period for Options granted under this Section 7.
- **7.8.** Other Option Terms Apply. Except to the extent inconsistent with the terms of this Section 7, all Options granted pursuant to this Section 7 shall be subject to the terms and conditions of Sections 1 through 6 and Sections 12 and 13 of the Plan.

## Section 8. <u>Director Fee Option Grants</u>

- **8.1.** Option Grants. Effective with respect to elections of Board members occurring at or after the Company s regular 2004 annual meeting of stockholders, each non-employee Board member may elect to receive all or any portion of the retainer fees otherwise payable in cash for his or her service on the Board (on any committee thereof) in the form of a special option grant under this Section 8. Such election must be filed with the Company s Chief Financial Officer prior to the stockholder vote that will determine whether that Board member (or Board candidate) will be elected to serve or continue to serve as a Board member and will apply to all retainer fees payable during the entire term for which that Board member (or Board candidate) is then nominated to serve. Each non-employee Board member (or Board candidate) who files such a timely election and is then elected to serve as a Board member will automatically be granted an option under this Section 8 on the date of the applicable stockholder vote.
- **8.2.** Option Terms. Each Option granted pursuant to this Section 8 shall be a Non-Qualified Option governed by the terms and conditions specified below.

## 8.2.1. Exercise Price.

- (a) <u>Amount</u>. The exercise price per share will be  $33^{1}/_{3}\%$  of the Fair Market Value per share of Common Stock on the Option s grant date.
- **(b)** <u>Payment</u>. The exercise price will become immediately due upon exercise of the Option and will be payable in one or more of the alternative forms authorized under Section 6.4.
- **8.2.2.** <u>Number of Option Shares</u>: The number of shares of Common Stock subject to the Option shall be determined pursuant to the following formula (rounded down to the nearest whole number):X

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= A  $\div$  (B x 66<sup>2</sup>/%), where X is the number of option shares; A is the portion of the annual retainer fee subject to the non-employee Board member s election; and B is the Fair Market Value per share of Common Stock on the Option s grant date.

- **8.2.3.** Exercise and Term of Options. Each Option granted under this Section 8 will be fully vested and immediately exercisable. Each such Option will have a maximum term of 10 years measured from the Option s grant date, subject to earlier termination pursuant to Section 8.2.4.
- **8.2.4.** Effect of Termination of Service. Should the Optionee cease Board service for any reason while holding one or more Options under this Section 8, then each such Option will remain exercisable, by the Optionee, or in the case of death by the personal representative of the Optionee s estate or by the person or persons to whom the Option is transferred pursuant to the Optionee s will or in accordance with the laws of descent and distribution, until the <u>earlier</u> of (a) the expiration of the 10-year option term or (b) the expiration of the three-year period measured from the date of such cessation of Board service.
- **8.2.5.** Other Option Terms. Except to the extent inconsistent with the terms of this Section 8, all Options granted pursuant to this Section 8 shall be subject to the terms and conditions of Sections 1 through 6 and Sections 12 and 13 of the Plan.

#### Section 9. Stock Appreciation Rights

- 9.1. In General. Subject to the terms of the Plan, the Committee and, subject further to the delegating resolution, the Non-Section 16(b) Delegates are authorized to grant SARs to eligible individuals. Each granted SAR shall be evidenced by an Award Agreement in the form that is approved by the Committee and that is not inconsistent with the terms and conditions of the Plan. The grant of an SAR provides the holder the right to receive the appreciation in value of shares of Common Stock between the date of grant and the date of exercise. SARs may be granted alone (Stand-Alone SARs) or in conjunction with all or part of any Option (Tandem SARs). In the case of a Non-Qualified Option, a Tandem SAR may be granted either at or after the time of the grant of such Option. In the case of an Incentive Stock Option, a Tandem SAR may be granted only at the time of the grant of such Option.
- **9.2.** Exercise. An SAR may be exercised by a Participant by giving notice of intent to exercise to the Company to the extent that the SAR is then by its terms exercisable. Upon the exercise of a Stand-Alone SAR, a Participant will be entitled to receive, in either cash and/or shares of Common Stock, an amount equal to the excess, if any, of (a) the Fair Market Value, as of the date the SAR (or portion thereof) is exercised, of the shares covered by the SAR (or portion thereof) over (b) the Fair Market Value of the shares covered by the SAR (or a portion thereof) as of the date the SAR was granted.

