

SIGMA-ALDRICH CORPORATION
(A Delaware Corporation)

BY-LAWS

ARTICLE I. OFFICES

1.01. Registered Office. The registered office shall be in the City of Wilmington, County of New Castle, State of Delaware.

1.02. Other Offices. The Corporation may also have offices at such other places both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the Corporation may from time to time require.

ARTICLE II. SHAREHOLDERS

2.01. Annual Meeting. The annual meeting of the shareholders shall be held at such time as shall be fixed by or under the authority of the Board of Directors on the first Tuesday of May of each year, if not a legal holiday, and if a legal holiday, then on the next succeeding day, or on such other date as may be fixed by or under the authority of the Board of Directors, for the purpose of electing directors and for the transaction of such other business as may properly come before the meeting.

2.01A. Business to be Conducted at Shareholder Meetings.

(a) At an annual meeting of shareholders, only such business shall be conducted, and only such proposals shall be acted upon, as shall have been properly brought before the meeting (i) pursuant to the Corporation's notice of meeting, (ii) by or at the direction of the Board of Directors, or (iii) by any shareholder of the Corporation who is a shareholder of record both at the time of giving of the notice provided for in this By-Law and at the time of the meeting, who shall be entitled to vote at such meeting and who complies with the notice and other requirements set forth in this By-Law.

(b) For a proposal to be properly brought before an annual meeting by a shareholder pursuant to clause (iii) of paragraph (a) of this By-Law, the shareholder must have given timely notice thereof in writing to the Secretary of the Corporation as hereinafter provided and such proposal must otherwise be a proper subject for action by the Corporation's shareholders. To be timely, a shareholder's notice must be delivered to the Secretary at the principal executive offices of the Corporation and received by the Secretary not less than 90 nor more than 120 days prior to the first anniversary of the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is advanced by more than 30 days or delayed by more than 60 days from such anniversary date, notice by the shareholder to be timely must be so received not earlier than the opening of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the tenth day following the day on which public announcement of the date of the meeting is first made. Such shareholder's notice to the Secretary shall set forth as to each matter the shareholder proposes to bring before the meeting: (i) a brief description of the proposal desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting,

(ii) the name and address, as they appear on the Corporation's stock transfer records, of the shareholder proposing such business, and the name and address of the beneficial owner, if any, on whose behalf the proposal is made, (iii) the class and number of shares of stock of the Corporation which are owned beneficially and of record by such shareholder of record and by the beneficial owner, if any, on whose behalf the proposal is made, (iv) the text of the proposal of business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the By-Laws, the language of the proposed amendment) and the reasons for conducting such business at the meeting, (v) any material interest in such business of such shareholder of record and the beneficial owner, if any, on whose behalf the proposal is made, (vi) any other information that is required to be provided by the shareholder pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended, (the "Exchange Act"), or any successor provision, in such shareholder's capacity as a proponent of a shareholder proposal; (vii) a representation that the shareholder intends to appear in person or by proxy at the meeting to propose such other business; and (viii) a representation whether the shareholder or the beneficial owner, if any, intends or is part of a group which intends (1) to deliver a proxy statement and/or form of proxy to holders of at least the percentage of outstanding capital stock required to adopt or approve the proposal or (2) otherwise to solicit proxies from shareholders in support of such proposal. The provisions of this paragraph (b) shall also govern what constitutes timely notice for purposes of Rule 14a-4(c) under the Exchange Act or any successor provision.

(c) Only such business shall be conducted, and only such proposals shall be acted upon, at a special meeting of shareholders called pursuant to Section 2.02 as shall have been brought before such meeting pursuant to a notice of meeting delivered pursuant to Section 2.04.

(d) No business shall be conducted at a meeting of shareholders except in accordance with this Section 2.01A. The Board of Directors may reject any shareholder proposal submitted for consideration at the meeting which is not made in accordance with the terms of this By-Law or which is not a proper subject for shareholder action in accordance with provisions of applicable law. Alternatively, if the Board of Directors fails to consider the validity of any shareholder proposal, the presiding officer of the meeting shall, if the facts warrant, determine and declare at the meeting that the shareholder proposal was not properly brought before the meeting in accordance with the procedures prescribed by these By-Laws or is not a proper subject for shareholder action in accordance with provisions of applicable law, and if he or she should make that determination, he or she shall so declare at the meeting and any such business or proposal shall not be acted upon.

(e) For purpose of this By-Law, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press, Reuters or comparable national news service or in a document publicly filed by the Corporation or other person with the Securities and Exchange Commission pursuant to Sections 13, 14, or 15(d) of the Exchange Act. In no event shall the public announcement of a postponement or adjournment of a meeting commence a new time period for the giving of a shareholder's notice pursuant to this By-Law.

(f) Notwithstanding the foregoing provision of this Section 2.01A, if the shareholder (or a qualified representative of the shareholder) does not appear at the meeting to present such proposed business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Corporation.

(g) Notwithstanding the foregoing provisions of this By-Law, a shareholder shall also comply with all applicable requirements of state law and the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this By-Law. This provision shall not prevent the consideration and approval or disapproval at the annual meeting of reports of officers, directors and committees of the Board of Directors, but, in connection with such reports, no new business shall be acted upon at the meeting unless stated, filed and recorded as herein provided. Nothing in the By-Law shall be deemed to affect any rights of shareholders to request inclusion of proposals in, or the Corporation's right to omit proposals from, the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act, or any successor provision.

2.02. Special Meeting. Special meetings of the shareholders, for any purpose or purposes, unless otherwise prescribed by statute or by the Certificate of Incorporation, and subject to the rights of holders of any class or series of stock of the Corporation that may be authorized, issued and outstanding may be called only by the Chairman of the Board of Directors, the President or the Board of Directors. Such request shall state the purpose or purposes of the proposed meeting. Business transacted at any special meeting of shareholders shall be limited to the purpose or purposes stated in the notice.

2.03. Place of Meeting. The Board of Directors may designate any place, either within or without the State of Delaware, as the place of meeting for any annual meeting or for any special meeting called by the Board of Directors; provided that the Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the General Corporation Law of the State of Delaware (the "General Corporation Law of Delaware").

2.04. Notice of Meeting; Waiver of Notice by Shareholders.

(a) Written or printed notice of each meeting of shareholders shall be given by or at the direction of the Secretary or the Chief Executive Officer of the corporation to each shareholder entitled to vote at the meeting, except that (i) it shall not be necessary under any provision of these By-Laws to give notice to any shareholder who properly waives notice, whether before or after the meeting and whether in writing or by electronic transmission or otherwise, and (ii) no notice of an adjourned meeting need be given except when required under Section 2.07 of these By-Laws or by law. Each notice of a meeting shall be given, personally or by mail or, as provided below, by means of electronic transmission, not less than ten (10) nor more than sixty (60) days before the meeting and shall state the time and place of the meeting, or if held by remote communications, the means of remote communication by which shareholders and proxy holders may be deemed to be present in person and vote at such meeting, and unless it is the annual meeting, shall state at whose direction or request the meeting is called and the purposes for which it is called. The attendance of any shareholder at a meeting, without protesting at the beginning of the meeting that the meeting is not lawfully called or convened, shall constitute a waiver of notice by him or her. Any previously scheduled meeting of shareholders may be postponed, and (unless the Certificate of Incorporation otherwise provides) any special meeting of shareholders may be canceled, by resolution of the Board of Directors upon public announcement (as defined in Section 2.01A[(e)]) given on or prior to the date previously scheduled for such meeting of shareholders.