## 9.2.1. Other Terms.

- (a) <u>Term of SAR</u>. Unless otherwise provided in the applicable Award Agreement at the time of grant, the term of an SAR will be 10 years.
- **(b)** <u>Exercisability</u>. SARs will vest and become exercisable at such time or times and subject to such terms and conditions as will be determined by the Committee at the time of grant.
- (c) <u>Termination of Service</u>. Unless otherwise provided by the Committee at the time of grant, SARs will be subject to the terms of Section 6.7 with respect to exercise following termination of Service.

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## Section 10. Restricted Shares

- 10.1. In General. Subject to the other terms of the Plan, the Committee and, subject further to the delegating resolution, the Non-Section 16(b) Delegates may grant Restricted Shares to eligible individuals and may impose conditions on such shares as it deems appropriate. Each issued Restricted Share shall be evidenced by an Award Agreement in the form that is approved by the Committee and that is not inconsistent with the terms and conditions of the Plan. The terms and conditions applicable to a Restricted Share issuance, including the vesting periods and conditions, the form of consideration payable, if any, and the Company s right to repurchase unvested Restricted Shares upon a Participant s termination of employment shall be determined by the Committee.
- 10.2. Stockholder Rights. The Participant shall have full stockholder rights with respect to any shares of Common Stock issued to him or her under the Plan, whether or not his or her interest in those shares is vested. Accordingly, the Participant shall have the right to vote such shares and to receive any regular cash dividends paid on such shares. Any new, additional or different shares of stock or other property (including money paid other than as a regular cash dividend) which the Participant may have the right to receive with respect to his or her unvested shares by reason of any stock dividend, stock split, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Company s receipt of consideration or by reason of any Change in Control, shall be issued subject to (i) the same vesting requirements applicable to his or her unvested shares and (ii) such escrow arrangements as the

Committee shall deem appropriate.

- **10.3.** <u>Unvested Shares May be Escrowed</u>. Unvested shares, including any unvested shares purchased pursuant to the exercise of an Option, may, in the Committee s discretion, be held in escrow by the Company until the Participant s interest in such shares vests or may be issued directly to the Participant with restrictive legends on the certificates evidencing such unvested shares.
- 10.4. Transferability of Shares. The Participant shall have no right to transfer any unvested shares of Common Stock issued to him or her under this Section 10. For purposes of this restriction, the term transfer shall include (without limitation) any sale, pledge, assignment, encumbrance, gift or other disposition of such shares, whether voluntary or involuntary. However, the Participant shall have the right to make a gift of unvested shares issued to him or her under this Section 10 to his or her spouse or issue, including adopted children, or to a trust established for such spouse or issue, provided the transferee of such shares delivers to the Company a written agreement to be bound by all the provisions of the Plan, including without limitation this Section 10, and the Award Agreement applicable to the gifted shares.
- Section 11. Restricted Share Units. Subject to the other terms of the Plan, the Committee and, subject further to the delegating resolution, Non-Section 16(b) Delegates may grant Restricted Share Units to eligible individuals and may impose conditions on such units as it may deem appropriate. Each granted Restricted Share Unit shall be evidenced by an Award Agreement in the form that is approved by the Committee and that is not inconsistent with the terms and conditions of the Plan. Each granted Restricted Share Unit shall entitle the Participant to whom it is granted to a distribution from the Company in an amount equal to the Fair Market Value (at the time of the distribution) of one share of Common Stock. Distributions may be made in cash and/or shares of Common Stock. All other terms governing Restricted Share Units, such as vesting, time and form of payment and termination of units shall be set forth in the Award Agreement.
- Section 12. Change in Control. Notwithstanding anything to the contrary set forth in this Plan, upon or in anticipation of any Change in Control, the Board may, in its sole and absolute discretion and without the need for the consent of any Optionee or Participant, take one or more of the following actions contingent upon the occurrence of that Change in Control:

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- **12.1.** cause any or all outstanding Options and SARs held by Participants affected by the Change in Control to become fully vested and immediately exercisable, in whole or in part;
- 12.2. cause any or all outstanding Restricted Shares held by Participants affected by the Change in Control to become non-forfeitable, in whole or in part;
- 12.3. cancel any Option held by a Participant affected by the Change in Control in exchange for an option to purchase common stock of any successor corporation, which new option satisfies the requirements of Treas. Reg. § 1.425-1(a)(4)(i) (notwithstanding the fact that the original Option may never have been intended to satisfy the requirements for treatment as an Incentive Stock Option);
- **12.4.** cancel any or all Restricted Shares or Restricted Share Units held by Participants affected by the Change in Control in exchange for restricted shares of or restricted share units in respect of the common stock of any successor corporation;
- 12.5. redeem any or all Restricted Shares held by Participants affected by the Change in Control for cash and/or other substitute consideration with a value equal to the (a) the number of Restricted Shares to be redeemed multiplied by (b) the Fair Market Value of an unrestricted share of Common Stock on the date of the Change in Control;
- 12.6. cancel any Option or SAR held by a Participant affected by the Change in Control in exchange for cash and/or other substitute consideration with a value equal to (a) the number of shares subject to that Option or SAR, multiplied by (b) the difference between the Fair Market Value per share of Common Stock on the date of the Change in Control and the exercise price of that Option or SAR;
- 12.7. cancel any Restricted Share Unit held by a Participant affected by the Change in Control in exchange for cash and/or other substitute consideration with a value equal to (a) the number of Restricted Share Units, multiplied by (b) the Fair Market Value per share of Common Stock on the date of the Change in Control.

## Section 13. <u>Miscellaneous Provisions</u>.

13.1. <u>Amendment and Termination of the Plan and Awards</u>. The Board has complete and exclusive power and authority to amend, modify or terminate the Plan (or any component thereof) in any or all respects whatsoever at any time. However, no such amendment, modification or termination shall adversely affect the material economic rights with respect to Awards then outstanding under the Plan, unless

the Participant consents to such amendment, modification or termination. In addition, the Board may not, without the approval of the Company s stockholders, amend the Plan to (a) increase the total number of shares reserved for the purposes of the Plan and the maximum number of shares for which any one individual may be granted Awards for any given year under the Plan, except for permitted adjustments under Section 5 of the Plan, or (b) change the persons or class of persons eligible to receive Awards.

13.2. Tax Withholding. No later than the date as of which an amount first becomes includible in the gross income of the Participant for federal income tax purposes with respect to any Award under the Plan, the Participant will pay to the Company, or make arrangements satisfactory to the Board regarding the payment of any federal, state or local taxes of any kind required by law to be withheld with respect to such amount. Unless otherwise determined by the Board, the minimum required withholding obligations may be settled with Shares, including Shares that are part of the Award that gives rise to the withholding requirement. The obligations of the Company under the Plan will be conditioned on such payment or arrangements, and the Company will, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to the Participant.

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#### 13.3. <u>Effective Date and Term of Plan.</u>

- **13.3.1.** Effective Date. The Plan will become effective on the Plan Effective Date (as defined in Section 1.2).
- 13.3.2. No Grants Under Predecessor Plans. No further option grants or stock issuances shall be made under the Predecessor Plans from and after the Plan Effective Date.
- **13.3.3.** Term of the Plan. The Plan will continue in effect until the it is terminated in accordance with Section 13.1; *provided, however*, that no Option that is an Incentive Stock Option and no Option issuable pursuant to Section 8 of the Plan will be granted hereunder on or after the 10th anniversary of the date of stockholder approval of the Plan (or, if the stockholders approve an amendment that increases the number of shares subject to the Plan, the 10<sup>th</sup> anniversary of the date of such approval); *but provided further*, that any such Option that is granted prior to such 10<sup>th</sup> anniversary may extend beyond that date.
- 13.4. No Employment or Service Rights. Neither the action of the Company in establishing the Plan, nor any action taken by the Committee or any Non-Section 16(b) Delegate hereunder, nor any provision of the Plan shall be construed so as to grant any individual the right to remain in the employ or service of the Company (or any Parent or Subsidiary) for any period of specific duration, and the Company (or any Parent or Subsidiary retaining the services of such individual) may terminate such individual s employment or service at any time and for any reason, with or without cause. Nothing in the Plan will prevent the Board from adopting other or additional compensation arrangements, subject to stockholder approval if such approval is required; and such arrangements may be either generally applicable or applicable only in specific cases.
- **13.5.** <u>Use of Proceeds</u>. Any cash proceeds received by the Company from the sale of shares pursuant to option grants or share issuances under the Plan shall be used for general corporate purposes.
- 13.6. <u>Unfunded Status of Plan</u>. The Plan is intended to be unfunded. With respect to any payments not yet made to a Participant by the Company, nothing contained herein will give any such Participant any rights that are greater than those of a general creditor of the Company. In its sole discretion, the Committee may authorize the creation of grantor trusts or other arrangements to meet the obligations created under the Plan with respect to Awards.
- 13.7. Representations; Legends. The Board may require each Participant to represent to and agree with the Company in writing that the Participant is acquiring securities of the Company for investment purposes and without a view to distribution thereof and as to such other matters as the Board believes are appropriate. The certificate evidencing any Award and any securities issued pursuant thereto may include any legend which the Board deems appropriate to reflect any restrictions on transfer and compliance with securities laws.
- 13.8. Regulatory Matters. The implementation of the Plan, the granting of any Award under the Plan and the issuance of any shares under the Plan shall be subject to the Company s procurement of all approvals and permits required by regulatory authorities having jurisdiction over the Plan, the Awards granted under it, and the Common Stock issued pursuant to it. All certificates for Common Stock or other securities delivered under the Plan shall be subject to such share-transfer orders and other restrictions as the Board may deem advisable under the rules, regulations, and other requirements of the Securities Act of 1933, as amended, the 1934 Act, any stock exchange upon which the Common Stock is then listed, and any other applicable federal or state securities laws.
- 13.9. <u>Invalid Provisions</u>. In the event that any provision of the Plan is found to be invalid or otherwise enforceable under any applicable law, such invalidity or unenforceability shall not be construed as rendering any other provision contained herein as invalid or

unenforceable, and all such other provisions shall

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be given full force and effect to the same extent as though the invalid or unenforceable provision was not contained in the Plan.

- **13.10. Board Action**. Notwithstanding anything to the contrary set forth in the Plan, any and all actions of the Committee and the Non-Section 16(b) Delegates, taken under or in connection with the Plan and any agreements, instruments, documents, certificates or other writings entered into, executed, granted, issued and/or delivered pursuant to the terms hereof, will be subject to and limited by any and all votes, consents, approvals, waivers or other actions of all or certain stockholders of the Company or other persons required by:
  - 13.10.1. the Company's Certificate of Incorporation (as the same may be amended and/or restated from time to time);
  - **13.10.2.** the Company s Bylaws (as the same may be amended and/or restated from time to time); and
- **13.10.3.** any other agreement, instrument, document or writing now or hereafter existing, between or among the Company and its stockholders or other persons (as the same may be amended from time to time).
- **13.11.** Governing Law. The Plan and all Awards granted hereunder shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without regard to the application of the principles of conflicts of laws.
- **13.12.** <u>Successors and Assigns</u>. The provisions of the Plan shall inure to the benefit of, and be binding upon, the Company and its successors or assigns and the Participants and Optionees, the legal representatives of their respective estates, their respective heirs or legatees and their permitted assignees.
- 13.13. Notices. Any notice to be given to the Company pursuant to the provisions of the Plan shall be addressed to the Company in care of its Secretary (or such other person as the Company may designate from time to time) at its principal executive office, and any notice to be given to a Participant will be delivered personally or addressed to him or her at the address given beneath his or her signature on his or her Award Agreement, or at such other address as such Participant may hereafter designate in writing to the Company. Any such notice will be deemed duly given on the date and at the time delivered via personal, courier or recognized overnight delivery service or, if sent via telecopier, on the date and at the time telecopied with confirmation of delivery or, if mailed, on the date five days after the date of the mailing (which will be by regular, registered or certified mail). Delivery of a notice by telecopy (with confirmation) will be permitted and will be considered delivery of a notice notwithstanding that it is not an original that is received.