(b) Without limiting the manner by which notice otherwise may be given effectively to shareholders, any notice to a shareholder may be given by a form of electronic transmission consented to by the shareholder to whom the notice is given. Any such consent shall be revocable by the shareholder by written notice to the Corporation. Any such consent shall be deemed revoked (i) if the Corporation is

unable to deliver by electronic transmission two consecutive notices given by the Corporation in accordance with such consent and (ii) such inability becomes known to the Secretary or an Assistant Secretary of the Corporation or to the transfer agent, or other person responsible for the giving of notice; provided, however, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action. For purposes of these By-Laws, "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

(c) Notice shall be deemed given, if mailed, when deposited in the United States mail with postage prepaid, if addressed to a shareholder at his or her address on the Corporation's records. Notice given by electronic transmission shall be deemed given: (i) if by facsimile, when directed to a number at which the shareholder has consented to receive notice; (ii) if by electronic mail, when directed to an electronic mail address at which the shareholder has consented to receive notice; (iii) if by posting on an electronic network together with separate notice to the shareholder of such specific posting, upon the later of (1) such posting and (2) the giving of such separate notice; and (iv) by any other form of electronic transmission, when directed to the shareholder.

(d) An affidavit of the Secretary or an Assistant Secretary or of the transfer agent or other agent of the Corporation that the notice has been given, whether by a form of electronic transmission or otherwise, shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

(e) Any notice to shareholders given by the Corporation shall be effective if given by a single written notice to shareholders who share an address if consented to by the shareholders at that address to whom such notice is given. Any such consent shall be revocable by the shareholder by written notice to the Corporation. Any shareholder who fails to object in writing to the Corporation within 60 days of having been given written notice by the Corporation of its intention to send the single notice so permitted shall be deemed to have consented to receiving such single written notice.

2.05. Record Date for Shareholder Notice and Voting.

(a) For purposes of determining the shareholders entitled to notice of any meeting or to vote thereat, the Board of Directors may fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than sixty (60) days nor less than ten (10) days before the date of any such meeting, and in such event only shareholders of record on the date so fixed are entitled to notice and to vote, notwithstanding any transfer of any shares on the books of the Corporation after the record date, except as otherwise provided in the Certificate of Incorporation, by these By-Laws, by agreement or by applicable law.

(b) If the Board of Directors does not so fix a record date, the record date for determining shareholders entitled to notice of or to vote at a meeting of shareholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(c) A determination of shareholders of record entitled to notice of or to vote at a meeting of shareholders shall apply to any adjournment of the meeting unless the Board of Directors fixes a new record date for

the adjourned meeting, but the Board of Directors shall fix a new record date if the meeting is adjourned for more than thirty (30) days from the date set for the original meeting.

(d) The record date for any other lawful purpose shall be as provided in Section 6.09 of these By-Laws.

2.06. List of Shareholders. Not less than ten (10) days prior to the date of any meeting of shareholders, the Secretary of the Corporation shall prepare a complete list of shareholders entitled to vote at the meeting, arranged in alphabetical order and showing the address of each shareholder and the number of shares registered in the name of such shareholder; provided, that the Corporation shall not be required to include electronic mail addresses or other electronic contact information on such list. For a period of not less than ten (10) days prior to the meeting, the list shall be available during ordinary business hours for inspection by any shareholder for any purpose germane to the meeting. During this period, the list shall be kept either (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting or (ii) during ordinary business hours, at the principal place of business of the Corporation. If the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to shareholders of the Corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any shareholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any shareholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

2.07. Quorum; Required Vote; Adjournment.

(a) The holders of a majority in voting power of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the shareholders for the transaction of business except as otherwise provided by statute or by the Certificate of Incorporation. If, however, such quorum is not present or represented at any meeting of the shareholders, then either (i) the person presiding over the meeting or (ii) the shareholders by the vote of the holders of a majority of the voting power of the outstanding stock, present in person or represented by proxy, shall have power to adjourn the meeting in accordance with Section 2.07 of these By-Laws.

(b) When a quorum is present at any meeting, a [majority] of the votes present in person or represented by proxy and entitled to vote on the election of a director shall be sufficient to elect directors, subject to the rights of the holders of any class or series of stock of the Corporation to elect directors under specified circumstances pursuant to the Certificate of Incorporation. On all other matters, the vote of the holders of a majority of the stock having voting power on such matter present in person or represented by proxy shall decide any question brought before such meetings, unless the question is one upon which, by express provision of the laws of the State of Delaware or of the Certificate of Incorporation or these By-Laws, a vote of a greater number or voting by classes is required, in which case such express provision shall govern and control the decision of the question.

(c) If a quorum is initially present, the shareholders may continue to transact business until adjournment, notwithstanding the withdrawal of enough shareholders to leave less than a quorum, if any action taken is approved by a majority of the shareholders initially constituting the quorum.

(d) The transactions of any meeting of shareholders, either annual or special, however called and noticed, and wherever held, shall be as valid as though they had been taken at a meeting duly held after regular call and notice, if a quorum is present either in person or by proxy.

(e) Any shareholders' meeting, annual or special, whether or not a quorum is present, may be adjourned from time to time (i) by the vote of the majority of the voting power of the shares represented at that meeting, either in person or by proxy or (ii) pursuant to Section 2.08 of these By-Laws. In the absence of a quorum, no other business may be transacted at that meeting except as provided in Section 2.01A of these By-Laws.

(f) When any meeting of shareholders, either annual or special, is adjourned to another time or place or means of remote communication, notice need not be given of the adjourned meeting if the time and place, if any, thereof, and the means of remote communication, if any, by which shareholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting, are announced at the meeting at which the adjournment is taken. However, if a new record date for the adjourned meeting is fixed or if the adjournment is for more than thirty (30) days from the date set for the original meeting, then notice of the adjourned meeting shall be given. Notice of any such adjourned meeting shall be given to each shareholder of record entitled to vote at the adjourned meeting in accordance with the provisions of Section 2.04 of these By-Laws. At any adjourned meeting the Corporation may transact any business that might have been transacted at the original meeting.

2.08. Conduct of Meeting.

(a) Meetings of shareholders shall be presided over by the Chairman of the Board, if any, or in his or her absence, by the Chief Executive Officer, if any, or in his or her absence by a chairman of the meeting, which chairman must be an officer or director of the Corporation and must be designated as chairman of the meeting by the Board of Directors. The Secretary, or in his or her absence an Assistant Secretary, or in his or her absence a person whom the person presiding over the meeting shall appoint, shall act as secretary of the meeting and keep a record of the proceedings thereof.

(b) The Board of Directors shall be entitled to make such rules or regulations for the conduct of meetings of shareholders as it shall deem appropriate. Subject to such rules and regulations of the Board of Directors, if any, the person presiding over the meeting shall have the right and authority to convene and adjourn the meeting, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of the person presiding over the meeting, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to shareholders of record of the Corporation and their duly authorized and constituted proxies and such other persons as the person presiding over the meeting shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting and matters which are to be voted on by ballot. The person presiding over the meeting, in addition to making any other determinations that may be appropriate to the conduct of the meeting, shall, if the facts warrant, determine and declare to the meeting that a matter or business was not properly brought before the meeting and if the person presiding over the meeting should so determine and declare, any such matter or business shall not be transacted or considered. Unless and to the extent determined by the Board of Directors or the person presiding over the meeting,

meetings of shareholders shall not be required to be held in accordance with rules of parliamentary procedure.

2.09 Proxies. Every person entitled to vote for directors, or on any other matter, shall have the right to do so either in person or by one or more agents authorized by a written proxy filed with the Secretary of the Corporation. A written proxy may be in the form of a telegram, cablegram, or other means of electronic transmission which sets forth or is submitted with information from which it can be determined that the telegram, cablegram, or other means of electronic transmission was authorized by the person. No such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. A duly executed proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(e) of the General Corporation Law of Delaware. A shareholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by filing an instrument in writing revoking the proxy or by filing another duly executed proxy bearing a later date with the secretary of the corporation. A proxy is not revoked by the death or incapacity of the maker unless, before the vote is counted, written notice of such death or incapacity is received by the Secretary of the Corporation.

2.10. Voting Procedures; Ballots.

(a) The shareholders entitled to vote at any meeting of shareholders shall be determined in accordance with the provisions of Section 2.06 of these By-Laws, subject to the provisions of Sections 217 and 218 of the General Corporation Law of Delaware (relating to voting rights of fiduciaries, pledgors and joint owners, and to voting trusts and other voting agreements).

(b) Except as may be otherwise provided in the Certificate of Incorporation, by these By-Laws or as required by law, each shareholder shall be entitled to one vote for each share of capital stock held by such shareholder which has voting power upon the matter in question.

(c) Any shareholder entitled to vote on any matter may vote part of the shares in favor of the proposal and refrain from voting the remaining shares or, except when the matter is the election of directors, may vote the remaining shares against the proposal; but if the shareholder fails to specify the number of shares which the shareholder is voting affirmatively or otherwise indicates how the number of shares to be voted affirmatively is to be determined, it will be conclusively presumed that the shareholder's approving vote is with respect to all shares which the shareholder is entitled to vote.

(d) Voting need not be by ballot unless requested by a shareholder at the meeting or ordered by the chairman of the meeting; however, all elections of directors shall be by written ballot, unless otherwise provided in the Certificate of Incorporation; provided, that if authorized by the Board of Directors, a written ballot may be submitted by electronic transmission, provided that any such electronic transmission must either set forth or be submitted with information from which it can be determined that the electronic transmission was authorized by the shareholder or proxyholder.

2.11. Inspectors of Elections; Opening and Closing of Polls. Before any meeting of shareholders, the Board of Directors may, and shall if required by law, appoint one or more inspectors of election, who may be employees of the Corporation, to act at the meeting or its adjournment and to make a written

report thereof. If any person appointed as inspector fails to appear or fails or refuses to act, then the person presiding over the meeting may, and upon the request of any shareholder or a shareholder's proxy shall, appoint a person to fill that vacancy.

Such inspectors shall:

- (a) determine the number of shares outstanding and the voting power of each, the number of shares represented at the meeting, the existence of a quorum, and the authenticity, validity, and effect of proxies and ballots;
- (b) receive votes and ballots, including, if applicable, votes and ballots submitted by means of electronic transmission;
- (c) hear and determine all challenges and questions in any way arising in connection with the right to vote;
- (d) determine when the polls shall close;
- (e) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspector or inspectors;
- (f) certify their determination of the number of shares of the Corporation represented at the meeting and such inspectors' count of all votes and ballots, which certification and report shall specify such other information as may be required by law; and
- (g) do any other acts that may be proper to conduct the election.

Each inspector of election shall perform his or her duties impartially, in good faith, to the best of his or her ability and as expeditiously as is practical, and before entering upon the discharge of his or her duties, shall take and sign an oath to execute faithfully the duties of inspector of election with strict impartiality and according to the best of his or her ability. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of their duties. In determining the validity and counting of proxies and ballots cast at any meeting of shareholders of the Corporation, the inspectors may consider such information as is permitted by applicable law. If there are three (3) or more inspectors of election, the decision, act or certificate of a majority is effective in all respects as the decision, act or certificate of all. Any report or certificate made by the inspectors of election is prima facie evidence of the facts stated therein.

2.12. Unanimous Consent Without Meeting. Any action required or permitted by the Certificate of Incorporation or By-Laws or any provision of law to be taken at a meeting of the shareholders, may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the shareholders entitled to vote with respect to the subject matter thereof.

ARTICLE III. BOARD OF DIRECTORS

3.01. General Powers and Number. Subject to the provisions of the General Corporation Law of Delaware, the business and affairs of the Corporation shall be managed by or under the direction of its Board of Directors. In addition to the powers and authorities by these By-Laws expressly conferred upon them, the Board of Directors may exercise all such powers of the Corporation and do all such lawful acts and things as are not by law or by the Certificate of Incorporation or by these By-Laws required to be exercised or done by the shareholders. Subject to the rights of the holders of any series or class of stock of the Corporation, as set forth in the Certificate of Incorporation, the number of directors of the Corporation shall be determined from time to time by resolution of the Board of Directors in accordance with Article Sixth of the Certificate of Incorporation, but shall consist of not more than eleven nor less than three directors.

3.02. Tenure and Qualifications.

(a) The directors who are to be elected at the annual meeting of the shareholders shall be elected by ballot by the holders of shares entitled to vote. Each director shall hold office until the next annual meeting of shareholders and until his or her successor shall have been elected and qualified, or until his or her prior death, resignation or removal. Subject to applicable law and the rights of the holders of any series or class of stock of the Corporation as set forth in the Certificate of Incorporation, a director may be removed from office by affirmative vote of the holders of a majority of the voting power of the outstanding shares entitled to vote for the election of such director, taken at a meeting of shareholders called for that purpose. A director may resign at any time by filing his or her written resignation with the Secretary of the Corporation, including by means of electronic transmission, to take effect at the time specified in the resignation; the acceptance of a resignation, unless required by its terms, shall not be necessary to make it effective. Directors need not be residents of the State of Delaware or shareholders of the Corporation. All directors shall be nominated pursuant to Section 3.13 of these By-Laws.