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Neose Technologies, Inc.

PROXY FOR ANNUAL MEETING OF STOCKHOLDERS May 6, 2004

(This Proxy is solicited by the Board of Directors of the Company)

The undersigned stockholder of Neose Technologies, Inc. hereby appoints C. Boyd Clarke, President, Chief Executive Officer and Chairman, Robert I. Kriebel, Senior Vice President and Chief Financial Officer, and A. Brian Davis, Vice President, Finance, and each of them, with full power of substitution, proxies to vote the shares of stock that the undersigned could vote if personally present at the Annual Meeting of Stockholders of Neose Technologies, Inc. to be held at the Company s headquarters at 102 Witmer Road, Horsham, PA 19044, on May 6, 2004, at 9:00 A.M. (Eastern Daylight Time), or any adjournment thereof.

UNLESS OTHERWISE SPECIFIED, THIS PROXY WILL BE BOTED FOR THE ELECTION OF DIRECTORS NAMED IN PROPOSAL 1 AND FOR PROPOSALS 2, 3 AND 4.

(Continued and to be signed on reverse side)

[logo]

Neose Technologies, Inc.

102 Witmer Road

Horsham, PA 19044

## VOTE BY INTERNET <u>www.proxyvote.com</u>

Use the internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

## VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we ve provided or return to Neose Technologies, Inc., c/o ADP, 51 Mercedes Way, Edgewood, NY 11717.

Please date, sign and mail your proxy card back as soon as possible.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

#### THIS PROXY CARD IS ONLY VALID WHEN SIGNED AND DATED

MEOSE	TECHNOI	OGIES	INC
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THE RELATED PROXY STATEMENT.

Vote on Directors

1. ELECTION OF DIRECTORS	For All	Withhold All	For All Except
NOMINEES: 01) C. Boyd Clarke 02) Brian H. Dovey 03) L. Patrick Gage 04) William F. Hamilton 05) Douglas J. MacMaster, Jr. 06) Mark H. Rachesky 07) Stephen A. Roth 08) Lowell E. Sears 09) Elizabeth H.S. Wyatt	[ ]	[ ]	[ ]
To withhold authority to vote for an individu 2. PROPOSAL TO RATIFY THE APPOIN			
3. PROPOSAL TO APPROVE AN AMENI SHARES OF COMMON STOCK AUTHOR SHARES.		] [ ] CATE OF INCORPORATION TO	
4. PROPOSAL TO APPROVE THE ADOP	FOR AGAI [ ] [ PTION OF OUR 2004 EQUIT	] []	
5. IN THEIR DISCRETION UPON SUCH (	FOR AGAI [] [ OTHER MATTERS AS MA	] []	ГНЕ MEETING.

THE UNDERSIGNED HEREBY ACKNOWLEDGES RECEIPT OF THE NOTICE OF ANNUAL MEETING OF STOCKHOLDERS AND

	ope in which this material was mailed. If shares are held jointly, each ld use full title, and if more than one, all should sign. If the stockholder is a partnership, please sign full partnership name by an
	Date:
Signature	
	Date:
Signature (Joint Owners)	