(b) No person who has reached 70 years of age may be elected or appointed to a term of office as a director of the Corporation. Any director still in office on their 70th birthday shall resign from office on that date. The term of office of any director elected or appointed prior to the adoption of these By-Laws shall continue (to the extent provided in the Certificate of Incorporation or these By-Laws) after such director reaches 70 years of age.

3.03. Annual and Regular Meetings. An annual meeting of the Board of Directors shall be held without other notice than this By-Law immediately after the annual meeting of shareholders, and each adjourned session thereof. The place of such annual meeting shall be the same as the place of the meeting of shareholders which precedes it, or such other suitable place as may be announced at such meeting of shareholders. The Board of Directors may provide, by resolution, the time and place, either within or without the State of Delaware, for the holding of regular meetings without other notice than such resolution. If the day fixed for a regular meeting is a legal holiday, the meeting shall be held on the next business day.

3.04. Special Meetings. Special meetings of the Board of Directors may be called by or at the request of the Chairman of the Board of Directors, the Chief Executive Officer, the President, the Secretary or [a majority of the directors in office]. The Chairman of the Board of Directors, President or Secretary calling any special meeting of the Board of Directors may fix any place, either within or without the State of Delaware, as the place for holding any special meeting of the Board of Directors called by them,

and if no other place is fixed the place of meeting shall be the principal executive offices of the Corporation. The person or persons authorized to call special meetings of the Board of Directors may fix the time and place of the meetings.

3.05. Notice; Waiver.

- (a) Each member of the Board of Directors shall file with the Secretary of the Corporation an address to which mail or telegraphic notices shall be sent, a telephone number to which a telephonic or facsimile notice may be transmitted and, at the sole discretion of a director, such electronic address to which other electronic transmissions may be sent. A notice mailed, telegraphed, telephoned or transmitted by facsimile or other means of electronic transmission in accordance with the instructions provided by the director shall be deemed sufficient notice. Such address or telephone number may be changed at any time and from time to time by a director by giving written notice of such change to the Secretary. Failure on the part of any director to keep an address and telephone number on file with the Secretary (but not including an address for other electronic transmissions) shall automatically constitute a waiver of notice of any regular or special meeting of the Board of Directors which might be held during the period of time that such address and telephone number are not on file with the Secretary. A notice shall be deemed to be mailed when deposited in the United States mail, postage prepaid. A notice shall be deemed to be telegraphed when the notice is delivered to the transmitter of the telegram and either payment or provision for payment is made by the Corporation. Notice shall be deemed to be given by telephone if the notice is transmitted over the telephone to some person (whether or not such person is the director) or message recording device answering the telephone at the number which the director has placed on file with the Secretary. Notice shall be deemed to be given by facsimile or other means of electronic transmission when sent to the telephone number or other address which the director has placed on file with the Secretary.

(b) Notice of the time and place of each special meeting of the Board of Directors shall be given to each director in advance of the time set for such meeting as provided herein; provided, that if the meeting is to be held at the principal executive offices of the Corporation, the notice need not specify the place of the meeting. Notice of a special meeting may be given by any one or more of the following methods and the method used need not be the same for each director being notified:

- (i) Written notice sent by mail at least three (3) days prior to the meeting;
- (ii) Personal service at least twenty-four (24) hours prior to the time of the meeting;
- (iii) Telegraphic notice at least twenty-four (24) hours prior to the time of the meeting, said notice to be sent as a straight full-rate telegram;
- (iv) Telephonic notice at least twenty-four (24) hours prior to the time of the meeting; or
- (v) Facsimile or other means of electronic transmission at least twenty-four (24) hours prior to the time of the meeting.

Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director.

(c) Whenever any notice is required to be given to any director of the Corporation under the Certificate of Incorporation or By-Laws or any provision of law, a waiver thereof in writing, signed at any time, whether before or after the time of meeting, by the director entitled to such notice, shall be deemed equivalent to the giving of such notice. The attendance of a director at a meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting and objects thereto to the transaction of any business because the meeting is not lawfully called or convened, and either (i) such dissent is entered into the minutes of the meeting or (ii) such director shall file such written dissent to such action with the secretary of the meeting and forwards such dissent by registered mail to the Secretary of the Corporation immediately after the adjournment of the meeting. Such right to dissent shall not apply to a director who voted in favor of such action. Except for amendments to these By-Laws, as provided in Section 9.02, neither the business to be transacted at, nor the purpose of, any regular or special meeting of the Board of Directors need be specified in the notice or waiver of notice of such meeting and, unless indicated in the notice thereof, any and all business may be transacted at a special meeting.

3.06. Quorum. Except as otherwise provided by law or by the Certificate of Incorporation or these By-Laws, a whole number of directors equal to a majority of the total number of directors as established pursuant to Section 3.01 shall constitute a quorum for the transaction of business at any meeting of the Board of Directors, but a majority of the directors present (though less than such quorum) may adjourn the meeting from time to time without further notice. At any adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting originally scheduled had a quorum then been present, unless the meeting is adjourned for more than twenty-four (24) hours. If the meeting is adjourned for more than twenty-four (24) hours, then notice of the time, date and place of the adjourned meeting shall be given before the adjourned meeting takes place, in the manner specified herein to the directors who were not present at the time of adjournment.

(b) A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

3.07. Manner of Acting. The act of the majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors, unless the act of a greater number is required by law or by the Certificate of Incorporation or these By-Laws.

3.08. Conduct of Meetings; Conference Telephone Meetings. (a) The Chairman of the Board of Directors, and in his or her absence, the Chief Executive Officer if he or she is a director and in his or her absence, the President, if he or she is a director and in his or her absence, and in their absence, any director chosen by the directors present, shall call meetings of the Board of Directors to order and shall act as chairman of the meeting. The Secretary of the Corporation shall act as secretary of all meetings of the Board of Directors, but in the absence of the Secretary, the presiding officer may appoint any Assistant Secretary or any director or other person present to act as secretary of the meeting.

(b) Any or all members of the Board of Directors or of any committee of the Board of Directors may participate in a meeting of the Board of Directors or of the committee by means of a conference telephone or other communications equipment allowing all persons participating in the meeting to hear

each other at the same time. Participation by such means shall constitute presence in person at the meeting.

3.09. Vacancies. Subject to the rights of the holders of any series or class of stock of the Corporation, as set forth in the Certificate of Incorporation, to elect additional directors under specified circumstances, and unless the Board of Directors otherwise determines, any vacancy occurring in the Board of Directors, including a vacancy created by an increase in the number of directors, may be filled until the next succeeding annual election by the affirmative vote of a majority of the directors then in office, though less than a quorum of the Board of Directors. No decrease in the number of authorized directors shall shorten the term of any incumbent director.

3.10. Compensation. The Board of Directors, by affirmative vote of a majority of the directors then in office, and irrespective of any personal interest of any of its members, may establish such compensation of all directors for services to the Corporation as directors, officers or otherwise, as the Board of Directors may determine, together with reimbursement of their reasonable expenses, or may delegate such authority to an appropriate committee.

3.11. Committees.

(a) By resolution of the whole Board of Directors, the Corporation has elected pursuant to Section 141(c)(2) of the General Corporation Law of Delaware to be governed by paragraph (2) of Section 141(c) in respect of committees of the Board of Directors.

(b) The Board of Directors by resolution adopted by the affirmative vote of a majority of the whole Board of Directors may designate one or more committees, each committee to consist of [two] or more directors elected by the Board of Directors, which to the extent provided in said resolution as initially adopted, and as thereafter supplemented or amended by further resolution adopted by a like vote, shall have and may exercise all the power and authority of the Board of Directors in the management of the business and affairs of the Corporation, except that no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the shareholders, any actions or matters expressly required by the General Corporation Law of Delaware to be submitted to shareholders for approval or (ii) adopting, amending or repealing any By-Law of the Corporation. The Board of Directors may elect one or more of its members as alternate members of any such committee who may take the place of any absent or disqualified member or members at any meeting of such committee, upon request by the Chief Executive Officer or President or upon request by the chairman of such meeting. Each such committee shall fix its own rules governing the conduct of its activities and shall make such reports to the Board of Directors of its activities as the Board of Directors may request.

3.12. Unanimous Consent Without Meeting. Any action required or permitted to be taken by the Board of Directors or by any committee of the Board of Directors may be taken without a meeting if all of the members of the Board of Directors or of the committee individually or collectively consent in writing or by electronic transmission to the adoption of a resolution authorizing the action. Such action by written consent shall have the same force and effect as a unanimous vote of the Board of Directors. The resolution and the written consents or electronic transmission or transmissions by the members of the Board of Directors or the committee shall be filed with the minutes of the proceeding of the Board of Directors or of the committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

3.13. Nomination By-Law.

(a) Only persons who are nominated in accordance with the procedures set forth in these By-Laws shall be eligible to serve as directors. Nominations of persons for election to the Board of Directors of the Corporation may be made at a meeting of shareholders (i) by or at the direction of the Board of Directors or (ii) in the case of an annual meeting or any special meeting for which the notice of special meeting states that the purpose or one of the purposes of the special meeting is to elect directors at such meeting, by any shareholder of the Corporation who is a shareholder of record both at the time of giving of notice provided for in this By-Law and at the time of the meeting, who shall be entitled to vote for the election of directors at the meeting and who complies with the notice and other requirements set forth in this By-Law.

(b) Nominations by shareholders must be made pursuant to timely notice in writing to the Secretary of the Corporation as hereinafter provided. To be timely, a shareholder's notice must be delivered to the Secretary at the principal executive offices of the Corporation and received by the Secretary (i) in the case of an annual meeting, not less than 90 nor more than 120 days prior to the first anniversary of the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is advanced by more than 30 days or delayed by more than 60 days from such anniversary date, notice by the shareholder to be timely must be so received not earlier than the opening of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the tenth day following the day on which public announcement of the date of the meeting is first made, and (ii) in the case of a special meeting at which directors are to be elected, not earlier than the opening of business on the 120th day prior to such special meeting and not later than the close of business on the later of the 90th day prior to such special meeting or the tenth day following the day on which public announcement is made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. Such shareholder's notice to the Secretary shall set forth (i) as to each person whom the shareholder proposes to nominate for election or reelection as a director, (A) the name, age, business and residential addresses, and principal occupation or employment of such proposed nominee, (B) the class and number of shares of stock of the Corporation that are beneficially owned by such nominee as of the date of such notice, (C) a description of all arrangements or understandings between the shareholder and such nominee and any other person or persons (naming such persons) pursuant to which the nomination or nominations are to be made by the shareholder, (D) all other information relating to such nominee that is required to be disclosed in solicitations of proxies for election of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act, or any successor provision, and (E) the written consent of each proposed nominee to being named in the proxy statement as a nominee and to serving as a director of the Corporation if elected; (ii) as to the shareholder giving the notice (x) the name and address, as they appear on the Corporation's stock transfer records, of such shareholder, (y) the class and number of shares of stock of the Corporation which are beneficially owned by such shareholder and also which are owned of record by such shareholder, and (z) a representation that such shareholder intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice; and (iii) as to the beneficial owner, if any, on whose behalf the nomination is made, (x) the name and address of such person and (y) the class and number of shares of stock of the Corporation which are beneficially owned by such person. The Corporation may require any proposed nominee to furnish any other information it may reasonably require to determine the eligibility of the proposed nominee to serve as a director of the Corporation. At the request of the Board of Directors, any person nominated by the Board of Directors for election as a director shall furnish to the Secretary of the Corporation that

information required to be set forth in a shareholder's notice of nomination which pertains to the nominee. The provisions of this paragraph (b) shall also govern what constitutes timely notice for purposes of Rule 14a-4(c) under the Exchange Act, or any successor provision, if applicable.

(c) Notwithstanding anything in the second sentence of paragraph (b) of this By-Law to the contrary, in the event that the number of directors to be elected to the Board of Directors is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the Corporation at least 100 days prior to the first anniversary of the preceding year's annual meeting, a shareholder's notice required by this By-Law shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to and received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the tenth day following the day on which such public announcement is first made by the Corporation.

(d) Subject to the rights, if any, of holders of any class of capital stock of the Corporation (other than the common stock) then outstanding, no person shall be eligible to serve as a director of the Corporation unless nominated in accordance with the procedures set forth in this By-Law. The Board of Directors may reject any nomination submitted for consideration at the annual or special meeting which is not made in accordance with the terms of this By-Law or which is not valid under applicable law. Alternatively, if the Board of Directors fails to consider the validity of any nomination, the presiding officer of the meeting shall, if the facts warrant, determine and declare at the meeting that a nomination was not made in accordance with the procedures prescribed by these By-Laws or is not valid under applicable law, and if he or she should make that determination, he or she shall so declare at the meeting and the defective nomination shall be disregarded.

(e) For purposes of this By-Law, "public announcement" shall mean disclosure in a press release reported by the Dow Jones New Service, Associated Press, Reuters or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Sections 13, 14 or 15(d) of the Exchange Act. In no event shall the public announcement of a postponement or adjournment of a special meeting commence a new time period for the giving of a shareholder's notice pursuant to this By-Law.

(f) Notwithstanding the foregoing provisions of this By-Law, if the shareholder (or a qualified legal representative of the shareholder) does not appear at the meeting of shareholders of the Corporation to present the nomination, such nomination shall be disregarded, notwithstanding that proxies in respect of such vote may have been received by the Corporation.

(g) Notwithstanding the foregoing provisions of this By-Law, a shareholder shall also comply with all applicable requirements of state law and the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in the By-Law.

ARTICLE IV. OFFICERS

4.01. Number. The principal officers of the Corporation shall be a Chief Executive Officer, a President, a Chief Financial Officer, one or more Vice Presidents (including Executive Vice Presidents and Senior Vice Presidents), a Secretary, a Treasurer and a Controller, each of whom shall be elected by the Board of Directors. Such other officers and assistant officers as may be deemed necessary may be

elected or appointed by the Board of Directors or pursuant to Sections 4.13 or 4.14 of these By-Laws. The Chairman of the Board of Directors (whether or not an officer of the Corporation) shall be chosen from the directors. The other officers may or may not be directors. Any two or more offices may be held by the same person, except the offices of President and Secretary and the offices of President and Vice President. If required by the Board of Directors, any one or more of the officers shall give a bond for the faithful discharge of his or her duties in such sum and with such surety or sureties as the Board of Directors shall determine.

4.02. Election and Term of Office. The officers of the Corporation to be elected by the Board of Directors shall be elected annually by the Board of Directors at the first meeting of the Board of Directors held after each annual meeting of the shareholders. If the election shall not be held at such meeting, such election shall be held as soon thereafter as is convenient. Each officer shall hold office until his successor shall have been duly elected and qualified or until his or her prior death, resignation or removal.

4.03. Resignation and Removal. Any officer may resign at any time by delivering his or her resignation in writing to the Chief Executive Officer, President or Secretary of the Corporation, to take effect at the time specified in the resignation; the acceptance of such resignation, unless required by its terms, shall not be necessary to make it effective. Any officer elected or appointed by the Board of Directors or appointed by an executive officer or by a committee may be removed at any time, with or without cause, by the affirmative vote of majority of the whole Board of Directors, and in the case of an officer appointed by an executive officer or by a committee, by the officer or committee who appointed him or her or by the Chief Executive Officer; provided that any such removal shall be without prejudice to the contract rights, if any, of the person so removed. Election or appointment shall not of itself create contract rights.

4.04. Vacancies. A vacancy in any office may be filled for the unexpired term in the manner prescribed in Sections 4.01 and 4.02 of these By-Laws for election or appointment to the office.

4.05. Chairman of the Board of Directors. The Chairman of the Board of Directors shall preside at all meetings of the Board of Directors and shareholders at which he or she is present and shall perform such other duties and have such authority as from time to time may be delegated or assigned to him or her by the Board of Directors. The Board of Directors may specify in a resolution or resolutions that the Chairman of the Board shall not be an officer of the Corporation. The offices of the Chairman of the Board, the Chief Executive Officer and the President may be filled by the same individual.

4.06. Chief Executive Officer. Subject to the control of the Board of Directors, the Chief Executive Officer of the Corporation shall have general supervision and control over the business, property, and affairs of the Corporation and perform such duties as may be assigned to him or her by the Board of Directors. In the absence of the Chairman of the Board, or in the event of his or her death, inability or refusal to act, the Chief Executive Officer shall preside at the meetings of the Board of Directors and shareholders at which he or she is present. He or she may sign and execute all instruments in the name of the Corporation which the Board of Directors has authorized to be executed, except where the execution thereof shall be expressly delegated by the Board of Directors or these By-Laws to another officer or agent of the Corporation, or shall be required by law to be otherwise executed. The Chief

Executive Officer shall be an ex-officio member of all standing committees. The offices of the Chief Executive Officer and the President may be filled by the same individual.

4.07. President. Subject to the provisions of Section 4.06, in the absence of the Chief Executive Officer or in the event of his or her death, inability or refusal to act, or in the event for any reason it shall be impractical for him or her to act personally, the President shall perform the duties of the Chief Executive Officer, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Chief Executive Officer. The President shall have such powers and be subject to such duties as the Board of Directors may from time to time prescribe. He or she may sign and execute all instruments in the name of the Corporation which the Board of Directors has authorized to be executed, except where the execution thereof shall be expressly delegated by the Board of Directors or these By-Laws to another officer or agent of the Corporation, or shall be required by law to be otherwise executed. The execution of any instrument of the Corporation by the President shall be conclusive evidence, as to third parties, of his or her authority to act in the stead of the Chief Executive Officer.

4.08. Chief Financial Officer. The Chief Financial Officer shall, subject to the control of the Board of Directors, (a) have primary charge and custody of and be responsible for all funds and securities of the Corporation; (b) be responsible for the accounting and financial services of the Corporation; and (c) in general, perform all of the duties and exercise such other authority as from time to time may be delegated or assigned to the Chief Financial Officer by the Chairman of the Board, the Chief Executive Officer, the President or by the Board of Directors.

4.09. The Vice Presidents. Subject to the provisions of Section 4.07, in the absence of the President or in the event of his or her death, inability or refusal to act, or in the event for any reason it shall be impractical for him or her to act personally, the Vice Presidents in the order designated by the Board of Directors, or in the absence of any designation, then in the order of their election, shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President. Any Vice President may sign, with the Secretary or Assistant Secretary, certificates for shares of the Corporation; and shall perform such other duties and have such authority as from time to time may be delegated or assigned to him or her by the Chief Executive Officer, the President or the Board of Directors. The execution of any instrument of the Corporation by any Vice President shall be conclusive evidence, as to third parties, of his or her authority to act in the stead of the Chief Executive Officer or the President.

4.10. The Secretary. The Secretary shall: (a) keep the minutes of the meetings of the shareholders and of the Board of Directors in one or more books provided for that purpose; (b) see that all notices are duly given in accordance with the provisions of these By-Laws or as required by law; (c) be custodian of the corporate records and of the seal of the Corporation and see that the seal of the Corporation is affixed to all documents the execution of which on behalf of the Corporation under its seal is duly authorized; (d) keep or arrange for the keeping of a register of the post office or other address of each shareholder which shall be furnished to the Secretary by such shareholder; (e) sign with the Chairman of the Board or the President, or a Vice President, certificates for shares of the Corporation, the issuance of which shall have been authorized by resolution of the Board of Directors; (f) have general charge of the stock transfer books of the Corporation; and (g) in general perform all duties and exercise such authority as from time to time may be delegated or assigned to him or her by the Chairman of the Board, the Chief Executive Officer or the President or by the Board of Directors.

4.11. The Treasurer. The Treasurer shall, under the general supervision of the Chief Financial Officer, (a) have charge and custody of and be responsible for all funds and securities of the Corporation; (b) receive and give receipts for moneys due and payable to the Corporation from any source whatsoever, and deposit all such moneys in the name of the Corporation in such banks, trust companies or other depositories as shall be selected in accordance with the provisions of Section 5.04 of these By-Laws; and (c) in general perform all of the duties and exercise such other authority as from time to time may be delegated or assigned to the Treasurer by the Chief Financial Officer or by the Board of Directors.

4.12. The Controller. The Controller shall, under the general supervision of the Chief Financial Officer, (a) be in charge of the financial records of the Corporation; (b) be responsible for the accounting and financial services of the Corporation; and (c) in general perform all of the duties and exercise such other authority as from time to time may be delegated or assigned to the Controller by the Chief Financial Officer or by the Board of Directors. The Controller shall at all reasonable times within business hours exhibit the Controller's books and accounts to any director.

4.13. Assistant Secretaries and Assistant Treasurers. There shall be such number of Assistant Secretaries and Assistant Treasurers as the Board of Directors may from time to time authorize. The Assistant Secretaries may sign with the Chairman of the Board, or the President or a Vice President certificates for shares of the Corporation the issuance of which shall have been authorized by a resolution of the Board of Directors. The Assistant Treasurers shall respectively, if required by the Board of Directors, give bonds for faithful discharge of their duties in such sums and with such sureties as the Board of Directors shall determine. The Assistant Secretaries and Assistant Treasurers, in general, shall perform such duties and have such authority as shall from time to time be delegated or assigned to them by the Secretary or the Treasurer, respectively, or by the Chairman of the Board or the President or the Board of Directors.

4.14. Other Officers and Assistants. The Board of Directors shall have the power to appoint any subordinate officers, including, without limitation, any person to act as assistant to any officer, or agent for the Corporation in his or her stead, or to perform the duties of such officer whenever for any reason it is impracticable for such officer to act personally, and such subordinate officers or assistant or acting officer or other agent so appointed by the Board of Directors shall have the power to perform all the duties of the office to which he or she is so appointed or to be assistant, or as to which he or she is so appointed to act, except as such power may be otherwise defined or restricted by the Board of Directors. The Board of Directors may delegate to any executive officer or to any committee the power to appoint and define the powers and duties of any subordinate officers, agents or employees.

4.15. Salaries. The salaries of the principal officers shall be fixed from time to time by the Board of Directors or by a duly authorized committee thereof, and no officer shall be prevented from receiving such salary by reason of the fact that he or she is also a director of the Corporation; provided, that the Board of Directors may authorize the Chief Executive Officer or the President to establish the salaries of officers appointed pursuant to Section 4.13 or 4.14 of these By-Laws.

ARTICLE V. CONTRACTS, LOANS, CHECKS AND DEPOSITS:
SPECIAL CORPORATE ACTS

5.01 Contracts. The Board of Directors may authorize any officer or officers, agent or agents, to enter into any contract or execute or deliver any instrument in the name of and on behalf of the Corporation, and such authorization may be general or confined to specific instances. In the absence of other designation, all deeds, mortgages and instruments of assignment or pledge made by the Corporation shall be executed in the name of the Corporation by the Chief Executive Officer, the President, the Controller or one of the Vice Presidents and, when necessary or required, the Secretary, an Assistant Secretary, the Treasurer or an Assistant Treasurer; the Secretary or an Assistant Secretary shall affix the corporate seal thereto; and when so executed no other party to such instrument or any third party shall be required to make any inquiry into the authority of the signing officer or officers.

5.02 Loans. No indebtedness for borrowed money shall be contracted on behalf of the Corporation and no evidences of such indebtedness shall be issued in its name unless authorized by or under the authority of a resolution of the Board of Directors. Such authorization may be general or confined to specific instances.

5.03. Checks, Drafts, etc. All checks, drafts, or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the Corporation, shall be signed by such officer or officers, agent or agents of the Corporation and in such manner as shall from time to time be determined by or under the authority of a resolution of the Board of Directors.

5.04. Deposits. All funds of the Corporation not otherwise employed shall be deposited from time to time to the credit of the Corporation in such banks, trust companies or other depositories as may be selected by or under the authority of a resolution of the Board of Directors.

5.05. Voting of Securities Owned by This Corporation. Subject always to the specific directions of the Board of Directors, (a) any shares or other securities issued by any other corporation and owned or controlled by this Corporation may be voted at any meeting of security holders of such other corporation by the Chief Executive Officer if he or she be present, or in his or her absence, by the President of this Corporation if he or she be present, or in his or her absence by the Controller, the Treasurer or any Vice President of this Corporation who may be present, and (b) whenever in the judgment of the Chief Executive Officer, or in his or her absence, the President, or in his or her absence, the Controller, the Treasurer or any Vice President, it is desirable for this Corporation to execute a proxy or written consent in respect to any shares or other securities issued by any other corporation and owned by this Corporation, such proxy or consent shall be executed in the name of this Corporation by the Chief Executive Officer, the President, the Controller, the Treasurer or one of the Vice Presidents of this Corporation, without necessity of any authorization by the Board of Directors, affixation of corporate seal or counter signature or attestation by another officer. Any person or persons designated in the manner above stated as the proxy or proxies of this Corporation shall have full right, power and authority to vote the shares or other securities issued by such other corporation and owned by this Corporation the same as such shares or other securities might be voted by this Corporation.

ARTICLE VI. CERTIFICATES FOR SHARES AND THEIR TRANSFER

6.01. Certificates for Shares; Stock Records.

(a) Certificates representing shares of the Corporation shall be in such form, consistent with law, as shall be determined by the Board of Directors; provided, however, that the Board of Directors may provide by resolution that some or all classes or series of the Corporation's stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until the certificate is surrendered to the Corporation. Notwithstanding the adoption of such a resolution, every certificate representing stock of the Corporation shall be, and upon request every holder of uncertificated shares shall be entitled to receive a certificate representing such stock, signed by the Chairman of the Board, or the President or a Vice President and by the Secretary or an Assistant Secretary or the Treasurer or an Assistant Treasurer, representing the number of shares registered in certificate form.

(b) The Corporation or a transfer agent and/or registrar shall keep stock books in which shall be recorded the number of shares issued, the names and addresses of the owners of the shares, the number owned by them and dates of issue respectively, whether such certificates are represented by certificates or are uncertificated, and the transfers of such shares with the dates of transfer. All certificates for shares shall be consecutively numbered or otherwise identified.

6.02. Facsimile Signatures and Seal. The seal of the Corporation on any certificate for shares may be a facsimile. The certificate shall also be signed by the transfer agent and registrar. The signature of any officer, and either the transfer agent or the registrar, may be facsimile, engraved or printed.

6.03. Signature by Former Officers or Agents. In case any officer, transfer agent or registrar, who has signed or whose facsimile signature has been placed upon any certificate for shares, shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

6.04. Transfers of Shares. Transfers of stock shall be made only on the stock transfer records of the Corporation upon surrender of the certificate or certificates being transferred which certificates shall be properly endorsed for transfer or accompanied by a duly executed stock power, except in the case of uncertificated shares, for which the transfer shall be made only upon receipt of transfer documentation reasonably acceptable to the Corporation. All certificates surrendered to the Corporation for transfer shall be canceled and no new certificate shall be issued until the former certificate for a like number of shares shall have been surrendered and canceled, except as provided in Section 6.06 of these By-Laws. Prior to valid transfer of shares, the Corporation may treat the registered owner of such shares as the person exclusively entitled to vote, to receive notifications and otherwise to have and exercise all the rights and power of an owner. Where a certificate for shares or an uncertificated share is presented to the Corporation with a request to register for transfer, the Corporation shall not be liable to the owner or any other person suffering loss as a result of such registration of transfer if (a) there were on or with the certificate or uncertificated share the necessary endorsements, and (b) the Corporation had no duty to inquire into adverse claims or had discharged any such duty. The Corporation may require reasonable assurance that said endorsements or other transfer materials are genuine and effective and compliance with such other regulations as may be prescribed by or under the authority of the Board of Directors.

6.05. Transfer Agent and Registrar. The Board of Directors may appoint, or authorize one or more officers of the Corporation to appoint, one or more transfer agents and one or more registrars.

6.06. Lost, Destroyed, Stolen or Mutilated Certificates. The owner of any stock of the Corporation shall immediately notify the Corporation of any loss, theft, destruction or mutilation of any certificate therefor, and the Corporation may issue uncertificated shares or a new certificate for stock in the place of any certificate theretofore issued by it and alleged to have been lost, stolen, destroyed, or mutilated and the Board of Directors may, in its discretion, require the owner of the lost, stolen, destroyed or mutilated certificate or his or her legal representatives to give the Corporation a bond in such sum, limited or unlimited, and in such form and with such surety or sureties, as the Board of Directors shall in its uncontrolled discretion determine, to indemnify the Corporation against any claim that may be made against it on account of the alleged loss, theft, destruction or mutilation of any such certificate, or the issuance of any such new certificate or uncertificated shares. The Board of Directors may, however, in its discretion refuse to issue any such new certificate or uncertificated shares except pursuant to legal proceedings under the laws of the State of Delaware in such case made and provided.

6.07 Special Designation on Certificates. If the Corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights or each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the Corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the Corporation shall issue to represent such class or series of stock a statement that the Corporation will furnish without charge to each shareholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

6.08. Stock Regulations. The Board of Directors shall have the power and authority to make all such further rules and regulations not inconsistent with the statutes of the State of Delaware as it may deem expedient concerning the issue, transfer and registration of shares of the Corporation.

6.09 Record Date for Purposes Other than Notice and Voting. For purposes of determining the shareholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the shareholders entitled to exercise any rights in respect of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted and which shall not be more than sixty (60) days before any such action. In that case, only shareholders of record at the close of business on the date so fixed are entitled to receive the dividend, distribution or allotment of rights, or to exercise such rights, as the case may be, notwithstanding any transfer of any shares on the books of the Corporation after the record date so fixed, except as otherwise provided in the Certificate of Incorporation, by these By-Laws, by agreement or by law. If the Board of Directors does not so fix a record date, then the record date for determining shareholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the applicable resolution.

ARTICLE VII. INDEMNIFICATION

7.01. Mandatory Indemnification. The Corporation shall, to the full extent permitted by the Delaware Corporation Law, indemnify any person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or officer of the Corporation or is or was serving at the request of the Corporation as a director or officer of any other corporation or enterprise. Such right of indemnification shall inure to the benefit of the heirs, executors, administrators and personal representatives of such a person.

7.02. Permissive Supplementary Benefits. The Corporation may, but shall not be required to, supplement the right of indemnification under Section 7.01 by (a) the purchase of insurance on behalf of any one or more of such persons, whether or not the Corporation would be obligated to indemnify such person Section 7.01, (b) individual or group indemnification agreements with any one or more of such persons and (c) advances for related expenses of such a person.

7.03. Amendment. This Article VII may be amended or repealed only by a vote of the shareholders and not by a vote of the Board of Directors.

ARTICLE IX. AMENDMENTS

9.01. By Shareholders. These By-Laws may be altered, amended or repealed and new By-Laws may be adopted by the shareholders by affirmative vote of the holders of not less than a [two-thirds] of the voting power of the shares issued and outstanding and entitled to vote at any annual or special meeting of the shareholders at which a quorum is in attendance; provided, that written notice of the proposed alteration, amendment, repeal or addition of the new By-Law or By-Laws must be contained in the notice of such meeting.

9.02. By Directors. These By-Laws may also be altered, amended or repealed and new By-Laws may be adopted by the Board of Directors by affirmative vote of a majority of the number of directors present at any meeting at which a quorum is in attendance; provided, that written notice of any such proposed action shall have been given to each director prior to such meeting, or that notice of such proposed alteration, amendment, repeal or addition shall have been given at the preceding meeting of the Board of Directors; provided further, that no By-Laws adopted by the shareholders shall be amended or repealed by the Board of Directors if the By-Law so adopted so provides.

9.03. Implied Amendments. Any action taken or authorized by the shareholders or by the Board of Directors, which would be inconsistent with the By-Laws then in effect but is taken or authorized by affirmative vote of not less than the number of shares or the number of directors required to amend the By-Laws so that the By-Laws would be consistent with such action, shall be given the same effect as though the By-Laws had been temporarily amended or suspended so far, but only so far, as is necessary to permit the specific action so taken or authorized.

ARTICLE X. MISCELLANEOUS

10.01 Construction; Definitions. Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the General Corporation Law of Delaware shall govern the construction of these By-Laws. Without limiting the generality of this provision, every reference to a majority or other proportion of stock, voting stock or shares shall refer to such majority or other proportion of the votes of such stock, voting stock or shares. Further, the singular number includes the plural, the plural number includes the singular, the term "person" includes both a corporation and a natural person, and the masculine gender includes the feminine gender and vice versa.

10.02 Provisions Additional to Provisions of Law. All restrictions, limitations, requirements and other provisions of these By-Laws shall be construed, insofar as possible, as supplemental and additional to all provisions of law applicable to the subject matter thereof and shall be fully complied with in addition to the said provisions of law unless such compliance shall be illegal.

10.03 Provisions Contrary to Provisions of Law. Any article, section, subsection, subdivision, sentence, clause or phrase of these By-Laws which upon being construed in the manner provided in Section 10.02 hereof, shall be contrary to or inconsistent with any applicable provisions of law, shall not apply so long as said provisions of law shall remain in effect, but such result shall not affect the validity or applicability of any other portions of these By-Laws, it being hereby declared that these By-Laws would have been adopted and each article, section, subsection, subdivision, sentence, clause or phrase thereof, irrespective of the fact that any one or more articles, sections, subsections, subdivisions, sentences, clauses or phrases is or are illegal.